

**MD 355 North Corridor Advisory Committee Meeting #7 Summary
June 7, 2016 from 6:30 to 9:00 PM
Montgomery County Executive Office Building
101 Monroe Street
Rockville, MD 20850**

Attendees

Members	
Jerry Callistein	Era Pandya
Nallathamby Devasahayam	David A. Rosenbaum
James Martin	Peter Shaw
Mark Pace	Gail H. Sherman
Apologies	
Paula Bienenfeld	Margaret Schoap
Dennis Cain	Goke Taiwo
Cherian Eapen	John Francis Torti
Stephen Hendrickson	Helen Triolo
Peter Henry	Ronald Welke
Kathie Hulley	Andrew Williamson
Richard Lindstrom	Paul Yanoshik
Dayssi Morera	Kam F. Yee
Tom Savoie	Joel Yesley
Staff	
Lead Facilitator – Mary Raulerson	MTA – Rick Kiegel
Study Team – Alvaro Sifuentes	MTA – Kyle Nembhard
Facilitation Staff – Andrew Bing	SHA – Laura Barcena
Facilitation Staff – Yolanda Takesian	Montgomery County Department of Transportation (MCDOT) – Tom Pogue
Facilitation Staff – Liz Gordon	MCDOT – Joana Conklin
AECOM Transit Service/Forecasting– Chris Bell	MC DOT – Warren Barrett
Maryland Transit Administration (MTA) – Jackie Seneschal	

Handouts

Handouts provided to CAC Members included:

- Agenda for CAC Meeting #7

- Presentation for CAC Meeting #7
- BRT Draft Alternatives Handouts
- BRT Draft Service and Station Map
- Summary of CAC Meeting #6

Meeting materials and video of the meeting will be posted on the project website:

www.montgomerycountymd.gov/rts

Introduction

Facilitator Mary Raulerson welcomed attendees, introduced meeting content, and outlined the agenda.

Montgomery County DOT Update

Joana Conklin updated attendees on the status of an \$80,000 grant that MCDOT applied for through the Transportation Land Use Connections (TLC) grant program. TLC grants are made available to jurisdictions in the region by the Metropolitan Washington Council of Governments (MWCOG). The County's application was to develop BRT station prototypes that can be used on various corridors. The grant has been awarded and a consultant is being chosen to complete the work. The project should begin in late summer-early fall and be completed by June of 2017. The County plans to come back to the CAC with ideas generated through this effort.

Summary of Open House

Jackie Seneschal updated attendees on the project public open houses conducted since the last CAC meeting. Between the two open houses about 160 people attended, as a result of outreach through mailers to addresses within a half mile of the corridor and other media. Outreach was performed in English, Spanish, Russian, Chinese and Vietnamese. Ms. Seneschal encouraged CAC members to continue to share public open house and CAC materials with their neighborhood associations and other networks.

The BRT project team also received around 50 comments directly through the online comment form. The comments received both through the form and the open houses focused mostly on the following non-exhaustive list of topics:

- Relationship of BRT to Metro
- BRT amenities
- Impact to traffic operations
- Improved bicycle facilities
- Dedicated BRT lanes to attract riders
- Fixing existing infrastructure (roads, Metro)
- Parking needs at northern station
- Need for frequent service (5-10 minutes)

Commenters were also pleased that an alignment was added to Observation Drive. The fact that comments from open house visitors were similar to those expressed by CAC comments is a good indication that the CAC process is doing a good job of representing the public's input.

Question (Q) What does “BRT Amenities mean”?

Response (R) People asked about system specifics like “Will it have level boarding?” and “Will there be Wi-Fi?”

Project Process and Screening Criteria

Ms. Seneschal discussed the progress made through the CAC process thus far, and showed where this meeting falls in that timeline, namely, introducing five conceptual BRT alternatives. Next, the process will turn toward comparing alternatives against each other, in terms of how well they meet the project’s purpose and need and screening criteria.

The Alternatives screening process starts with examining fundamental physical constraints, followed by a high level comparative analysis. Those results will be presented to the CAC and to the broader public in the fall. After the options have been vetted, they will be narrowed down several that will be advanced to detailed study. These alternatives will be evaluated in greater detail and quantitatively compared before the selection of a Locally Preferred Alternative (LPA).

The general screening criteria that will be used to evaluate the conceptual alternatives include

- Transit ridership (BRT, bus, total)
- Boardings by station
- Travel time (BRT, automobiles)
- Person throughput
- Jobs/people within 45 and 60 minutes
- Property impacts
- Environmental impacts
- Costs (capital, operating)

(Q)The schedule you showed made it look like the CAC process “goes dark” for a year. Will we have no involvement for a year?

(R) The CAC will be consulted during this time but it will take time for the detailed analysis to be completed. There will be some months where analysis is underway without much information coming from the process to the CAC. The length of these processes will depend on how many alternatives are advanced for detailed study.

Conceptual Alternatives

Alvaro Sifuentes reviewed with the CAC the three components that characterize each alternative: the running way, the station locations, and a service plan. At the previous CAC meeting, the members had the opportunity to review the station locations and service plans proposed for the entire corridor. The service plan consists of three routes:

- Clarksburg (Northern termini) to Rockville Metrorail Station;
- Lake Forest Transit Center to Rockville Metrorail Station; and
- Montgomery College (Rockville Campus) to Southern Termini.

Meeting 7's discussion is focused on running way concepts.

The development of conceptual alternatives began with the Countywide Transit Corridors Functional Master Plan. Given the diverse characteristics found along the corridor, the team has divided it into the seven sections described below.

- Section 7 – Clarksburg / Germantown (~6.2 miles), Clarksburg to Middlebrook Road
 - MD 355 transitions to a four lane roadway at Middlebrook Road and then quickly to a two lane roadway north of MD 27
 - Character and land use along MD 355 changes considerably from a suburban to rural environment
 - Section would isolate comparison between the MD 355 alignment and Observation Drive alignment

- Section 6 –Germantown / Montgomery Village (~3.2 miles), Middlebrook Road to MD 124 (Montgomery Village Avenue)
 - Predominantly a six lane roadway section
 - Predominantly suburban in nature
 - North of the congested MD 124 intersection

- Section 5 – Gaithersburg (~1.4 miles), MD 124 (Montgomery Village Avenue) to Summit Avenue
 - Challenging section with many constraints. Alvaro discussed how more detail would be provided for this section on a later slide

- Section 4 – Rockville / Shady Grove (~3.2 miles), Summit Avenue to College Parkway
 - Predominantly a six lane roadway section
 - Similar land use with commercial on the east side of the road and pockets of residential on the west side

- Section 3 – Rockville Town Center (~1.8 miles), College Parkway to Dodge Street
 - Challenging section with many constraints. Alvaro discussed how more detail would be provided for this section on a later slide

- Section 2 – White Flint / Rockville (~4.1 miles), Dodge Street to Grosvenor Metrorail Station
 - Predominantly a six lane roadway section
 - Land use is commercial
 - White Flint Sector Plan and Rockville Pike Plan cover most of this section

- Section 1 – Bethesda (~3.2 miles), Grosvenor Metrorail Station to Bethesda Metrorail Station
 - Challenging section with many constraints. Alvaro discussed how more detailed would be provided for this section on a later slide

Sections 1, 3, and 5 are the most constrained and complicated of the corridor. The character of the roadway and constraints on the possible BRT running way types in those places were discussed in more detail.

- Section 5 - Gaithersburg

- 5 lane section
- Center left turn lane used to access businesses
- Buildings in close proximity to roadway
- Constrained by bridge over railroad tracks and roadway
- Section 3 - Rockville Town Center
 - Buildings in close proximity to roadway
 - Service roads providing inter-parcel connectivity
 - Rail tracks on east side in close proximity to roadway
 - Park and historic property
- Section 1- Bethesda
 - Buildings in close proximity to roadway south of Jones Bridge Road
 - Federal properties abutting both sides of roadway
 - Three listed historic properties
 - Beltway bridges

Mr. Sifuentes then explained each of the conceptual alternatives using the plans provided to the CAC members and available on the project website.

- Alternative 1: No Build
 - Includes planned and programmed transit and roadway improvements as currently listed in the Financially Constrained Long Range Transportation Plan (CLRP)
- Alternative 2: Transportation System Management (TSM - Figure 1)
 - Enhanced bus service in existing lanes, including greater frequency
 - Bus will be in mixed traffic
 - Queue jumps at some intersections
 - Transit Signal Priority (TSP) at some intersections
 - TSM is being considered for entire length of the corridor from Bethesda to Clarksburg

Introduction of Alternative 3:

Alternative 3 was divided into a 3A and 3B option. Both Alternatives include BRT that is mostly in the median, however Alternative 3A provides BRT service from the Grosvenor Metrorail Station to the Clarksburg Outlets along Observation Drive, and Alternative 3B provides BRT service from the Bethesda Metrorail Station to Redgrave Place in Clarksburg, staying on MD 355. The specifics of each alternative are listed below and depicted graphically on Figure 2 and Figure 3 which are available with the meeting #7 materials at <http://www.montgomerycountymd.gov/RTS/md355north.html>.

- Alternative 3A:
 - Provides new BRT service from the Grosvenor Metrorail Station to the Clarksburg Outlets
 - No BRT service between Bethesda and Grosvenor Metrorail Stations

- Service would be on dedicated lane(s) from Grosvenor Metrorail Station to Middlebrook Road along MD 355
 - Two dedicated median lanes where feasible proposed for Sections 2, 4, 6 through widening of the road
 - Within the median sections all existing unsignalized intersections would be closed. Those movements would need to occur at signalized intersections.
 - Bi-directional dedicated median lane proposed for Section 3 achieved through the widening of the road
 - Passing zones would be created to achieve necessary headways
 - Within the median sections all existing unsignalized intersections would be closed. Those movements would need to occur at signalized intersections.
 - Bi-directional dedicated median lane proposed for Section 5 achieved through the repurposing of the center turn lane
 - Passing zones would be created to achieve necessary headways
 - All left turn movements will only occur at signalized intersections
 - Service would be in mixed traffic north of Middlebrook Road up to the Clarksburg Outlets along Observation Drive (Section 7)
- Three Route Patterns Along MD 355
 - The first (northern) pattern is from either Clarksburg Outlets (3A) or Redgrave Place (3B), and would end at Rockville Metro Station
 - The second (northern) pattern is from Lake Forest Transit Center to Rockville Metro Station
 - The third (southern) pattern is from Montgomery College (Rockville Campus) to the southern terminus, which would be Grosvenor (3A) or Bethesda Metro Station (3B)

(Q) How does this option square with Rockville Pike Plan?

(R) It is consistent but does not include recommendations for access roads shown as part of the plan, because they are beyond the scope of this phase of study.

- Alternative 3B
 - Provides new BRT service from the Bethesda Metrorail Station to Redgrave Place in Clarksburg.
 - Service would be in dedicated lane(s) from Bethesda Metrorail Station to Redgrave Place along MD 355.
 - Alternative 3B running way options are the same as Alternative 3A except for:
 - Section 1 – BRT would operate in the curb lane. The roadway inside of the Beltway will be converted into a reversible system where more lanes will be assigned to the peak direction of traffic. This condition is similar to the existing reversible system on US 29 inside the Capital Beltway. A lane in the off-peak direction would be repurposed. For example in the AM peak direction there would be four lanes of southbound traffic into Bethesda where the curb lane would be the dedicated BRT lane and shared with local buses and right turning movements to and from MD 355. The BRT operation in the off-peak direction would be in mixed traffic.

- A median BRT lane was not analyzed because there is a proposed pedestrian tunnel at Bethesda Medical Center, which is intended to reduce the need for pedestrians to cross MD 355 at grade. A median BRT station would be in direct conflict with the goals of the pedestrian underpass project.
- All concrete median along this section of the road would need to be removed.
- Section 3 – Lane repurposing of two inside lanes to provide two dedicated median BRT lanes.
 - Within the median sections all existing un-signalized intersections would be closed. Those movements would need to occur at signalized intersections.
- Section 7 – This section is proposed as a two lane median BRT along MD 355
 - Within the median sections all existing unsignalized intersections would be closed. Those movements would need to occur at signalized intersections.

(Q) Does this match up with the operation plan?

(R) Yes. The difference between these two alternatives is the termini. For the southernmost route, Alternative 3A, [BRT] service would terminate at Grosvenor. For Alternative 3B, [BRT] service would terminate at Bethesda.

Introduction of Alternative 4:

Alternative 4 was divided into a 4A and 4B option. Both Alternatives are mostly in the curb lane; however Alternative 4A provides BRT service from the Grosvenor Metrorail Station to Redgrave Place in Clarksburg and Alternative 4B provides BRT service from the Bethesda Metrorail Station to Redgrave Pace in Clarksburg. Both alternatives keep BRT service on MD 355. The differences were in approaches to constrained roadway sections, as outlined in the below bullet points. The specifics of each alternative are also depicted graphically on Figure 4 and Figure 5 and are available with the meeting #7 materials at <http://www.montgomerycountymd.gov/RTS/md355north.html>.

- Alternative 4A
 - Provides new BRT service from the Grosvenor Metrorail Station to Redgrave Place in Clarksburg.
 - No BRT service between Bethesda and Grosvenor Metrorail Station.
 - Service would be on dedicated lane(s) from Grosvenor Metrorail Station to Redgrave Place along MD 355.
 - Two dedicated curb lanes where feasible proposed for Sections 2, 6 and 7 through the widening of the road.
 - The curb lanes will be shared with local buses and right turning vehicles to and from MD 355.
 - A median running way was proposed for Sections 3, 4 and 5 to minimize switching from curb to median repeatedly.
 - Bi-directional dedicated median lane proposed for Section 3 achieved through the widening of the road.
 - Passing zones would be created to achieve necessary headways.
 - Within the median sections all existing unsignalized intersections would be closed. Those movements would need to occur at signalized intersections.

- Two dedicated median lanes where feasible proposed for Section 4 through the widening of the road.
 - Within the median sections all existing unsignalized intersections would be closed. Those movements would need to occur at signalized intersections.
- Bi-directional dedicated median lane proposed for Section 5 achieved through the repurposing of the center turn lane.
 - Passing zones would be created to achieve necessary headways.
 - All left turn movements will only occur at signalized intersections.
- The transition from curb to median would occur over several blocks where the BRT may be in mixed traffic.
- **Alternative 4B**
 - Provides new BRT service from the Bethesda Metrorail Station to Redgrave Place in Clarksburg.
 - Service would be on dedicated lane(s) from Bethesda Metrorail Station to Redgrave Place along MD 355.
 - All running way options remain the same as Alternative 4A except for:
 - Section 1 (Same as running way proposed for Alternative 3B) – BRT would operate in the curb lane. The roadway inside of the beltway will be converted into a reversible system where more lanes are assigned to the peak direction of traffic. This condition is similar to the existing reversible system on US 29 inside the Capital Beltway. A lane in the off-peak direction would be repurposed. For example in the AM peak direction there would be four lanes of southbound traffic into Bethesda where the curb lane will be the dedicated BR lane and shared with local buses and right turning movements to and from MD 355. The BRT operation in the off-peak direction would be in mixed traffic.
 - A median BRT lane was not analyzed because there is a proposed pedestrian tunnel at Bethesda Medical Center, which is intended to diminish at-grade pedestrian crossings of MD 355 at this location.
 - All concrete median along this section of the road would need to be removed.
 - Section 3 – Lane repurposing of two outside lanes to provide two dedicated curb BRT lanes.
 - The curb lanes will be shared with local buses and right turning vehicles to and from MD 355.
 - Section 4 – Two dedicated curb lanes where feasible
 - The curb lanes will be shared with local buses and right turning vehicles to and from MD 355.
- **Conceptual Alternatives – Next Steps**
 - The next step in the process is to complete the preliminary analysis of the alternatives.
 - The analysis performed will be used to complete the screening criteria information and compare alternatives.
 - This information will also be used to guide the Alternatives Retained for Detailed Study (ARDS) selection.

(Q) Do the alternatives all take place within the existing footprint of the road?

(R) No. All of the build alternatives involve widening for some sections of the roadway. The existing curb-to-curb widths and range of dimensions being considered are shown on the maps at the breakout tables.

(Q) Could we have an alternative that, for example, continues all the way to Bethesda, but still uses Observation Drive? Can Observation Drive be included in TSM?

(R) Yes. Many “mix-and-match” alternatives are possible. This preliminary analysis being conducted is going to yield a lot of useful information that will be used to determine the ARDS. These alternatives which will be investigated further could very easily result in a hybrid of the alternatives as currently proposed.

(Q) Would a bi-directional lane operate that way all day, or just during peak hours?

(R) A bi-directional lane would maintain a two way operation during the entire day, as opposed to a reversible lane where the direction using it changes during peak hours.

(Q) Have these been used in high frequency systems before?

(R) They’re used in Eugene, OR, for example, but we believe that service operates on a less frequent headway than we are currently planning to test for the MD 355 BRT service. We will look at other precedent locations during analysis.

(Q) Why are bike lanes always shown instead of a multi-use path on one side of the street?

(R) MD 355 is a State road. The concepts follow state bicycle design policy which requires on-street bicycle lanes.

(Q) Do any of the alternatives provide end to end service?

(R) No. The travel analysis showed that end to end trips were pretty rare. The service plans presented previously show a series of three discreet route structures that overlap in the Rockville area. Those are the service plans that will be tested initially.

(Q) How will transfers between this system and Metro work?

(R) Similar to between Ride On and Metro. The BRT system will be integrated with the regional fare media to make for a seamless regional system.

Breakout Exercise

Meeting participants conversed with project staff at tables with maps of each of the sections, to understand and get into the details of the running way options being considered in each location. An additional table was available for members to discuss the proposed screening criteria.

Notes from Breakout Conversations:

Section 1 – Bethesda Metrorail Station to Tuckerman Lane

- No comments from CAC members

Section 2 – Tuckerman Lane to Dodge Street

- There are few crossings of rail corridor, and this leads to congestion at the few crossings. Edmonston is an example. Consider moving the proposed station and local bus transfer activity from Edmonston to 1st Street (closer to Richard Montgomery High School)
- Median stations would add width to the already wide planned roadway.
- Harmonize recommendations between the Rockville Pike Plan and this project.

Section 3 – Dodge Street to College Parkway

- An area with lots of utility infrastructure was highlighted near College Plaza Shopping Center.

Section 4 – College Parkway to Summit Avenue

- Discussed the possibility of a grade-separated alternative across Gude Drive through redeveloping parcels of College Plaza Shopping Center.
- Several redeveloping parcels were identified.
- The complicated intersection at King Farm Boulevard was highlighted.

Section 5 – Summit Avenue to MD 124 (Montgomery Village Avenue)

- Support was noted for attempting to stay within existing pavement.
- Lack of concern about eliminating protected turn pockets, since these turned are already perceived as dangerous.
- Support for keeping standard lane widths where possible was noted, to accommodate trucks, etc.
- Concern for small businesses was noted, in light of some proposed roadway changes.
- High rate of jaywalking was noted at Chestnut Street.
- Dangerous turns noted at East Diamond Avenue.
- “Will there be a fence to discourage jaywalking?”
- Significant transfers to Metro were predicted.
- Challenge of timing signals for buses coming from opposite directions was noted.

Section 6 – MD 124 (Montgomery Village Avenue) to Middlebrook Road

- Support was noted for limiting median running way options to a single center station, not a station on each side of a center busway.

Section 7 – Middlebrook Road to Clarksburg

- Curbside parking exists in the vicinity of Boland Farm Road.

- Seneca Meadows Parkway may present a better alignment for the section between Ridge Road and the Germantown campus of Montgomery College to more directly access industrial parks there.
- Future Road connections and alternative stop locations were also identified on the campus.