

ITEM 9 – Information

October 16, 2013

Briefing on the Final Report of the TPB Bus On Shoulders (BOS) Task Force

Staff Recommendation: Receive briefing on the final report of the task force.

Issues: None

Background: At the September 2012 meeting, the Board established the Bus on Shoulder Task Force to investigate promising locations in the region to operate buses on the shoulders of highways. On September 18, 2013, the task force reviewed and approved the final report for submission to the TPB.



***National Capital Region
Transportation Planning Board***

***Bus On Shoulders (BOS) Task Force
Overview and Final Report***

***Transportation Planning Board
October 16, 2013***

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TPB Task Force on BOS

- At the July 18, 2012 meeting of the Transportation Planning Board (TPB), it was requested that a task force be established to identify promising locations in the region to operate buses on the shoulders of highways.
- The proposed membership, work plan, and schedule were approved at the September 19 TPB meeting.



BOS is an arrangement by which buses providing public transportation service operate on designated highway shoulders, when safe and practical to do so, in order to circumvent peak traffic congestion.



Why BOS?

- Increased interest in regional transit network using the region's highway network.
 - Provide alternatives to single-occupancy vehicles and auto-dependency.
- Known congestion issues on region's highways.
 - I-495 Express Lanes in Virginia provide managed right-of-way for buses, but lack connections to make regional network effective.
- Modest experience in this region:
 - 1.6 mile section of Dulles Airport Access Road (VA-267) into West Falls Church Metrorail Station,
 - US-29 near Burtonsville, MD,
 - Previously, on Maryland portion of Capital Beltway (I-495) near the American Legion Bridge.
- Currently, VDOT is preparing to implement a BOS pilot project along I-66 inside the Beltway in Fall 2014.

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History of Task Force



Task Force Meeting #1 – October 2012

- Discussed local and national/world experience with key issues: implementation, design, operational, and regulatory.

Task Force Meeting #2 – January 2013

- Discussed BOS feasibility on three study corridors: MD 5/US 301 Corridor in Prince George's and Charles Counties; I-270 Corridor from City of Frederick to the Capital Beltway; Virginia: I-66 Inside the Beltway.

Task Force Meeting #3 – April 2013

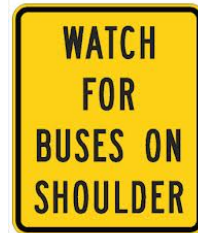
- Discussion of benefit-cost analysis (BCA) model.
- Draft Report distributed in July.

Task Force Meeting #4 – September 2013

- Reviewed and approved Final Report for submission to TPB.
- *“An Assessment of the Feasibility of Bus On Shoulders (BOS) at Select Locations in the National Capital Region”*

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Key Issues for BOS



Operating buses on shoulders has implications for general travel and emergency use of the shoulders. Among the key issues are:

- Operational Speeds and Hours
- Roadway Shoulder Width, Structural Strength, Geometry and Sight Distances
- Clearance at Barriers and Overpasses
- Posted Signage and Markings
- Enforcement and Public Outreach and Education
- Emergency Incidents and Responder Access
- Federal and State Exceptions to Design Code
- Eligible Vehicles and Bus Driver Training Requirements

These issues are in many cases location or agency specific, and would have to be addressed during preliminary engineering, in operations protocols, or as part of project implementation.

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Three corridors were evaluated for BOS feasibility

Maryland

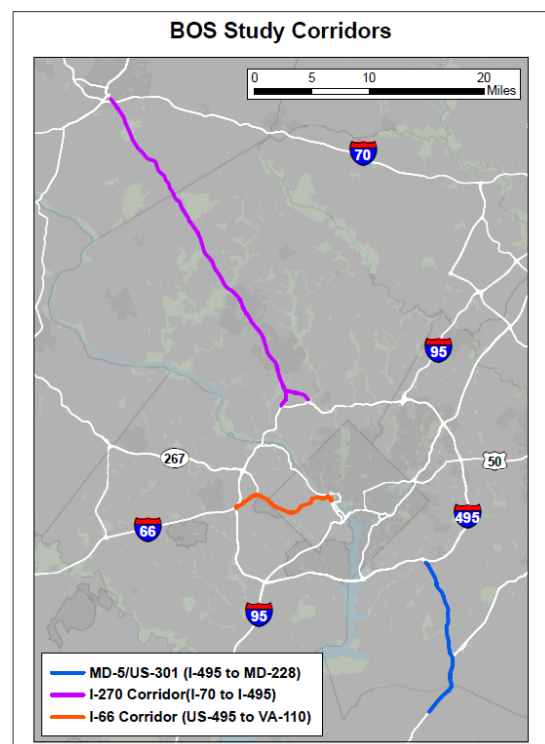
- MD-5/US-301 Corridor in Prince George's and Charles Counties.
- I-270 Corridor from City of Frederick to the Capital Beltway.

Virginia

- I-66 Inside the Beltway.

Reviewed information and data for three key criteria:

- **Bus Service** (number of buses and of bus riders)
- **Traffic Congestion** (average speed and unreliability in peak hour)
- **Shoulder Conditions** (known data on shoulder conditions)



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Findings of Final Report – “An Assessment of the Feasibility of Bus On Shoulders (BOS) at Select Locations in the National Capital Region”



Shoulder Conditions

- Detailed information is generally unavailable on shoulder width and strength and overall suitability for routine use by buses.
- Pinch points and conflict points on the corridors require additional evaluation.
- Initial capital cost estimates to upgrade the shoulders of some corridors are high, but could be refined with further study.

Targeted Implementation

- BOS implementation is likely to be more feasible if initially targeted to short segments that have high transit usage and high congestion.
- Shoulder upgrade costs could be reduced or minimized if integrated with other road work

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Member Agencies’ Next Steps for Examining Bus on Shoulders



- Update TPB in 2015 on VDOT I-66 Inside the Beltway Pilot Implementation and further BOS developments.
- Contingent upon funding, State DOTs, Jurisdictions, and Transit Operators should continue evaluating corridors for BOS feasibility:
 1. Further refine shoulder condition data through engineering evaluations.
 2. Identify and fund necessary capital improvements for specific segments.
 3. Define necessary procedural and operational steps to conduct BOS projects or pilot programs.
 4. Review long-range roadwork schedule for opportunities to upgrade shoulders for BOS operations in conjunction with rehab / re-surfacing.

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**Final Report and All Documents
available at:**

<http://www.mwcog.org/bostf>

