

MD 355 North Corridor Advisory Committee Meeting #9 Summary
October 26th, 2016 from 6:30 to 9:00 PM
Upcounty Regional Services Center
12900 Middlebrook Road, Germantown, MD 20874

Attendees

Members	
Dennis Cain	Era Pandaya
Jerry Callistein	Peter Shaw
Mark Pace	Richard Lindstrom
Apologies	
Paula Bienenfeld	Gail H. Sherman
Nallathamby Devasahayam	Goke Taiwo
Cherian Eapen	John Francis Torti
Stephen Hendrickson	Helen Triolo
Peter Henry	Gary Unterberg
Kathie Hulley	Ronald Welke
James Martin	Andrew Williamson
Dayssi Morera	Paul Yanoshik
David A. Rosenbaum	Kam F. Yee
Tom Savoie	Joel Yesley
Margaret Schoap	
Staff	
MTA – Jackie Seneschal	Facilitation Staff – Yolanda Takesian
MTA -- Kyle Nembhard	Facilitation Staff – Liz Gordon
Montgomery County DOT – Joana Conklin	WMATA – Jamaica Arnold
Montgomery County DOT – Darcy Buckley	Study Team– Chris Bell
Montgomery County DOT – Rafael Olarte	Study Team – Alvaro Sifuentes
Facilitation Staff – Andrew Bing	

Handouts

Handouts provided to CAC Members included:

- Agenda for CAC Meeting #9
- Presentation for CAC Meeting #9
- BRT Draft Alternatives comparison handout
- Station and Service Route Map

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

<https://www.montgomerycountymd.gov/BRT/md355north.html>

Introduction

Facilitator Yolanda Takesian welcomed attendees, introduced meeting content, and outlined the agenda. She explained the meeting is the second of a two-part review of the analysis of BRT alternatives; the goal of this meeting is to understand the remaining high-level screening criteria for the BRT alternatives – costs and property impacts. The tabletop exercise following the presentation will allow participants to weigh the tradeoffs of different alternatives and to provide input on which running ways or alternatives could be removed from consideration or refined to move to the next stage of more detailed study.

Project Process and Screening Criteria

Kyle Nembhard reintroduced the four BRT conceptual alternatives for the corridor (Alternatives 3A, 3B, 4A, and 4B) that the project team has been testing at a high level. He explained that while this meeting would focus on comparing tested alternatives to one another, it is very likely that “hybrid” alternatives will emerge keeping only the best aspects of these preliminary alternatives in the mix for further study.

(Question) We talked about alternatives for detailed study, is that these?

(Response) Yes, these will be the basis of the alternatives that will be carried forward for more analysis.

Conceptual Alternative Screening Results

Alvaro Sifuentes explained that this meeting will add a consideration of impacts and costs to the previous meeting’s discussion of transit ridership, person throughput, travel time, and accessibility. Adding these criteria will begin to introduce tradeoffs, as the alternatives that provide the most transit benefit also tend to have higher impacts on property and higher capital and operating costs.

Mr. Sifuentes walked participants through the same general questions as in the previous meeting, but this time added the dimensions of operating costs and property impacts to the discussion. The previous takeaways from these questions are below, with operating cost and property impact implications added in italics.

The analysis presented at this meeting answers six questions at a high level, that is, in a very general sense.

- How does Observation Drive compare to MD 355, in the northernmost end of the study corridor?
 - Observation Drive has higher ridership.
 - Lower congestion would allow the BRT to operate quickly in mixed traffic on Observation Drive.
 - Important activity centers are planned along Observation Drive.
 - *Operating costs are slightly higher on Observation Drive compared to MD 355.*
 - *Construction costs on MD 355 would be higher than construction costs for an Observation Drive alignment.*
- How do the two southern termini (Bethesda and Grosvenor) compare?

- 15% of the ridership is generated by extending service south of Grosvenor. This is true both in that portion and in the central portion of the corridor, north of Grosvenor, because it provides greater access to important activity centers.
- *Stopping BRT service at Grosvenor will result in lower impacts and costs compared to continuing service to Bethesda.*
- What is causing differences in the projected ridership for new BRT service between the BRT alternatives?
 - Higher ridership is anticipated along an Observation Drive alignment due to a greater number of large trip generators.
 - Extending service to Bethesda increases ridership by expanding the BRT market and providing access to additional activity centers.
 - In general, the median running way sections have shorter BRT travel times generating higher ridership within those sections.
 - *Property or environmental impacts and construction costs are not causing differences in ridership between BRT Alternatives.*
- What are the effects of lane repurposing?
 - Transit person throughput increases on all alternatives and all alignment sections compared to the No Build alternative.
 - In general, total person throughput decreases in sections where lane repurposing is being proposed due to a decrease in auto person throughput (caused by increased traffic congestion).
 - *Lane repurposing minimizes property impacts and has been proposed in constrained areas.*
- How does the bi-directional section operate?
 - It creates longer travel times due to buses having to wait to pass one another.
 - Longer travel times lower the ridership projections.
 - *Construction costs and property impacts are higher for this option compared to lane repurposing.*
- How do the median vs. curb running ways compare?
 - Median options result in shorter BRT travel times, in general.
 - Median alternatives also generate higher ridership, in general.
 - *The median alternatives cause higher property impacts and result in higher construction costs than curb alternatives.*

(Q) You say costs are “higher,” but what does that mean? 10% additional cost for 50% additional ridership, or 150% additional cost for 10% additional ridership? We need to understand the orders of magnitude.

(R) This was only a high-level, general comparison. More detailed costs needed to quantify differences will be developed in future phases of the project.

(Q) Is the travel time greater on Observation Drive just because it is a longer distance?

(R) Yes, but aspects that are affecting travel time also include the fact that BRT would operate in mixed traffic and is predicted to have higher ridership due to the greater density of destinations.

(Q) Are there fewer traffic lights on Observation Drive?

(R) Yes, but there is one more BRT stop planned compared to the alternative running along MD 355.

(Q) How far apart are the two corridors?

(R) The minimum distance between the two corridors is about 1000 feet.

(Q) Have you looked at going around the Montgomery College campus north of Middlebrook Road, instead of through it?

(R) We are going to look at that in the next phase.

(Q) When you say “longer travel time means lower ridership,” is there some linear relationship, like every extra 10% in travel time results in an X% drop in ridership?

(R) It is not quite that simple, but travel time is usually very highly correlated with ridership. We will get more detailed than that with refined alternatives.

(Q) Why is the BRT faster in the median?

(R) Because it's a dedicated lane and it doesn't have conflicts with local buses and right turning vehicles.

(Q) So two dedicated median lanes are more expensive than two dedicated curb lanes?

(R) Yes. A median alternative has a wider footprint resulting in higher construction costs.

(Q) Will it be possible to have a median running way in some sections and a curb running way in others?

(R) Yes, however ideally these transitions, with their associated weaving in and out of traffic, are minimized through the corridor.

(Q) How large a percentage of the operating cost is driver (vehicle operator) labor? And is it reasonable to consider driverless vehicles?

(R) Most of the operating cost is driver labor. If driverless technology becomes feasible it would dramatically change the cost calculation.

(Comment) As we have seen with electric vehicles, driverless vehicle acceptance will take time.

(Q) Would it be possible to run fewer, but larger vehicles?

(R) Yes, and that would increase capacity, but the service would be less attractive to many riders if buses arrived less frequently.

Next Steps

Kyle Nembhard described the public meeting that will be held in February, 2017, where the information shared with the CACs in the past two meetings will be shown to the general public.

Breakout Exercise

Yolanda Takesian then transitioned the meeting to small table group work, where staff led discussions of study results and tradeoffs, corridor segment by segment. Two groups developed their own “hybrid” conceptual alternatives that they suggested moving forward into detailed study. Concepts and the basis for consideration are described below:.

Breakout Table 1

- In Section 7 (northern alignment), only the Observation Drive routing should be studied due to the higher levels of ridership and number of destinations along this route as well as the greater potential for impacts along MD 355 route.
- In Sections 6, 4, and 2, the study team should look at median and curb alternatives; we should continue looking at both options in the next phase of study.
- In Section 5, median options should consider a reversible system rather than bi-directional. For the curb alternative, consider a reversible curb system, and consider a mixed traffic option.
- In Section 3 in Rockville, the median alternative should continue to investigate a bi-direction system and a new alternative with a reversible median lane should be studied. For the curb alternative, look at mixed traffic as well.
- In Section 1, continue to investigate lane repurposing and consider using Woodmont Avenue in mixed traffic or repurposing a lane, either in lieu of MD 355 or as a couplet system.

Breakout Table 2

- For Section 7, higher operating costs make the Observation Drive routing less attractive than the MD 355 route.
- In Section 6, dedicated BRT lanes should be introduced as soon as possible.
- Limited space in Section 5 frustrates the priority for dedicated transit lanes that participants feel is necessary for the service quality desired.
- In Section 4, the study team should investigate dedicated lanes for both curb and median running operations; access to the Shady Grove Metro Station may dictate which alternative is most feasible.
- For Section 2, the alternative should defer to existing plans calling for a median-running BRT.
- Going to Bethesda in Section 1 seems important.