

Braddock Road Multimodal Study Outline (DRAFT)

April 2, 2014

The Braddock Road Widening Study will consist of three main components: study widening/HOV/transit needs from Burke Lake Road to I-495, study widening/transit from Guinea Road to Burke Lake Road, and study a parking/transit center facility on Braddock Road in the vicinity of Burke Lake Road.

Corridor-wide tasks

- Perform an Origin-Destination study to evaluate total vehicular trips entering the Express Lanes and northbound I-495 and the traffic patterns in the corridor.
- Perform a corridor traffic analysis to assess vehicular weaving and merging issues.
- Coordinate all alternatives studied with adjacent communities.
- Study trail systems, bicycle connections, bus stops, and pedestrian crossings and missing links.
- Investigate right-of-way and environmental impacts of all alternatives, such as noise, stormwater management, impacts on parks, wetlands, etc.
- Develop planning level cost estimates for each alternative.
- Look at the county's Transit Development Plan recommendations for future transit in the corridor.
- Incorporate results and recommendations from the Braddock Road/Wakefield Chapel Road/Dansbury Forest Drive Study.
- Evaluate access management strategies.
- Evaluate landscaping needs and community priorities, including discussion of existing landscaping.
- Evaluate traffic signal operations and coordination along the corridor and other operational improvements.
- Perform license plate survey at the Kings Park Shopping Center.
- Perform neighborhood travel survey.

- Coordinate with Fairfax County Public Schools on how each alternative will impact school bus routes.

HOV Widening from Burke Lake Road to I-495

- Examine ability to connect directly to I-495 Express Lanes facility, including possible bridge widening to accommodate the additional lanes.
- Evaluate all four alternatives for viability – GP lanes only/HOV 2/HOV 3/HOT lanes. Make recommendation on preferred alternative.
- Evaluate best location for roadway widening to accommodate GP lanes only/HOV 2/HOV 3/HOT lanes (e.g., far left lane or far right lane) for effectiveness, safety, and traffic flow.
- Evaluate enforcement strategies to examine occupancy violations utilizing the HOV and HOT facilities.
- Examine implementing innovative at-grade solutions for incorporating preferred alternative on Braddock Road (eg, Turn-lane restrictions, lane conversion to accommodate peak hour traffic, queue jumping for buses).
- Also examine possibility of grade-separated solutions and draw a comparison with at-grade solutions for the preferred alternative to be effective.
- Study following key intersections in detail, in addition to other intersections for vehicular and pedestrian safety improvements and possible alignment:
 - Wakefield Chapel Road/Braddock Road
 - Danbury Forest Drive/Braddock Road
 - Burke Lake Road/Woodland Way/Braddock Road
 - I-495/Ravensworth Road/Port Royal Road/Queensberry Avenue
- Research similar examples of roadway widening incorporating HOV in other jurisdictions (DC, MD and other states).

General Purpose Widening from Guinea Road to Burke Lake Road

- Develop conceptual design of addition of General Purpose lanes on the Braddock Road segment from Guinea Road to Burke Lake Road.
- Ensure coordination with HOV lane east of Burke Lake Road.

- Identify right-of-way, environmental issues, and community concerns regarding this segment.

Transit Center/Park and Ride/Transit Service

- Develop conceptual design of the Transit Center on Braddock Road, including determination of parking needs.
- Coordinate with Fairfax Connector and WMATA on existing and future bus routes and service along the Braddock Road corridor, and how each alternative will function with the proposed park-and-ride facility.
- Evaluate usage of current park-and-ride lots and informal carpooling along the corridor.
- Coordinate with recommendations from the Transit Development Plan.
- Study pedestrian/bike facilities to/from and within the Transit Center.

Study Alternatives

- Addition of only General Purpose Lanes from Burke Lake Road to I-495.
- Addition of two HOV 2 Lanes from Burke Lake Road to I-495.
- Addition of two HOV 3 Lanes from Burke Lake Road to I-495.
- Addition of two HOT Lanes from Burke Lake Road to I-495.
- Addition of two General Purpose Lanes from Guinea Road to Burke Lake Road.
- Addition of Transit Center and Commuter Parking.
- No-Build Alternative.