

AGENDA ITEM #10A

Corridor Traffic Counting



-April 7, 2005-






Background:

- Each year VDOT uses federal technical assistance funds to employ TPB to perform traffic counts on HOV lanes (I-267, I-66 and I-395/95). This is part of a cycle of TPB counting that includes a Beltway screenline and a Core screenline.
- These counts show the outstanding capacity-enhancing qualities of HOV lanes.
- VDOT's HOV counts are not designed to show the exact contributions of public transit:
 - Bus ridership is assumed based on 1999 load factors.
 - No Metrorail ridership is included.



2004 VDOT Counts

-  Counts occur on highway facilities containing HOV lanes.
-  Counts are at screenlines.
-  Data reported in 15-minute increments.



2004 VDOT Counts




-  Separately for HOV and non-HOV lanes.
-  Separate tallies for 1-, 2- and 3+ auto occupants, vanpools, motorcycles, transit buses, other buses, trucks.
-  List vehicles and passengers (but no passengers for bus and no consideration of Metrorail or VRE).

Figure 10

Person Carrying Capacity Comparison for HOV and Conventional Lanes, FALL 2004							
HOV Facility	Persons	Direction	Restricted Hours	A.M. HOV Lane Person Movement*	A.M. Conventional Lane Person Movement	A.M. Persons Per HOV Lane, Per Peak Hour*	A.M. Persons Per Conventional Lane, Per Peak Hour
<u>I-395</u> North of Glebe Road	HOV-3	Northbound	6:00 A.M. - 9:00 A.M.	34,600 (2 LANES)	23,400 (4 LANES)	6,500	2,200
<u>I-95</u> North of Newington	HOV-3	Northbound	6:00 A.M. - 9:00 A.M.	22,700 (2 LANES)	18,000 (4 LANES)	5,800	1,500
<u>I-66 - Inside Beltway</u> East of I-495; Road only for HOV use	HOV-2	Eastbound	6:30 A.M. - 9:00 A.M.	18,400 (2 LANES)	N/A	3,900	N/A
<u>I-66- Outside Beltway</u> West of I-495	HOV-2	Eastbound	5:30 A.M. - 9:30 A.M.	10,000 (1 LANE)	18,200 (3 LANES)	2,100	1,800
<u>I-267- Dulles Toll Road</u> West of Rt. 7	HOV-2	Southbound	6:30 A.M. - 9:00 A.M.	6,600 (1LANE)	12,800 (3 LANES)	3,000	1,800

Source: VDOT Fall 2004 Counting Program.


Includes automobiles, vanpools, motorcycles, and buses during the restricted period. Also includes violators. Bus counts are based on factors calculated from latest ridership data provided for the 1999 Performance of Regional High Occupancy Vehicles Facilities in the Washington Region.



Growth of HOV/SOV Traffic:

 I-95/395 showed sharp growth in the ratio of HOV to conventional lanes in persons per lane per peak hour.

	<u>1999</u>			<u>2004</u>		
	<u>HOV</u>	<u>Conventional</u>	<u>Ratio</u>	<u>HOV</u>	<u>Conventional</u>	<u>Ratio</u>
N. of Glebe	5,200	2,300	2.3	6,500	2,200	3.0
N. of Newington	4,200	2,100	2.0	5,800	1,500	3.9

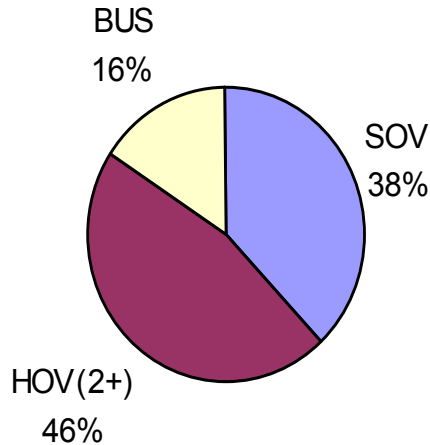
 I-66 and I-267 were relatively unchanged.



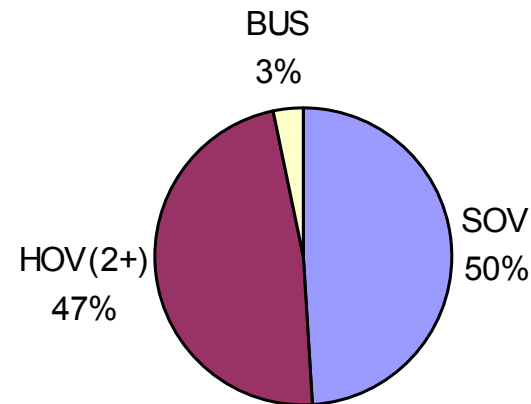
Facility Mode Shares:

Using 1999 transit ridership factors and excluding Metrorail, for inbound traffic during each morning restricted period on combined HOV and conventional lanes at screenlines:

I-395 North of Glebe Road
6:00 AM - 9:00 AM



I-95 North of Newington
6:00 AM - 9:00 AM



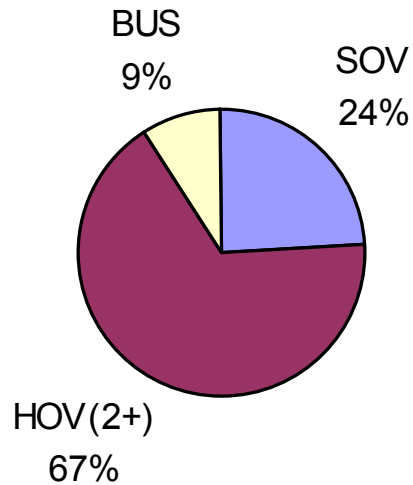


Facility Mode Shares:

I-66 - Inside Beltway

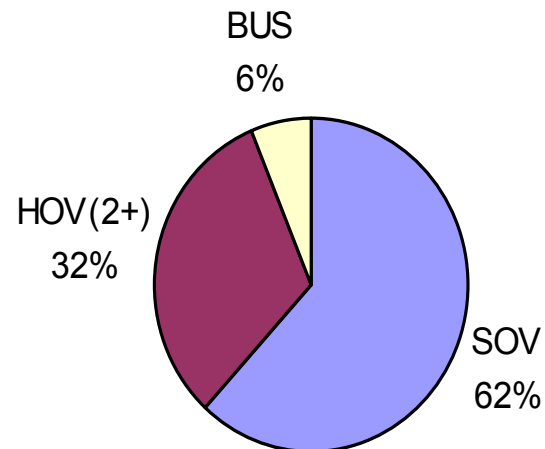
(Sycamore/Fairfax Drive; Road only for HOV use)

6:30 AM - 9:00 AM



I-66 - Outside Beltway (VA 243/I-495)

5:30 AM - 9:30 AM

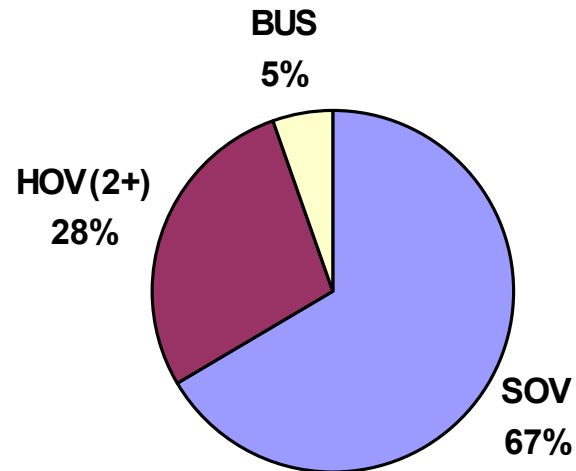




Facility Mode Shares:

I-267 - Dulles Toll Road (West of Rt. 7)

6:30 AM - 9:00 AM



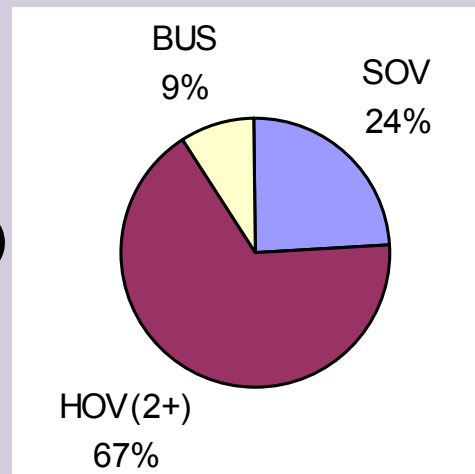


Corridor Mode Shares:

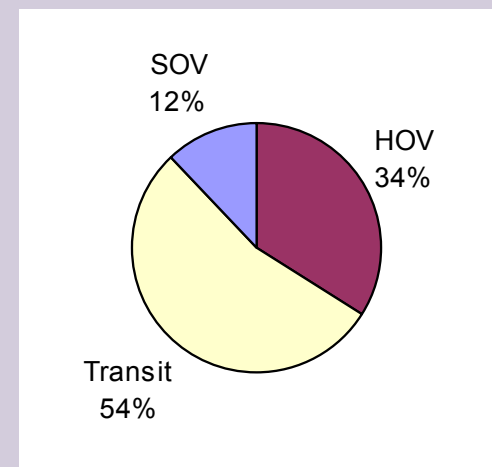
- Omitting Metrorail from I-66 drastically changes mode shares.
- Estimating Metrorail ridership for Fall, 2004, the I-66 shares would change:

I-66 Inside of Beltway
(Sycamore/Fairfax Dr.)

No Metrorail



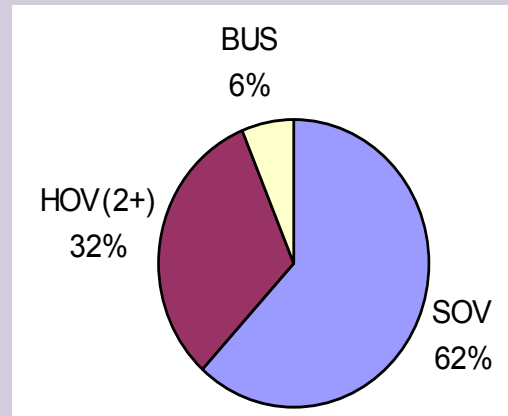
Includes Metrorail



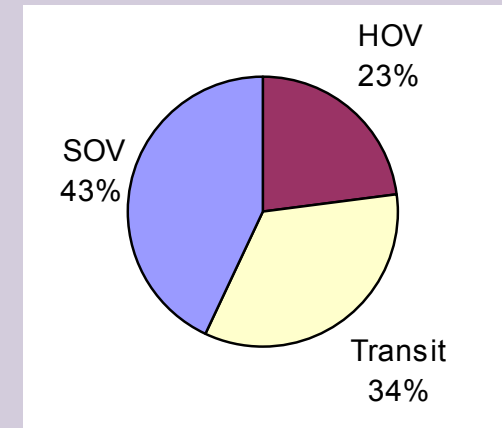


Corridor Mode Shares:

No Metrorail





Includes Metrorail



I-66 Outside of Beltway
(VA 243/I-495)



NVTC's Pilot Traffic Counting Program:

-  When fully implemented not only will HOV mainlines be counted as they are now, but current bus and rail ridership will be included as well as counts on parallel highways.
-  This will provide statistically significant mode share estimates in corridors.