

2017-2018 REGIONAL TRAVEL SURVEY: ALTERNATIVE TRAVEL OPTIONS

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Presentation Outline

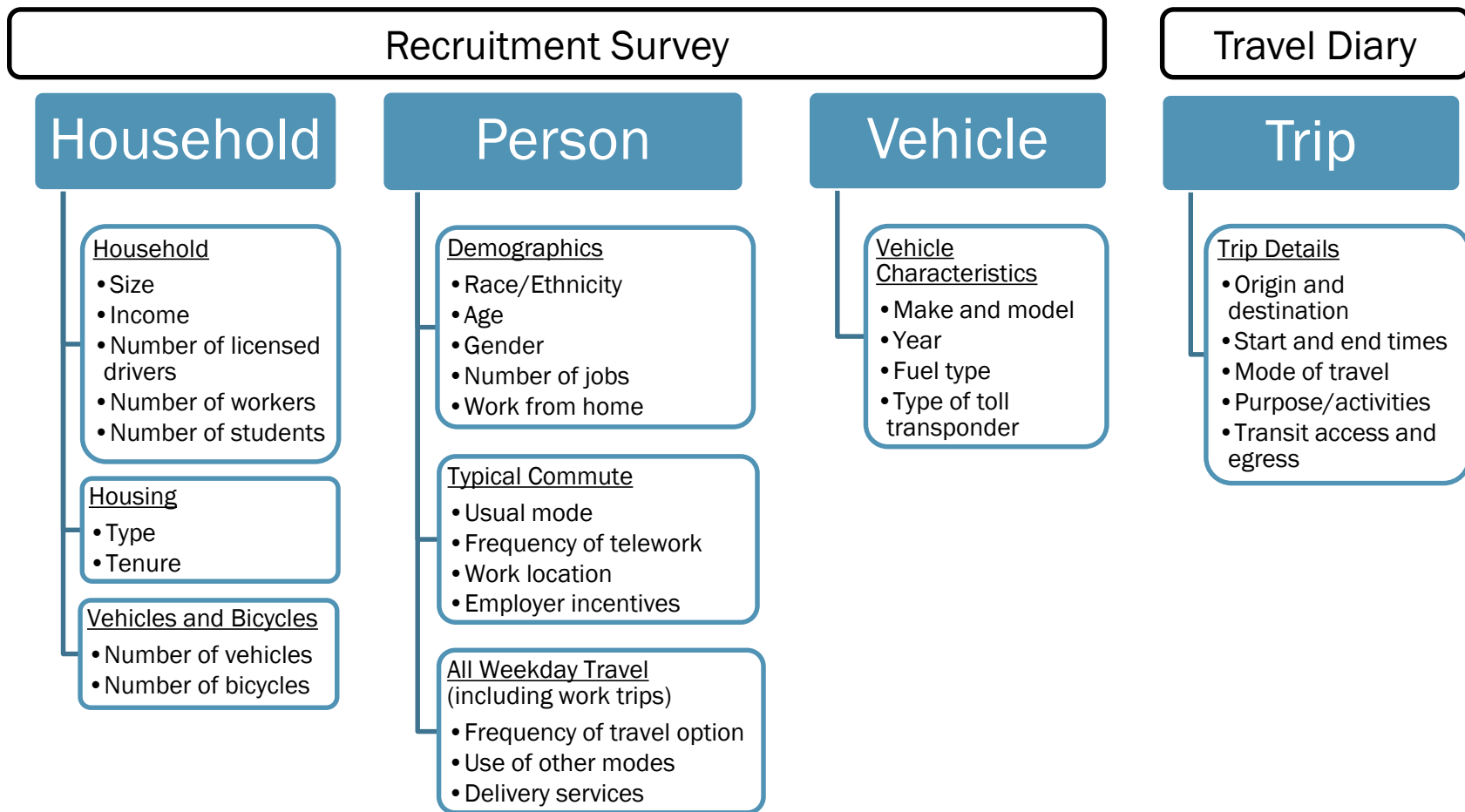
- Purpose of Regional Household Travel Survey
- Overview of RTS information
- New Alternative Travel Option Questions
- Next steps

Purpose of Regional Household Travel Survey

- Collect empirical data on travel behavior from individual persons and households
- Provide more details, specificity to national level travel behavior data (Census, ACS, etc.)
- Serve as primary source of region specific data to develop travel demand forecasting model
- Inform development of projects, programs and policies supporting transportation planning and programming decisions
- Typically performed every ten years
- Largest single discrete project (on cost basis) in UPWP



Overview of Regional Travel Survey Information



Preliminary Plan for Release

Phase I – Household, Person, and Vehicle Information

- Alternative travel option questions (New)
- Demographic changes since 2007/08
- Additional analysis of demographics including cross tabulations

Phase II – Trip Information

- Preliminary findings of select indicators from the travel diary
- Changes in reported travel between 2007/08 and 2017/18
- Additional findings from the travel diary



REGIONAL TRAVEL SURVEY



Planning Our Future Together

New Alternative Travel Options Questions

- Inquired how often a person uses these travel options in a typical week
- Focus on travel options that reduce SOV travel and capture recent travel trends since the 2007/08 Household Travel Survey
- Asked of those 16 years and older



Alternative Travel Options

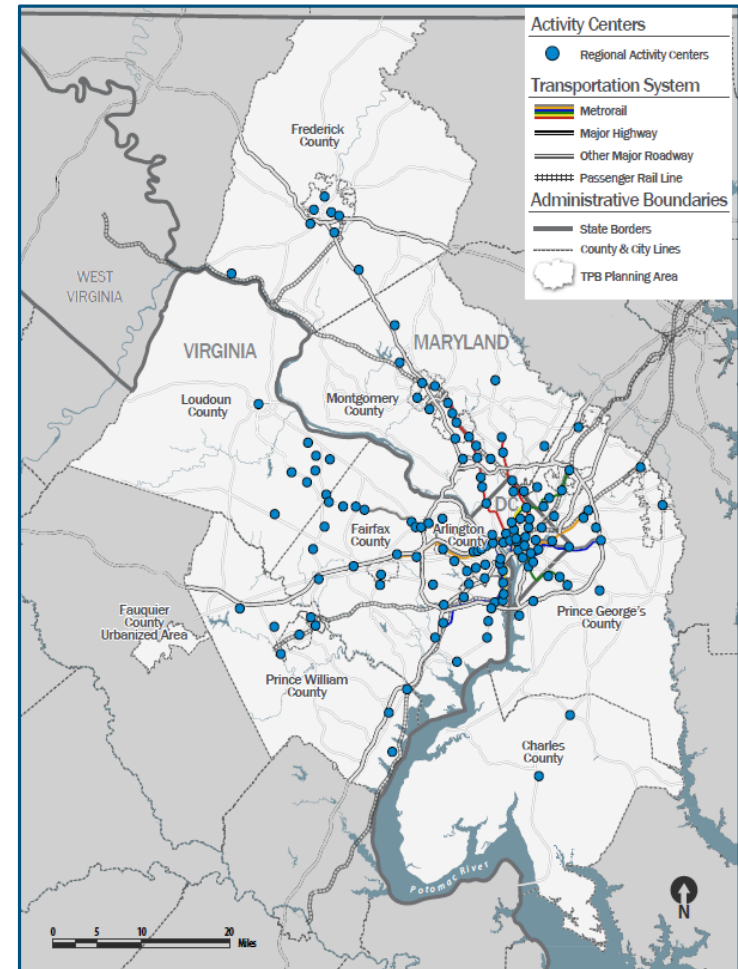
These questions cover:

- A. Modes that reduce the need for a household vehicle (e.g., ride-hailing, public transit)
- B. Optimizing the region's highway system including high-occupancy vehicle (HOV) and recently built high-occupancy toll (HOT) lane facilities
- C. Non-motorized travel (bicycle/bikeshare)



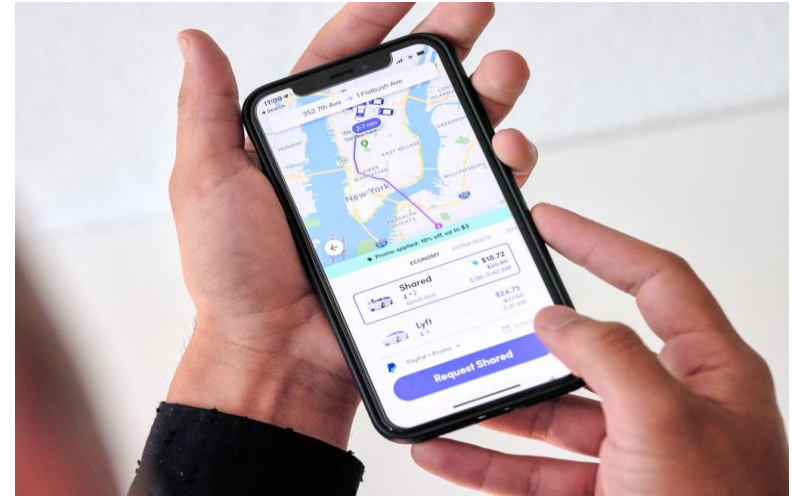
A. Modes that Reduce the Need for a Household Vehicle

1. Ride-Hailing Services
2. Regional and Local Transit Services
3. Delivery Services to Home

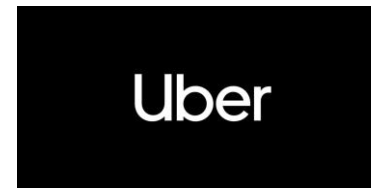


1. Ride-Hailing Services

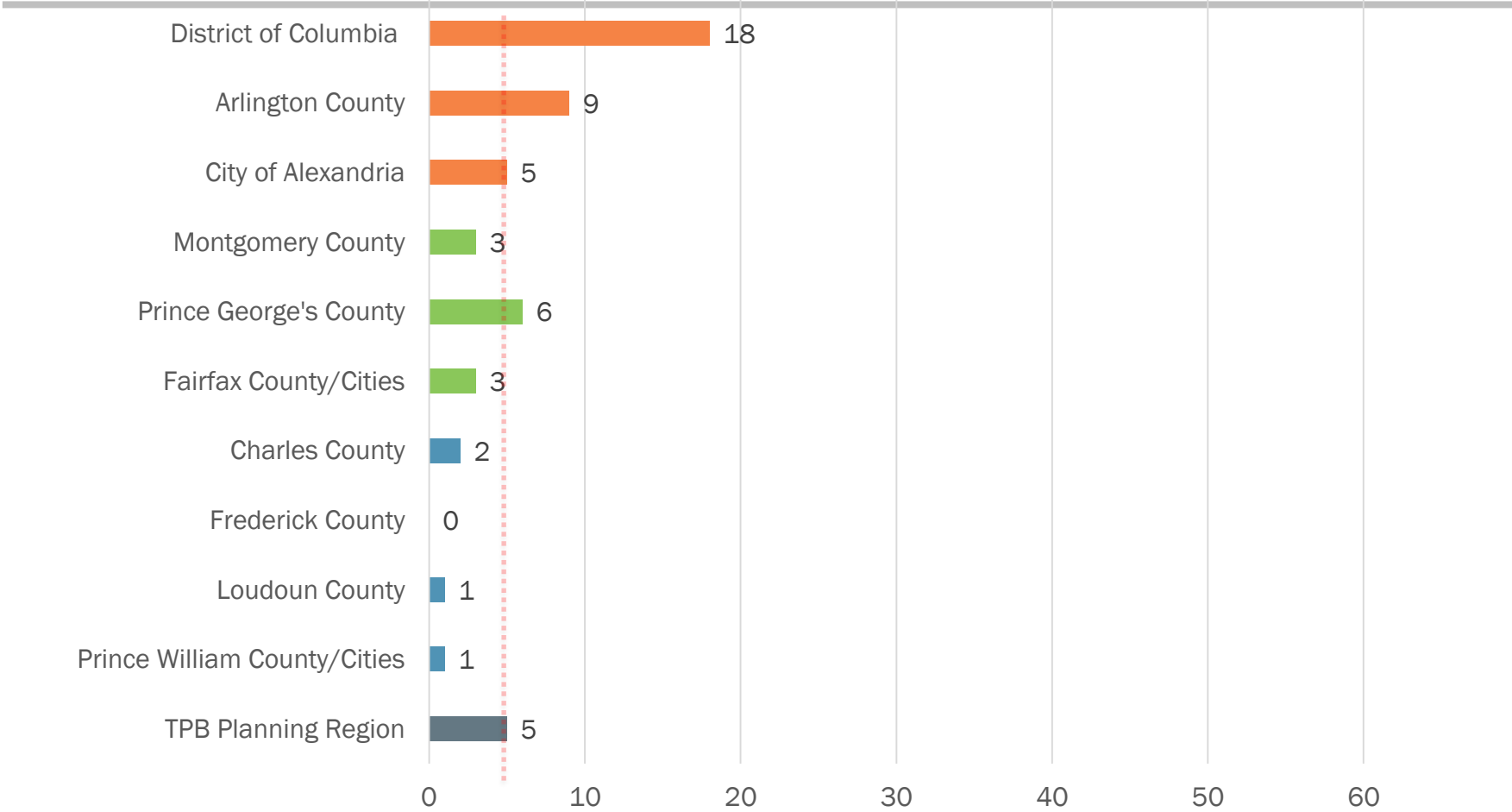
- Also called Transportation Network Companies (TNCs)
- Use smartphone apps to connect passengers with drivers of personal vehicles
- Dynamic pricing based on demand
- Examples include: Uber, Lyft, Via



"Lyft" by danielfoster437



Household Weekday Use of Ride-Hailing Services At Least Once a Week (%)



2. Regional and Local Public Transit

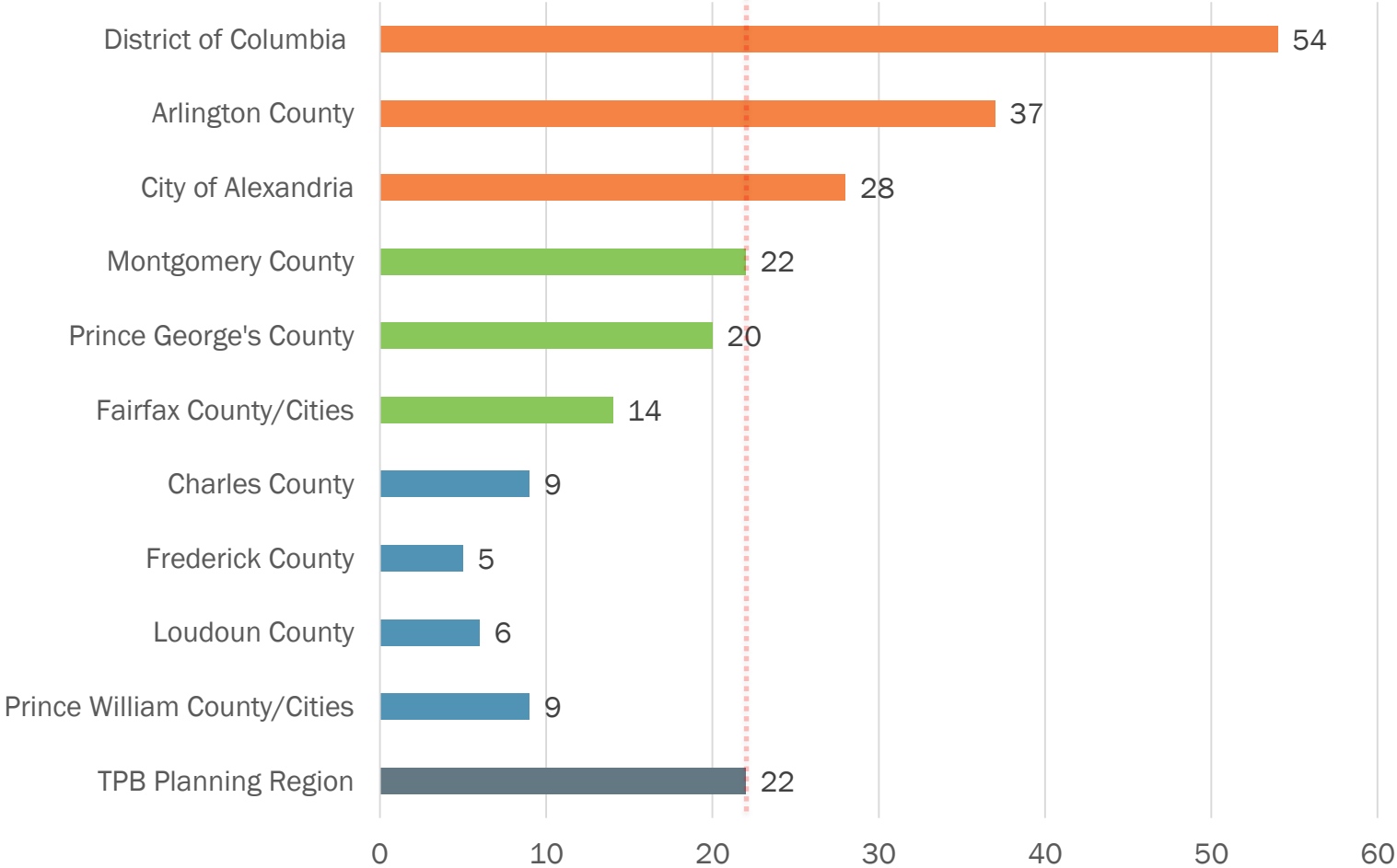
- Regional/local rail options:
 - Metrorail
 - Commuter rail (MARC, VRE)
 - Light rail/streetcar (DC Streetcar)
- Regional/local bus options:
 - Metrobus
 - Commuter bus (e.g., Loudoun County Transit, OmniRide)
 - Local bus (e.g., ART, Ride On)



"Metrobus at Metrorail" (top) and "Farragut West" (bottom) by afagen



Household Weekday Use of Public Transit At Least Once a Week (%)



3. Delivery Services to Home on Weekdays

- Package deliveries:
 - Amazon
 - UPS/FedEx
 - USPS
- Food deliveries:
 - Pizza delivery
 - UberEats/GrubHub
- Home services:
 - Landscaping
 - Cable service



Household Delivery Services to Home on Weekdays (%)

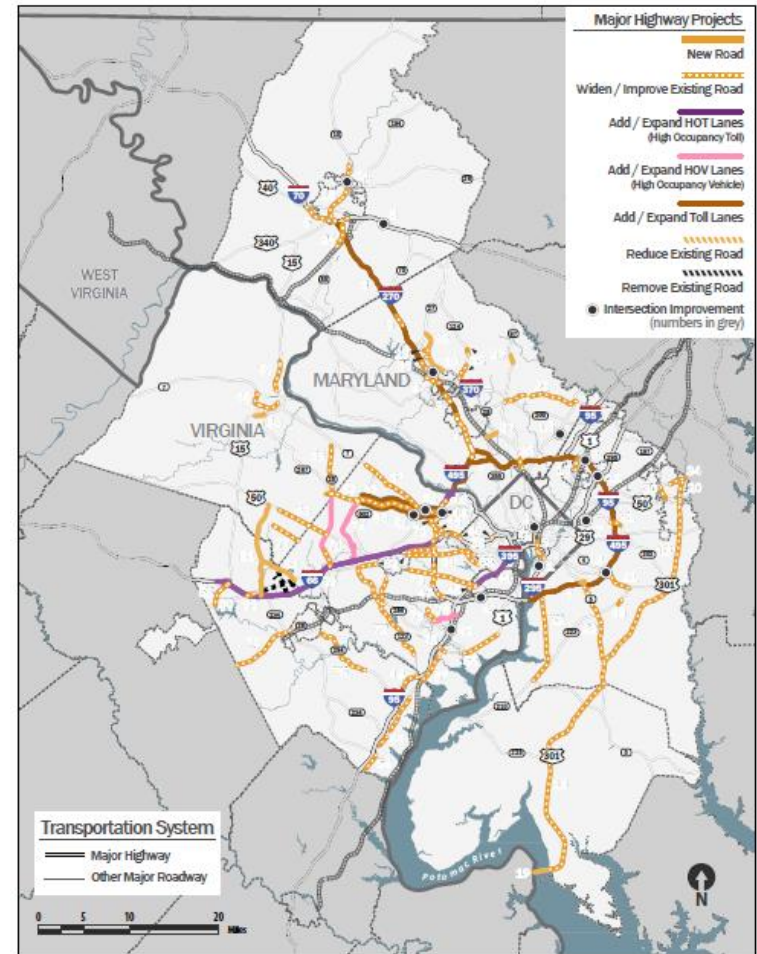
Person File

| | 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 |



B. Alternative Travel Options to Optimize the Region's Highway System

1. Carpooling and Vanpooling
2. HOV Lanes
3. HOT Lanes and Toll Roads



1. Carpooling and Vanpooling

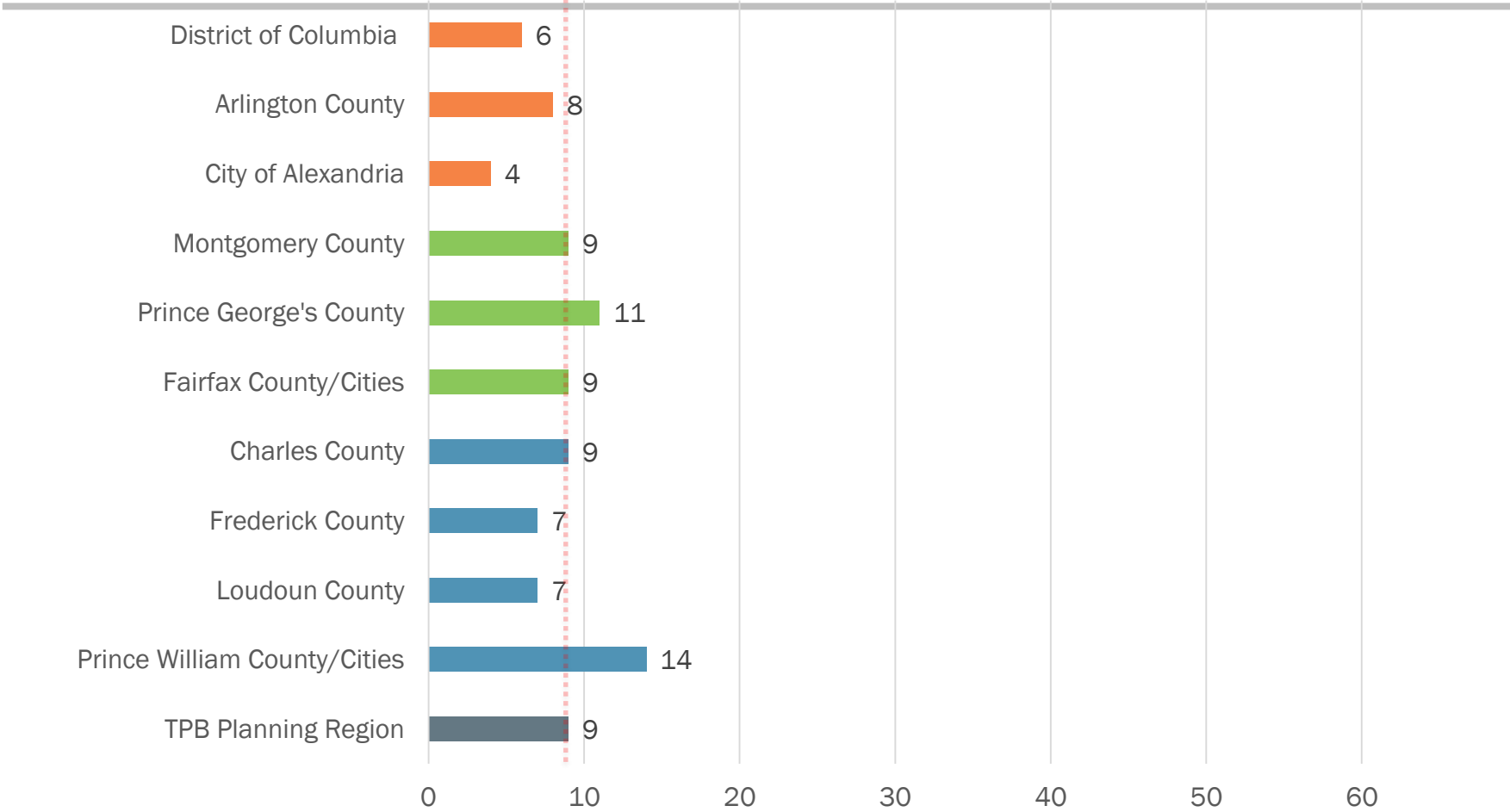
- Commuter Connections offers ridesharing programs to promote carpooling and vanpooling to and from work
- Casual carpooling (“slugging”) allows drivers and non-paying passengers to use HOV lanes
- Carpools/vanpools can be formally arranged via ride-matching services or ad hoc via slug lines



Source: Federal Highway Administration



Household Weekday Commuter Car & Vanpooling At Least Once a Week (%)



2. The Region's HOV Network

- First HOV lane in the U.S. opened in the Washington region (I-395/Shirley Hwy)
- The region's extensive network of HOV lanes help move more persons per lane than general purpose lanes in the AM and PM peak periods
- HOV facilities include: I-66, I-95/395, I-270, I-495 (in VA), VA-267(Dulles Toll Road)



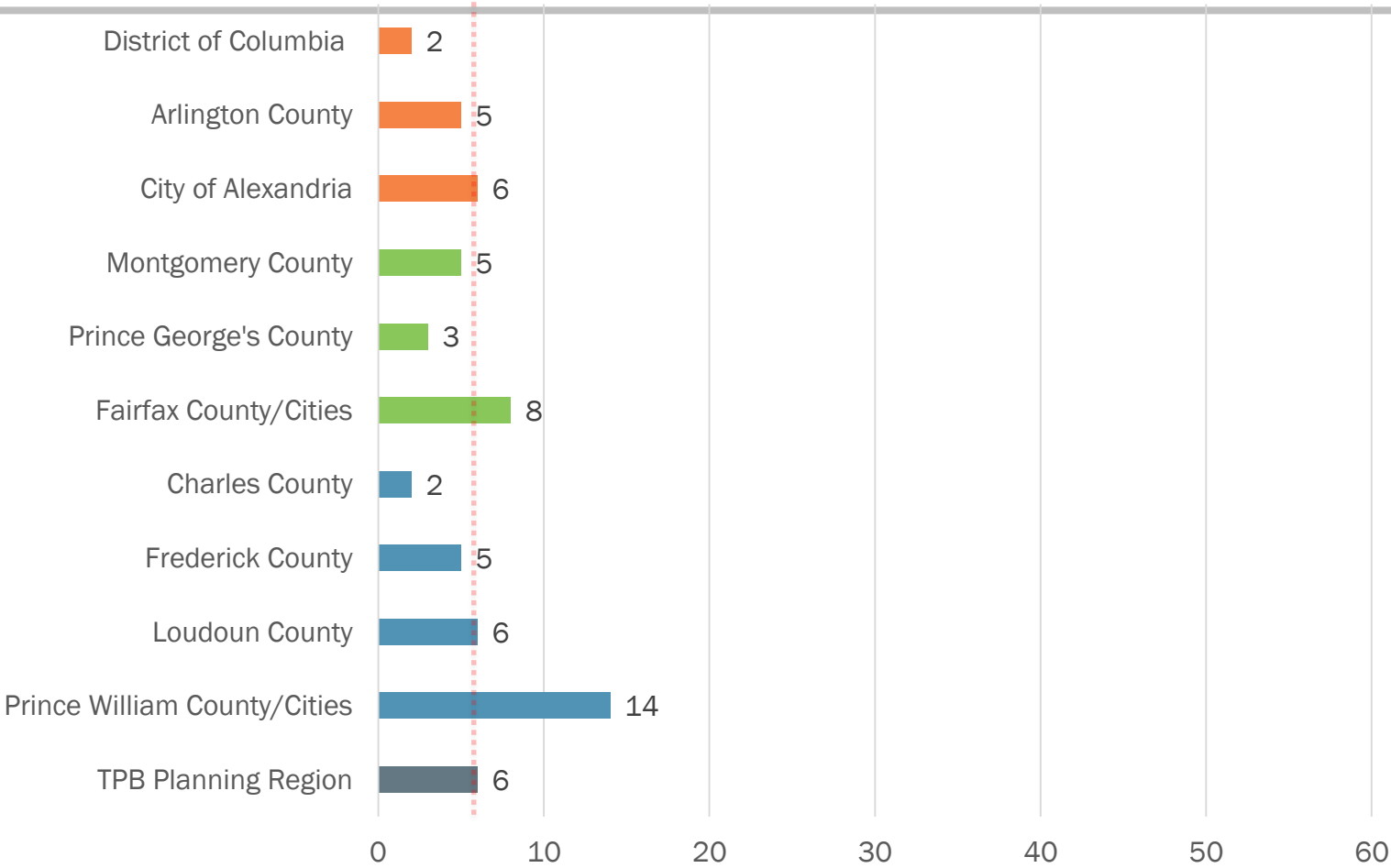
"File:HOV2+ I270 MD 08 2009 7033.JPG" by Mariordo



Source: <https://williamsonsource.com/the-past-and-future-of-hov-lanes/>



Household HOV Use for Weekday Peak Period Travel At Least Once a Week (%)



3. HOT Lanes and Toll Road Use

- HOT lanes and toll road pricing encourage efficient use of the region's limited highway capacity in peak periods
- Examples of HOT Lanes:
 - I-95/495 Express Lanes (VA)
 - I-66 Express Lanes
- Examples of Toll Roads:
 - Dulles Toll Road/Dulles Greenway (VA-267)
 - Intercounty Connector (MD-200)



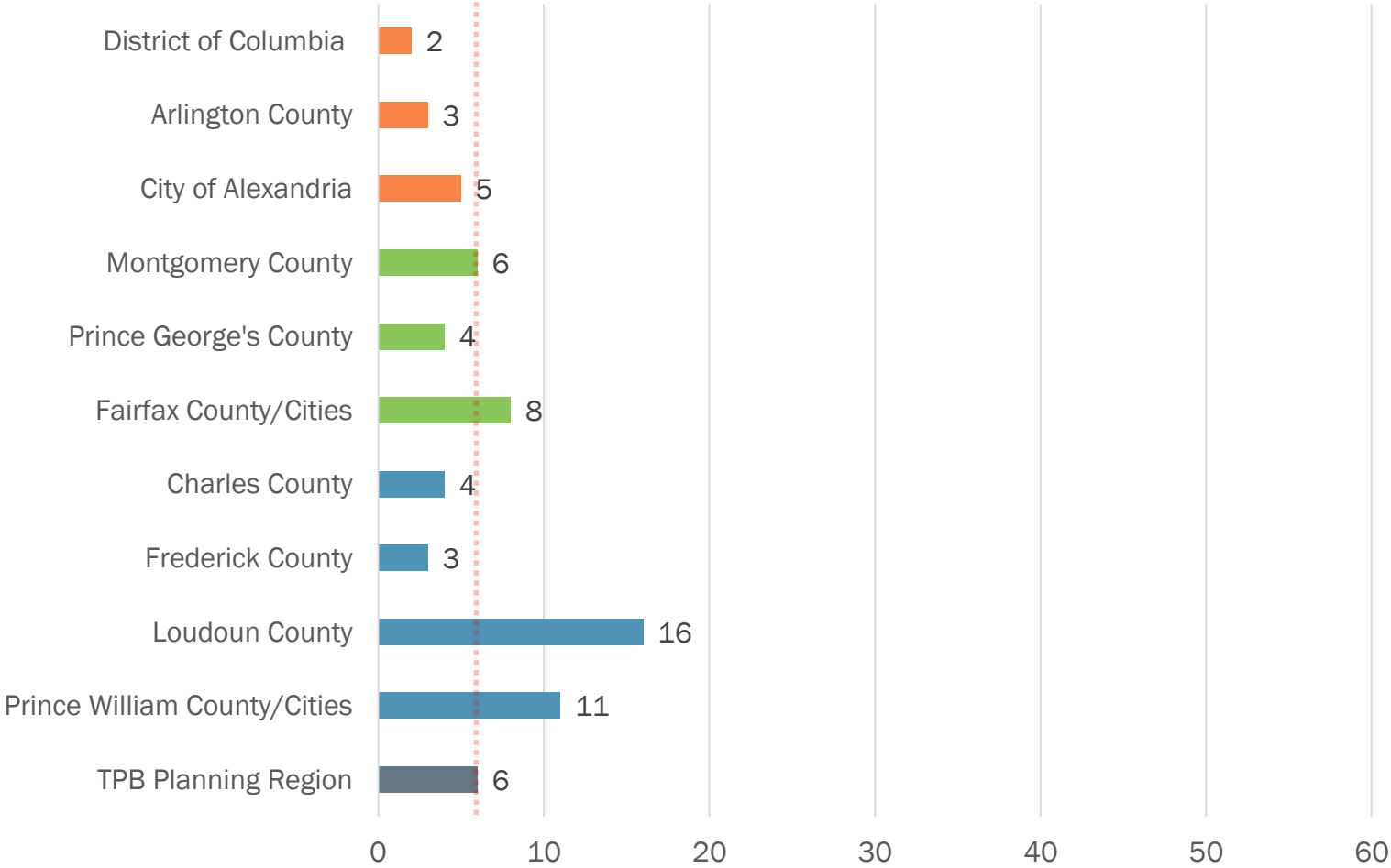
Household Vehicles with Toll Transponders (%)

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 |



Household HOT Lane and Toll Road Use for Weekday Travel At Least Once a Week (%)



C. Bicycle and Bikeshare Travel

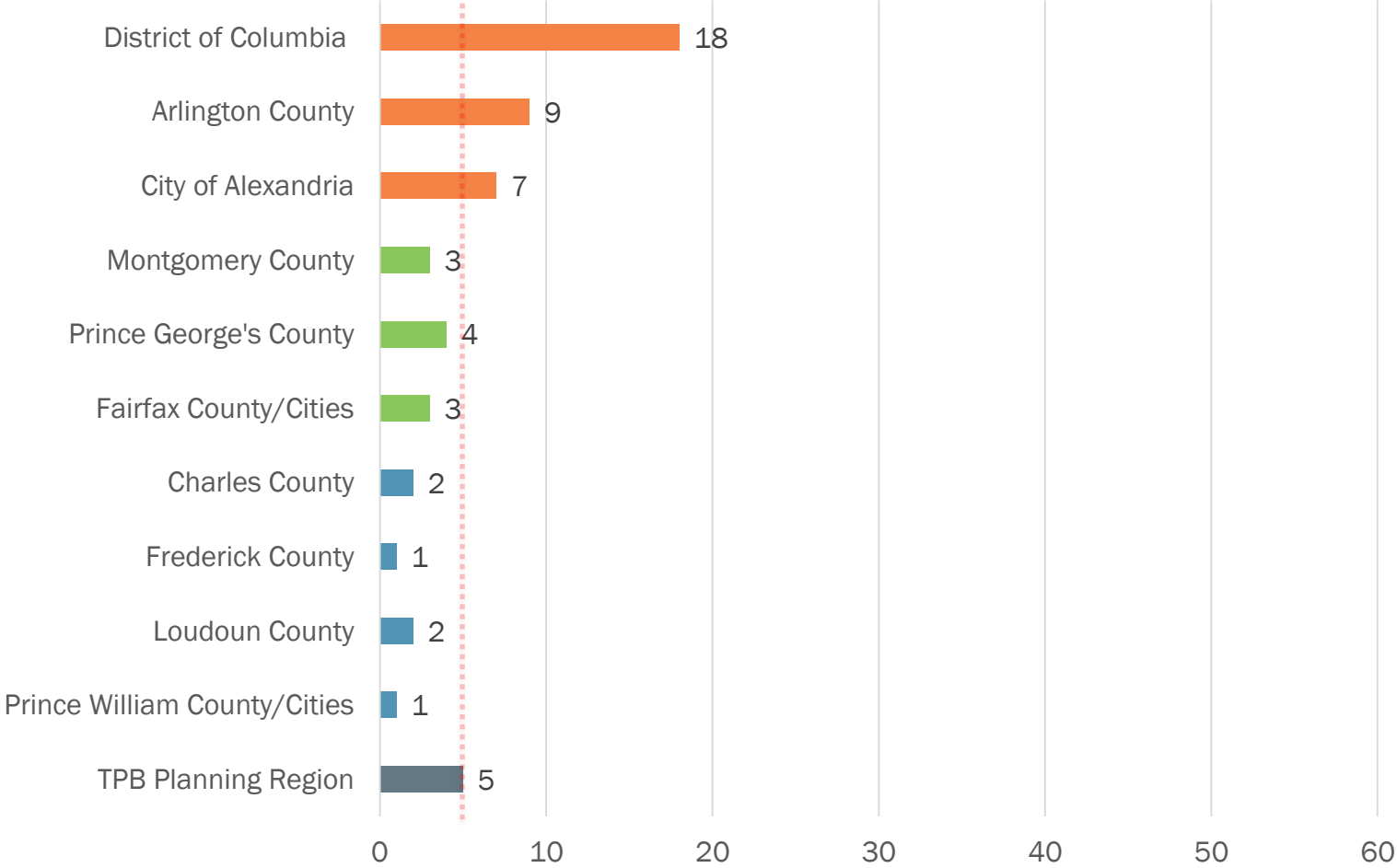
- The region's bicycling network and infrastructure has grown rapidly since 2005
- Capital Bikeshare launched in 2010 and has grown to serve five jurisdictions with 500 stations and over 4,300 bikes
- 48% of the region's households have 1 or more adult bicycles for their personal use



"DC Capital Bikeshare" by James D. Schwartz



Household Weekday Bicycle Use (including Bikeshare) At Least Once a Week (%)



Household Weekday Bicycle Use (including Bikeshare) (%)

| Jurisdiction | 3-5 weekdays a week | 1-2 weekdays a week | Few weekdays per month | Few weekdays per year | Use only on weekends |
|------------------------------|---------------------|---------------------|------------------------|-----------------------|----------------------|
| District of Columbia | 12 | 5 | 6 | 5 | 5 |
| Arlington County | 5 | 4 | 4 | 7 | 3 |
| City of Alexandria | 4 | 3 | 5 | 5 | 4 |
| Montgomery County | 2 | 1 | 2 | 4 | 3 |
| Prince George's County | 2 | 1 | 1 | 3 | 3 |
| Fairfax County/Cities | 2 | 2 | 2 | 4 | 3 |
| Charles County | 0 | 2 | 0 | 3 | 2 |
| Frederick County | 1 | 1 | 2 | 2 | 3 |
| Loudoun County | 1 | 1 | 2 | 3 | 2 |
| Prince William County/Cities | 1 | 1 | 1 | 3 | 2 |
| TPB Planning Region | 3 | 2 | 3 | 4 | 3 |



Summary of Findings

- Ride-hailing is most heavily used in the core
- Public transit is used widely across the region, especially in the core and inner suburban areas
- Car and vanpooling rates do not vary as much regionally as other alternative travel modes
- HOV lanes, HOT lanes, and toll roads/bridges are utilized most by suburban commuters
- Bicycle and bikeshare use most prevalent in the core



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