

## **Bus Rapid Transit Issues and Potentials in Rockville Town Center Preliminary Review (July 14, 2014)**

### **Findings:**

Both alternatives incorporate:

- a. A single, dedicated bi-directional BRT lane.
- b. BRT station at or close to the Metro station.
- c. Minimum 11-foot wide motor vehicle lanes.
- d. Motor vehicle turn lanes maintained in their existing locations.
- e. Approximately 25-foot wide pedestrian zone on the west side of MD 355 and an approximately 14-foot wide zone on the east side.
- f. 5-foot wide bicycle lanes on both sides of MD 355 and MD 28.
- g. Possible ROW impacts to the Veterans Memorial Park.

### *East side alternative*

- a. Requires little land acquisition for BRT lanes or station.
- b. Riders have a direct relationship between BRT and the Metro Station and its future redevelopment.
- c. Cross section becomes wider, making it potentially longer for pedestrians to cross.
- d. Could be added to existing street configuration along MD 355, but would require land acquisition at the pinch point near the Metro Station to maintain the current motor vehicle lane widths. Acquisition would create minor but mitigatable impacts to the existing Metro Station (approximately 32 feet for the BRT station) and Metro surface parking area north of Park Road (5 to 10 feet).

### *Centerline alternative and tunnel*

- a. Almost eliminates the need for expansion and property acquisition except at the north end tunnel entry location. Possibly allows for maintaining wider motor vehicle travel lanes.
- b. Potential for more effective BRT operations and local vehicle traffic movement at grade (up top) due to fewer conflicts and less friction given the separation of the flow-through traffic going below, and could potentially enable adjustments to signal timing at grade to improve traffic flow for local traffic.

- c. Potential to better connect East Rockville and the Metro Station with the Town Center area since fewer travel lanes that would need to be crossed by pedestrians to access the BRT and Metro station and the neighborhoods.
- d. Provides potential for better place-making that supports the goals of the Town Center Master Plan, and potentially more effective approach to environmental requirements such as stormwater management along this segment of the corridor.
- e. Provides potential for better use of the local (at grade) space with fewer conflicts for multiple users (buses, vehicles, pedestrians and bicycles).
- f. Provides potential for better through-put with reduced delays for through traffic. Staff estimates through traffic at 70% of all traffic on MD 355.
- g. The alternative as drawn does little to address congestion at MD 28 and the mixing bowl because the Veirs Mill Road lanes stay at grade rather than entering a tunnel, and all turning lanes and signal phases would still be needed.

A fully grade-separated intersection may be needed to fully address these needs.

- h. The tunnel cost would likely be high. However, any return on investment analysis should consider the corridor as a whole, not just this one intersection.
- i. The benefits of being able to narrow the local at grade cross section and create a more walkable environment should also be part of any future analysis of tunnel viability.