

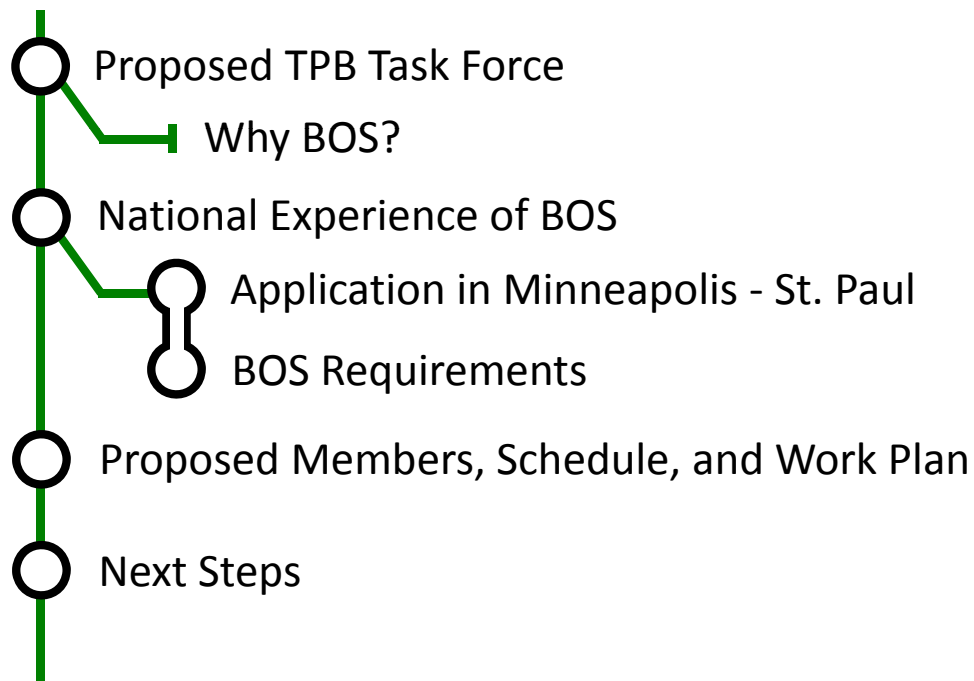


TPB Task Force for Bus On Shoulders (BOS)

Commuter Connections Committee
September 18, 2012

Eric Randall, DTP

Structure of Presentation



Proposed 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.



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 will provide managed right-of-way for bus, but need 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,
 - MD-29 near Burtonsville,
 - Previously, on Maryland portion of Capital Beltway (I-495) near the American Legion Bridge.
- Currently, VDOT is conducting a technical assessment of the feasibility of BOS along I-66.

National Experience



- Minneapolis-St. Paul is the leading implementer:
 - ❖ Started in 1991; now a 280-mile network.

Application in Minneapolis-St. Paul

When is traffic congested enough for shoulder use?

- Delays (traffic at less than 35 mph) at least once a week.
- Area is used by 6+ buses a day.
- Must save a bus 8+ minutes per mile in travel time.

Bus drivers:

- Must not use the shoulder when traffic is moving faster than 35 mph.
- Cannot exceed the speed of traffic by more than 15 mph; max. speed is 35 mph.
- Must yield to any vehicle entering the shoulder, including at freeway ramps or intersections.
- Must join regular lanes when the shoulder is blocked by stalled cars or debris.

Why only Transit Buses?

- Professional drivers accountable to operating rules and trained to handle complex driving decisions while driving on the shoulder.
- Large transit buses can be seen by other motorists and the drivers sit high enough to see potential hazards.
- Shoulder use is limited to a small number of vehicles and those vehicles are transit buses that directly help to reduce congestion.

TPB Task Force: Proposed Members and Schedule

Departments of Transportation

- District of Columbia (DDOT)
- Maryland (MDOT)
- Virginia (VDOT)

Transit Operators

- WMATA
- PRTC
- MTA Commuter Bus
- Loudoun Transit

Jurisdictions

- Fairfax County
- Frederick County
- Montgomery County
- Prince George's County
- Others...

Proposed Schedule										
Tasks	2012				2013					
	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Task 1										
Summary of Local and National Experience with Bus On Shoulders										
Task 2										
Assessment of the Feasibility of BOS at Specific Locations										
Task 3										
Analysis of Selected Locations in the Region										
Meetings		▲			▲			▲		
Technical Memoranda			■		■			■		

TPB Task Force: Proposed Work Plan



Task 1 – Summary of Local and National Experience with Bus On Shoulders

- Evaluate experience with current and previous BOS experience in the region, including safety, roadway engineering, and bus service operations aspects.
- Summary of national experience and its applicability in this region will be prepared and reviewed, including federal regulations and supporting state legislation.

Task 2 – Assessment of the Feasibility of BOS at Specific Locations

- Stakeholder agencies will identify potential corridors for BOS operation on the region's highway network, based on 1) existing highway congestion locations, 2) current bus service, and 3) highway shoulder conditions.
- Identify potential corridors and bus routes for further analysis; screen out infeasible locations.

Task 3 – Analysis of Select Corridors/Routes in the Region

- Identify issues and challenges with safe operation,
- Develop capital cost and operating cost inputs,
- Determine potential travel time savings and benefits for bus routes based on highway congestion,
- Present a benefit-cost analysis of the prospective benefits to riders and traffic relative to the projected costs of implementation of BOS service, on the selected corridors/routes.

Next Steps



- Presentation of Proposed Work Plan and Membership of BOS Task Force to the TPB at their September 19 meeting
 - Receive approval and any additional direction.
- First task force meeting is proposed for Wednesday, October 17 (morning of the TPB meeting).
 - Meeting would include presentation of the initial results for Task 1 - Summary of Local and National Experience

