

**2013 CENTRAL  
EMPLOYMENT CORE  
CORDON COUNT  
OF VEHICULAR  
AND PASSENGER VOLUMES**

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Travel Forecasting Subcommittee  
Item #6  
January 24, 2014

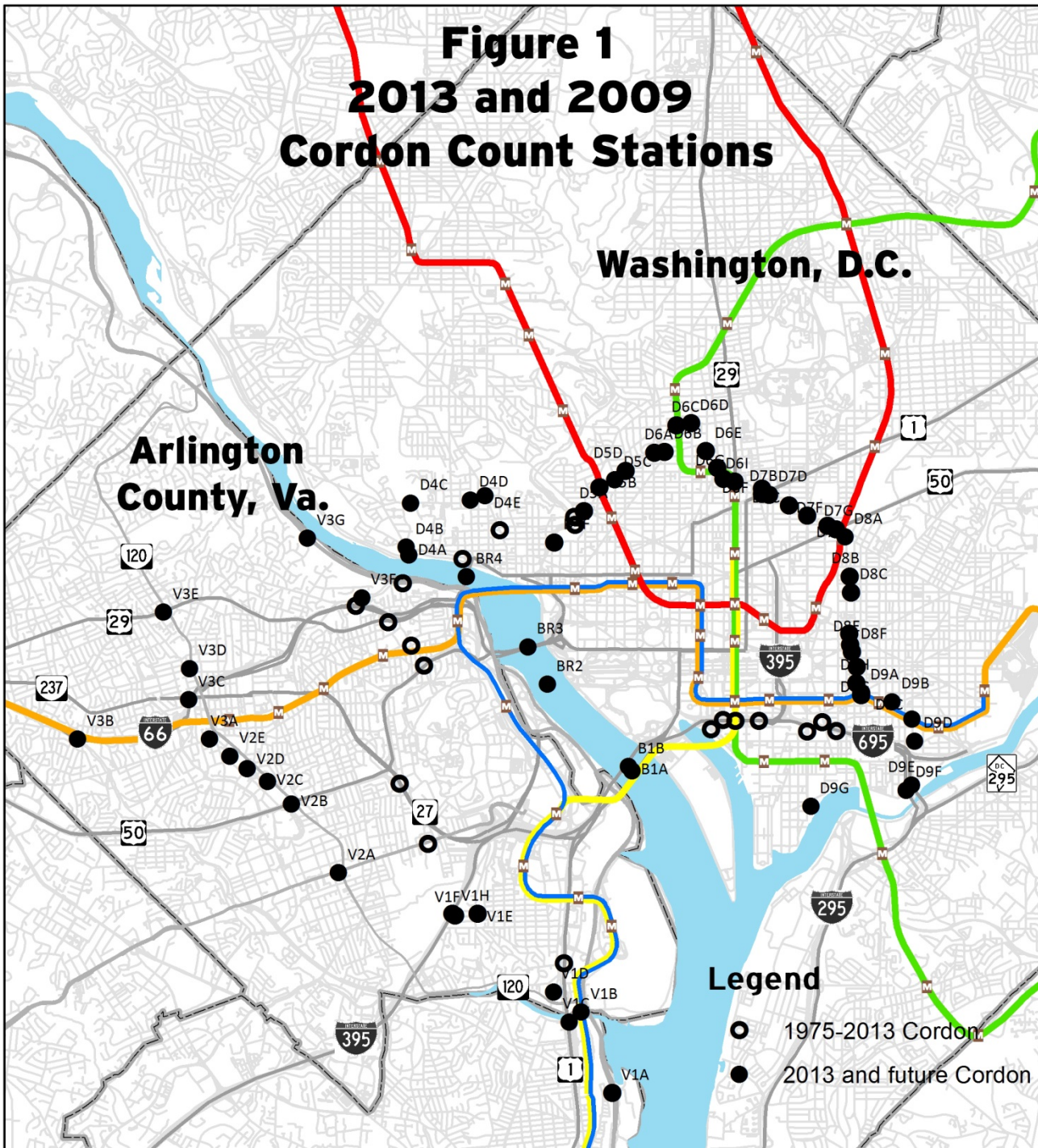
# When

- **March through June 2013**
- **Tuesdays, Wednesdays and Thursdays only**
- **Holidays avoided**
- **5:00 A.M. to 10:00 A.M. inbound only**

# Where

- Two cordon lines
- Traditional cordon line from 1970s through 2013 (originally established as the max load points on transit system after 1968 bus survey)
- Revised cordon line, first count 2013
- Cordon expanded to include “new” employment that has and will happen between 1975 and 2020

**Figure 1**  
**2013 and 2009**  
**Cordon Count Stations**



- Legend**
- 1975-2013 Cordon
  - 2013 and future Cordon

# What

- All wheeled traffic at each station
- Including bike traffic
- Transit buses were checked individually
- Mostly by COG/TPB, but WMATA conducted the counts at the Pentagon Bus Station
- Metrorail by WMATA
- MARC, VRE, MTA, PRTC and Loudoun Co. by the respective agencies
- This project does not count pedestrians





Checking 16Y bus arriving in 1900 block of E Street, N.W.

03 05 2013

# **Results (6:30 to 9:30) 2009 to 2013**

- Person trips decreased by about 17,000
- Transit - little change in Metro patronage - overall, not much change in absolute terms - transit modal share up from 45% to 47%
- Trips by car-pooling down by over 16,000 trips, modal share down from 19% to 16%
- SOV modal share unchanged at about 37%
- About 11,000 fewer trips crossing the revised cordon - due largely to less patronage on Orange Line at revised count station

# **Results (5:00 to 10:00) 2009 to 2013**

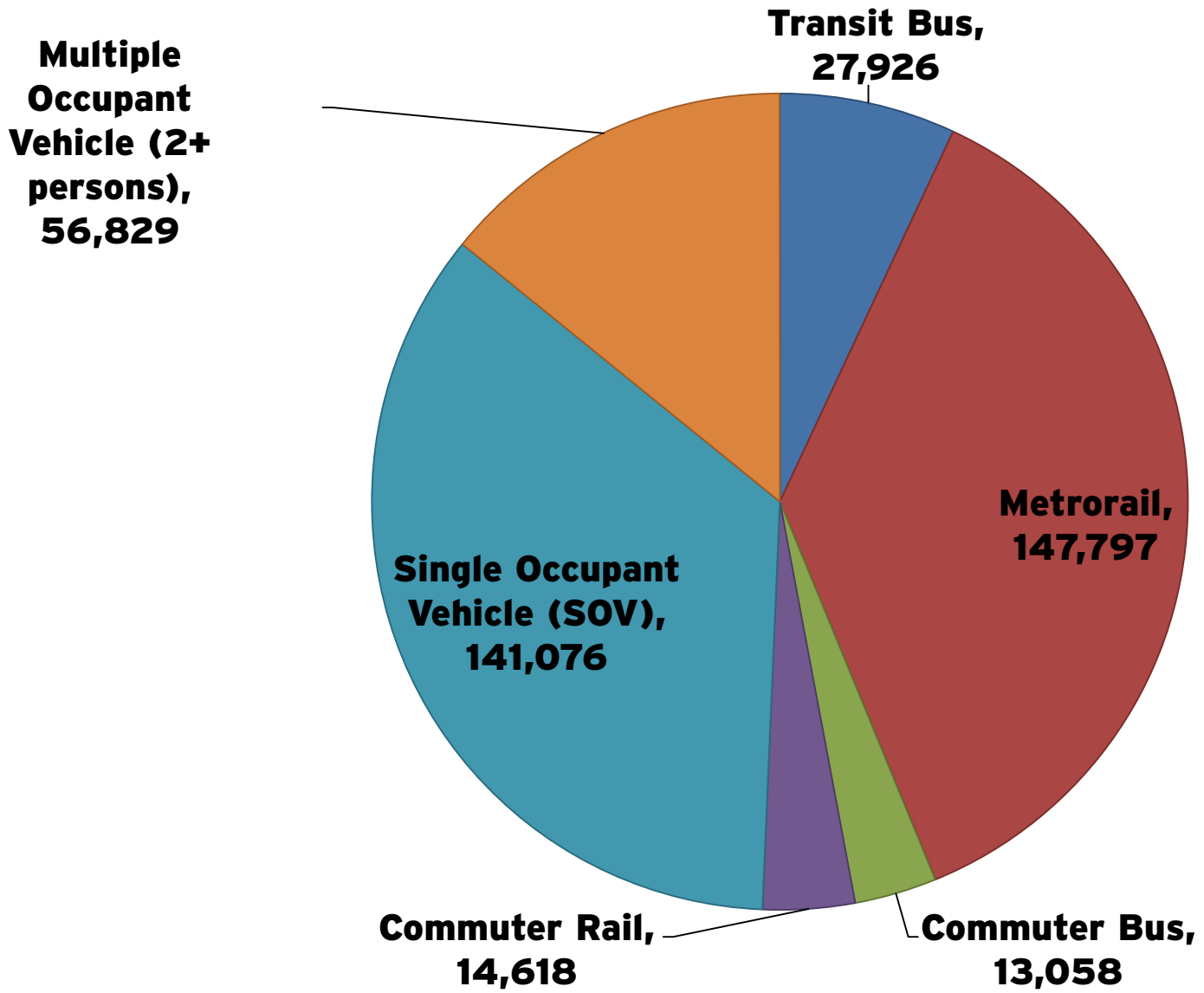
- Person trips also decreased by about 17,000
- Transit - not much change in absolute terms - modal share up from 43% to 45%
- Trips by car-pooling down by over 19,500 trips, modal share down from 18% to 15%
- SOV modal share up from slightly from 39% to 40%
- Also about 11,000 fewer trips crossing the revised cordon



# **Modal Shares to D.C. part of cordon only (6:30 to 9:30)**

- D.C. Stations plus bridge crossings from Virginia
- Transit bus 7% (Metrobus, Circulator); up from 5% in 2006
- Metrorail 37%; 38% in 2006
- Commuter Bus 3%; 2% in 2006
- Commuter Rail 4%; 2% in 2006
- SOVs 35%; 40% in 2006
- Car-pooling 14%; 13% in 2006

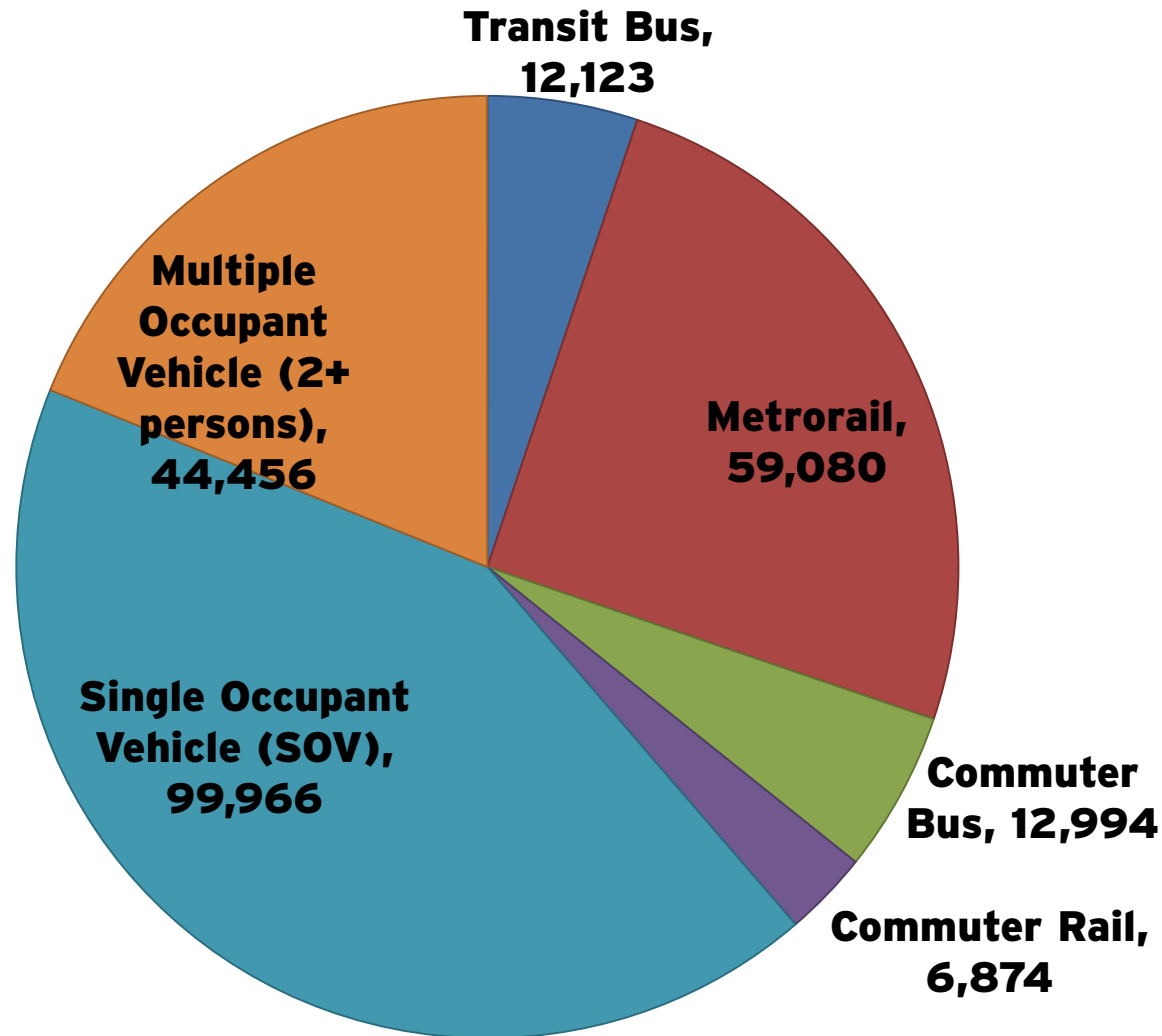
# Person Trips to D.C. Sectors by Mode (2013) 6:30-9:30



# **Modal Shares to Arlington part of cordon only (6:30 to 9:30)**

- Virginia stations plus bridge crossings from D.C.
- Transit bus 5% (Metrobus, ART, DASH, Fairfax Connector); up from 3% in 2006
- Metrorail 25%; 26% in 2006
- Commuter Bus 6%; 2% in 2006
- Commuter Rail 3%; 3% in 2006
- SOVs 42%; 46% in 2006
- Car-pooling 19%; 21% in 2006

# Person Trips to Va. Sectors by Mode (2013) 6:30-9:30



# Traffic Volumes

- 6:30 - 9:30: Down slightly for full cordon from 212,000 to 203,000
- 5:00 - 10:00: Down slightly from 285,500 to 278,500
- Bikes - big increase in percentage terms but even with that increase, we only counted about 5,000 (2%) of them for the full five hour period

# **Estimated error associated with Cordon Counts**

- Old cordon line, 6:30 to 9:30, there is a 95% chance that total observed traffic falls +/- 8,841 of 203,288
- Old cordon line, 5:00 to 10:00, 95% chance that traffic falls +/- 12,667 of 278,429
- New cordon line, 6:30 to 9:30, 95% chance that traffic falls +/- 5,458 of 206,721
- New cordon line, 5:00 to 10:00, 95% chance that traffic falls +/- 8,003 of 283,471
- New cordon line - more stations and renumbered stations means lower estimated error



# Questions? Comments?

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- Comments within 30 days, please