

2004 Performance of Regional High-Occupancy Vehicle Facilities in the Washington Region

Presented to the
TPB Technical Committee
Friday, October 7, 2005

HOV Facilities Monitored

- I-395 and I-95 (Shirley Highway)
- I-66 (inside Beltway)
- I-66 (outside Beltway)
- I-270 (and I-270 Spur)
- Va. 267 (Dulles Toll Road)
- U.S. 50 (John Hanson Highway)
- U.S. 1 and Washington Street (arterial HOV in City of Alexandria)
- **Wilson Bridge** (future HOV crossing Potomac)

Data Collection

- Spring and early summer of 2004
- Collected Tuesdays, Wednesdays and Thursdays
- Counts re-done in the event of a serious freeway incident
- Peak-flow direction only (inbound to D.C. in A.M.; outbound from D.C. in P.M. – except U.S. 50 HOV – two stations counted both ways because of 24/7 HOV restriction)
- 5 A.M. to 10 A.M. inbound
- 3 P.M. to 8 P.M. outbound
- HOV and non-HOV lanes monitored
- Auto occupancy; person trips; vehicle trips and persons per lane per hour
- Buses and nearby transit monitored

Findings

- HOV Lanes carry more persons per lane per hour than adjacent non-HOV lanes (A.M. HOV and non-HOV average vehicle occupancies for each facility – these do not include transit)
 - I-395 (HOV 2.5, non-HOV 1.1)
 - I-95 (HOV 2.6, non-HOV 1.1)
 - I-66 [inside Beltway] (HOV 1.7)
 - I-66 [outside Beltway] (HOV 2.0, non-HOV 1.1)
 - I-270 [at Md. 187] (HOV 1.9, non-HOV 1.1)
 - I-270 spur [at Democracy Blvd.] (HOV 1.5, non-HOV 1.1)
 - Va. 267 (HOV 1.8, non-HOV 1.1)
 - U.S. 50 (westbound side) (HOV 1.6, non-HOV 1.0)
- HOV lanes provide savings in travel time (from 37 minutes on Shirley Highway to 3 minutes on U.S. 50)
- Almost no savings in travel time on I-66 eastbound in the mornings (*outside of Beltway, concurrent-flow HOV lane*)
- Hybrids appear to have some impact on HOV lane performance in Virginia

Planned Future Activities

- Comments on this report
- Monitor in the future as resources and time allow
- Monitor hybrid use if needed (current “clean fuel” exemption in Virginia is due to sunset on June 30, 2006)
- Performance impact of PPTA proposals to convert Shirley Highway HOV to HOT lanes

Comments

- Already reviewed with Travel Forecasting Subcommittee
- Questions?
- (202) 962 3292
- Comments?
- In writing to Zill@MWCORG.ORG
- Or FAX to (202) 962 3202
- By Friday, October 21, 2005