

Montgomery County **RAPID TRANSIT**

MD 586

Veirs Mill Road
CAC Meeting #8
September 14, 2016



Purpose of Tonight's Meeting

- Recap Meeting #7
- Draft Corridor Study Report (DCSR)
- Present alternatives comparison matrix
- Preview upcoming public meeting and how the recommended alternative will be selected
- Questions/comments

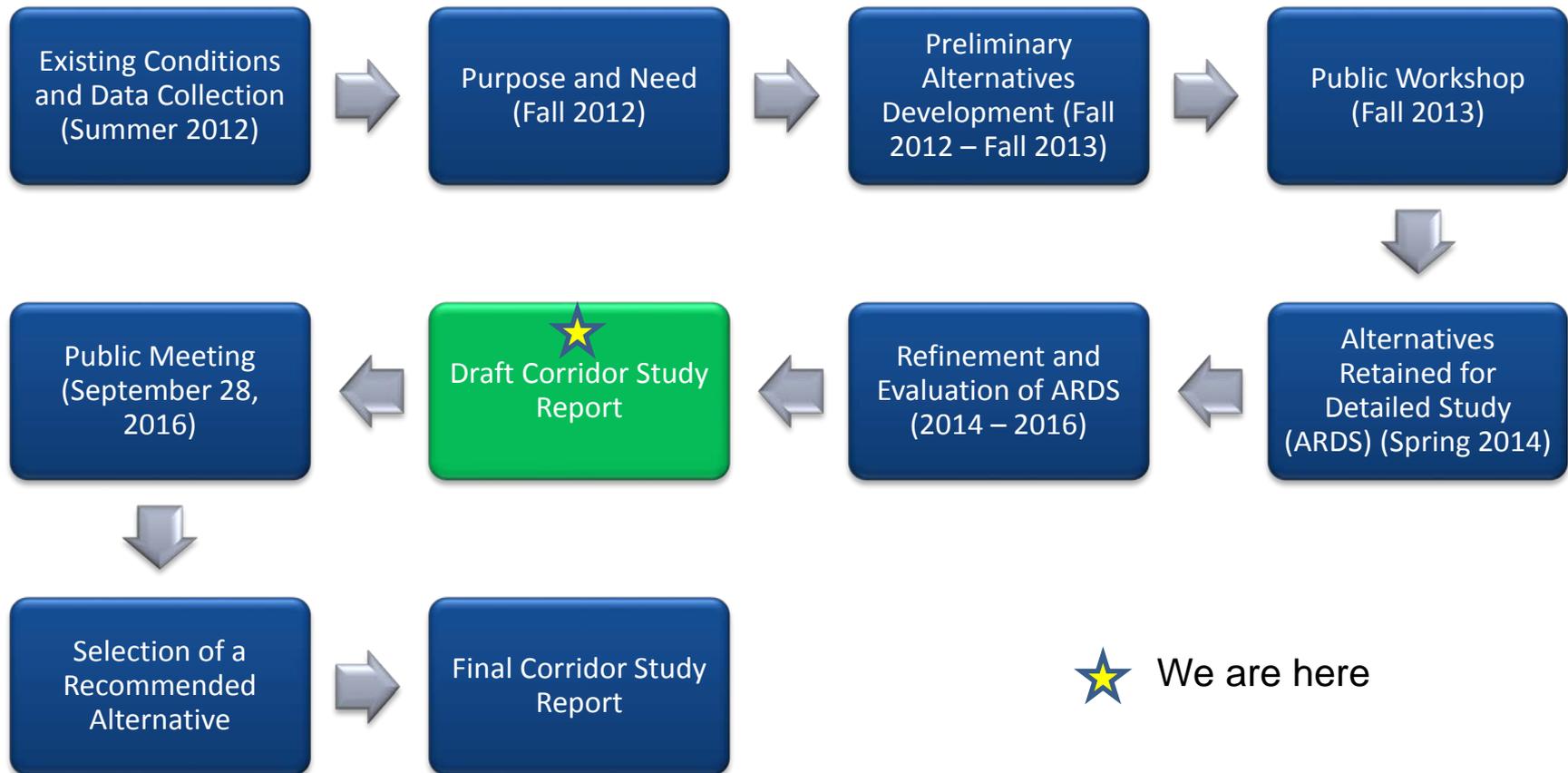
Review of Alternatives Retained for Detailed Study

- Anticipate 4 meetings to review Alternatives
 - Meeting #5: January 20th: Start Review of Alternatives
 - Meeting #6: February 17th: Continue Review of Alternatives
 - Meeting #7: April 13th: Bus Service Plans and Station Concepts
 - Meeting #8: September 14th: Continue Review of Alternatives: Traffic, Ridership, Cost Estimate, Comparison Matrix

Meeting #7 Recap

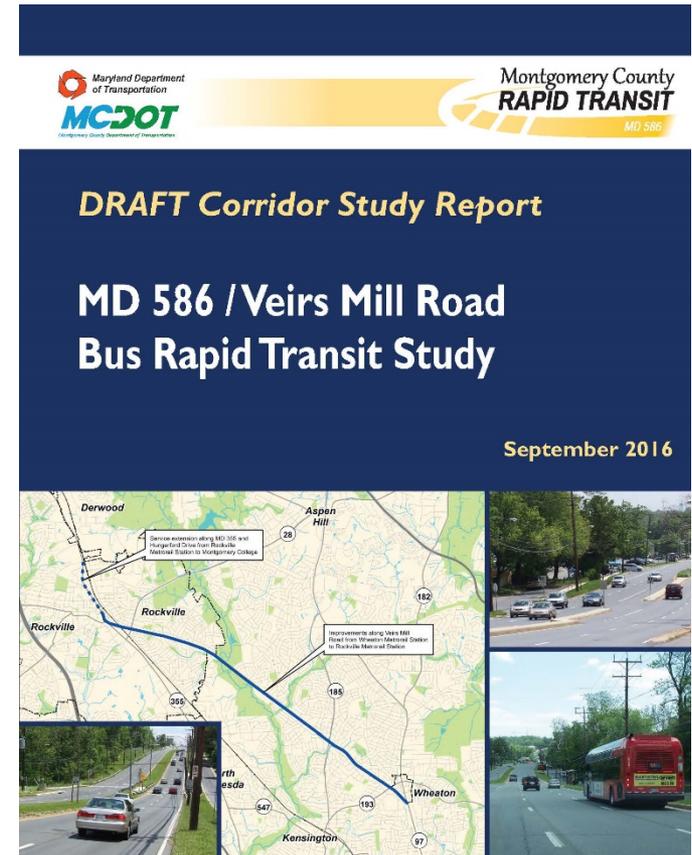


Transit Project Planning Process



Draft Corridor Study Report (DCSR)

- Summarizes the results of the alternatives analysis
- Electronic copy can be viewed online at: montgomerycountymd.gov/brt
- Paper copy can be viewed at:
 - Rockville Memorial Library
 - Twinbrook Library
 - Wheaton Interim Library
 - Mid-County Regional Services Center
 - Holiday Park Senior Center



Draft Corridor Study Report (DCSR)

- Public comment period: Now through October 14, 2016

How to comment

- Send an email to: md586brt@sha.state.md.us
- Attend the public meeting on September 28th

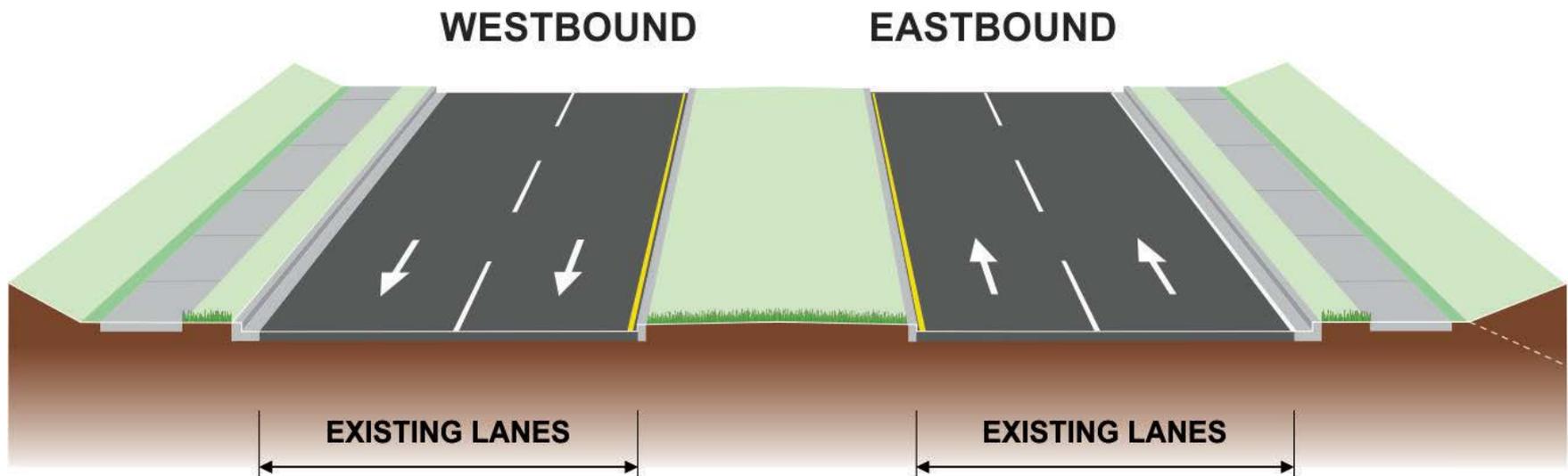


Alternatives Retained for Detailed Study

- Alternative 1: No-Build
- Alternative 2: Enhanced bus service with queue jumps
- Alternative 3: New BRT service in dedicated curb lanes (where feasible)
- Alternative 5B: New BRT service in one bi-directional median lane or two dedicated median lanes

Alternative 1 (No-Build)

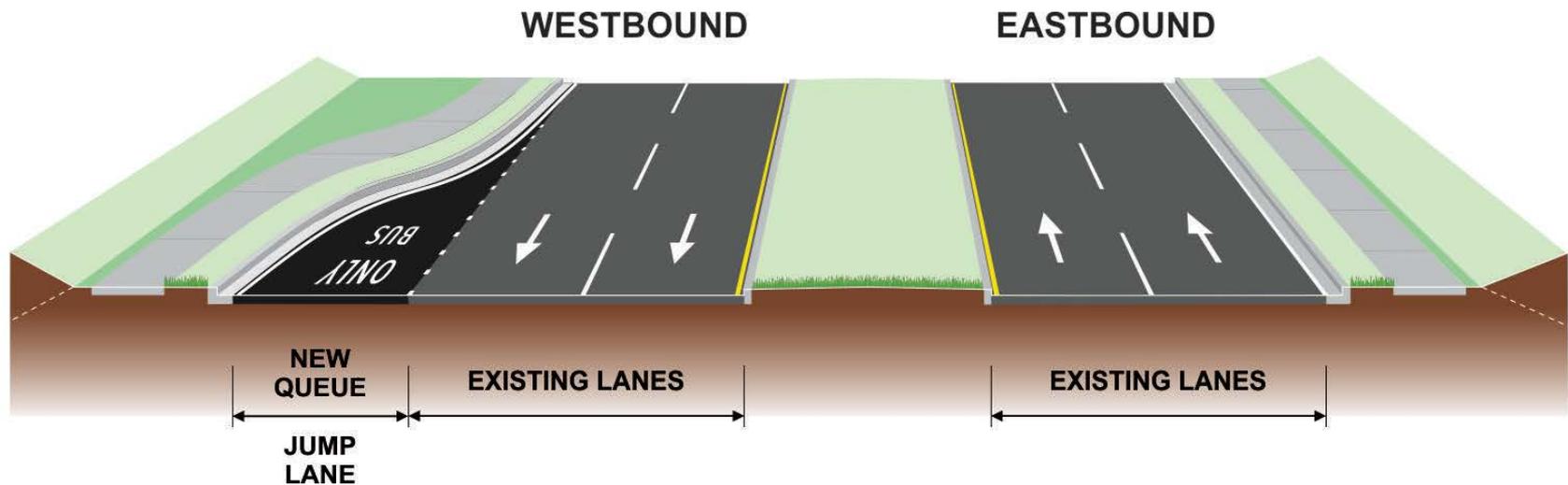
- Runningway: existing lanes in mixed traffic
- Service: existing local bus service



*This typical section is for an existing four-lane section. The number of lanes in Alternative 1 would match the existing conditions.

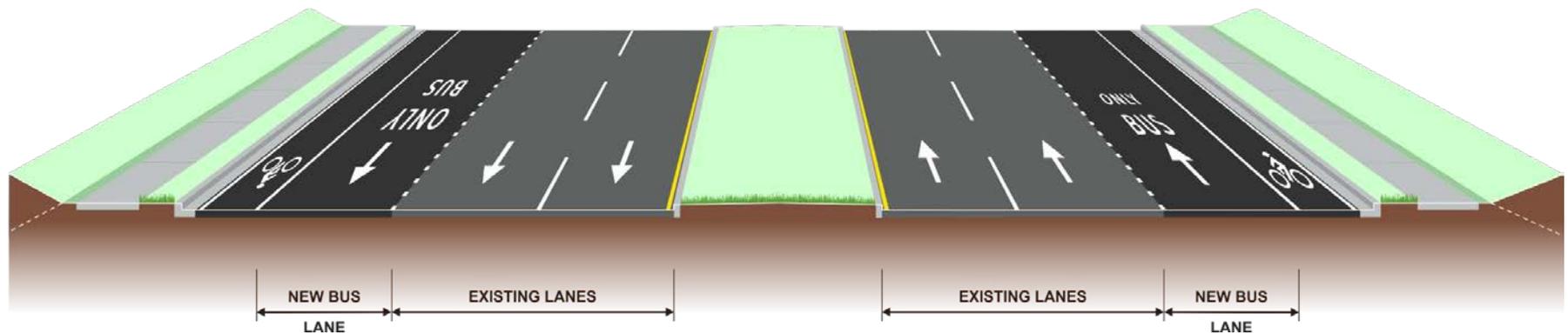
Alternative 2 (TSM)

- Runningway: Add queue jumps at select intersections; use existing lanes with mixed traffic otherwise
- Service: Similar to WMATA's proposed Q9 express bus service
- Add Transit Signal Priority (TSP) at select locations and optimize signals
- Upgrade existing bus stops



Alternative 3

- Runningway: Curb-running dedicated lanes where feasible; existing lanes in mixed traffic otherwise
- Service: New BRT service
- Constructs additional dedicated lanes where there would be minimal impacts on existing properties
- Constructs new BRT stations
- Provides bike lanes where feasible



Alternative 5B

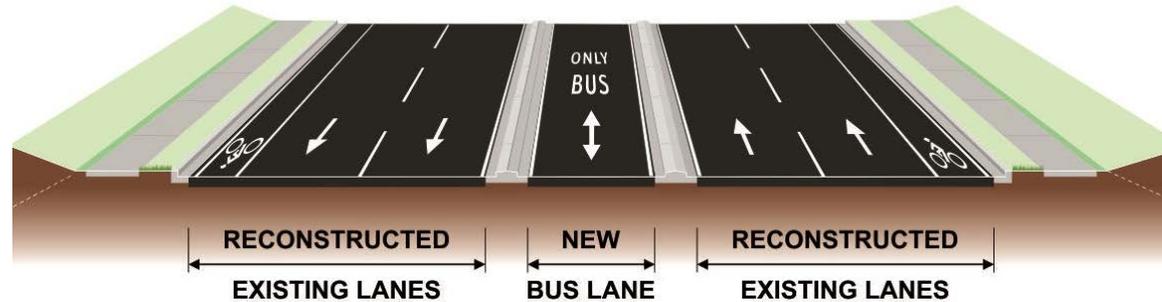
- Runningway: New dedicated BRT lane(s) in median for two-way travel
 - Provide two-way travel in one or two new dedicated lanes
 - One-lane, median-running dedicated lane in both directions – buses pass each other at stations
 - Two dedicated lanes provided where feasible
 - Requires tight BRT operational schedule
- Service: New BRT service
- Constructs new BRT stations
- Provides bike lanes where feasible



Alternative 5B

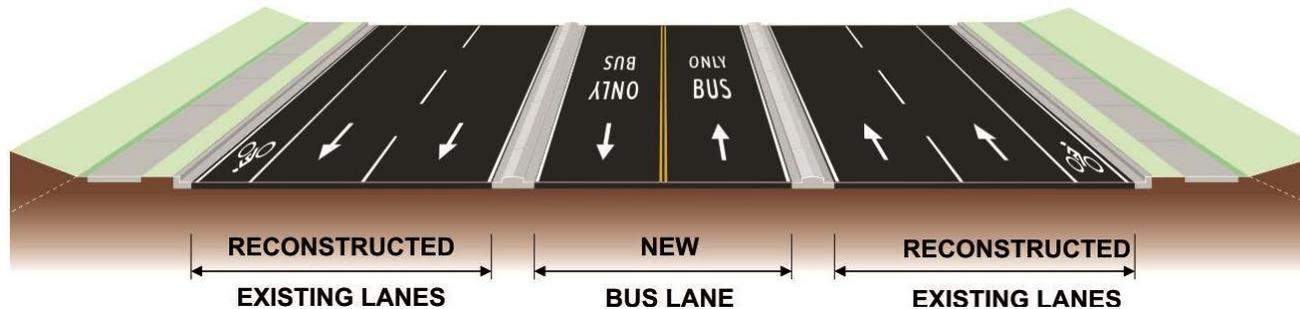
Bi-directional Median

WESTBOUND EASTBOUND



Two-lane Median

WESTBOUND EASTBOUND



- BRT buses would use the median lane(s)
- Local buses would use the curb lanes

Service Characteristics – Alternative 2

- Overview
 - New express bus limited service
 - 12 stops
 - Existing local service – continue with 43 stops

- Wheaton Metro station to Rockville Metro station
 - 12 minute headways (peak)
 - 15 minute headways (off-peak)
 - Span of service: 6 AM to Midnight

- Rockville Metro Station to Montgomery College
 - 36 minute headways (peak)
 - 45 minute headways (off-peak)
 - Span of service: 8 AM to 10 PM

Service Characteristics – Alternatives 3 & 5B

- Overview
 - New BRT service
 - 12 stations (curbside and/or median)
 - Existing local service – continue with 43 stops

- Wheaton Metro station to Rockville Metro station
 - 6 minute headways (peak)
 - 10 minute headways (off-peak)
 - Span of service: 6 AM to Midnight

- Rockville Metro Station to Montgomery College
 - 18 minute headways (peak)
 - 30 minute headways (off-peak)
 - Span of service: 8 AM to 10 PM

Alternatives Comparison Matrix

- Expected ridership
- Travel times
- Costs
- Traffic operations
- Environmental impacts



Expected Ridership

	Alt. 1 (No-Build)	Alt. 2	Alt. 3	Alt. 5B
Total Daily Transit Boardings	32,300	33,400	35,000	35,300
Total Daily BRT Boardings	N/A	2,600	6,400	7,300

Numbers are rounded to the nearest hundred.

Key Points:

- All 3 build alternatives increase transit ridership in the corridor
- All 3 build alternatives attract “new” transit riders

Peak Hour (AM) Travel Time in Minutes Between Rockville and Wheaton

		Alt. 1 (No-Build)	Alt. 2	Alt. 3	Alt. 5B
Eastbound	Enhanced bus/BRT	N/A	27.9	26.2	22.8
	Local Buses	35.5	36.7	34.0	37.1
	Automobiles	22.5	20.7	21.3	22.1
Westbound	Enhanced bus/BRT	N/A	21.6	22.7	25.5
	Local Buses	29.5	28.8	29.2	32.0
	Automobiles	19.6	18.6	20.5	24.6

Key Point:

- Travel times for proposed service in 3 build alternatives are lower than the No-Build

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Peak Hour (PM) Travel Time in Minutes Between Rockville and Wheaton

		Alt. 1 (No-Build)	Alt. 2	Alt. 3	Alt. 5B
Eastbound	Enhanced bus/BRT	N/A	24.9	25.3	23.7
	Local Buses	40.4	32.7	30.4	33.8
	Automobiles	27.9	22.3	20.2	22.1
Westbound	Enhanced bus/BRT	N/A	22.3	25.7	24.6
	Local Buses	32.9	29.1	29.0	34.6
	Automobiles	24.4	18.6	20.2	23.6

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Costs (in millions)

	Alt. 1 (No-Build)	Alt. 2	Alt. 3	Alt. 5B
Right-of-Way (ROW)	-	\$6	\$13	\$35
Engineering and Construction	-	\$23	\$119	\$238
Vehicles	-	\$5	\$17	\$17
Total Capital Cost	-	\$35	\$148	\$289
Annual Operating Cost	-	\$3	\$5	\$5

Key Point:

- The capital costs vary greatly among the build alternatives, ranging between \$35M for the TSM alternative and \$289M for the median BRT alternative

Traffic Operations (AM Peak Hour)

	Alt. 1 (No-Build)	Alt. 2	Alt. 3	Alt. 5B
Miles of LOS E or F Along the Corridor	3.5	3.2	3.5	3.3
Intersections Operating at LOS E or F	4	4	4	4

Traffic Operations (PM Peak Hour)

	Alt. 1 (No-Build)	Alt. 2	Alt. 3	Alt. 5B
Miles of LOS E or F Along the Corridor	5.8	4.2	3.8	4.1
Intersections Operating at LOS E or F	5	4	4	5

Key Point:

- All 3 build alternatives improve traffic operations along MD 586, as compared to the No-Build

Socioeconomic Impacts

	Alt. 1 (No-Build)	Alt. 2	Alt. 3	Alt. 5B
Properties Impacted	-	27	116	217
Residential Relocations	-	4	7	9-17 ¹
Business Displacements	-	1	2	3
Public Parks Affected	-	1	3	5
Public Park Property Required (acres)	-	0.2	0.6	1.6
Public/Community Facilities Affected	-	1	6	9

¹The range is due to the uncertainty in the final station locations. The range was developed by identifying potential displacements for the most likely station locations based on discussions with the City of Rockville.

Key Point:

- Property impacts vary greatly among the build alternatives, with the TSM alternative having the fewest impacts and the median BRT having the most

Cultural and Natural Resource Impacts

	Alt. 1 (No-Build)	Alt. 2	Alt. 3	Alt. 5B
Historic Structures	-	0	4	2
Historic Structures – Effect Determination	No effect	No Effect	No Adverse Effect	Adverse Effect
Stream Crossings	-	0	2	10
Stream Impact (linear feet)	-	0	47	864
100-Year Floodplain (acres)	-	0	<0.1	0.3
Wetlands (acres)	-	0	<0.1	<0.1
Forests (acres)	-	0.8	1.2	3.1
Green Infrastructure (acres)	-	0.2	<0.1	1.7
Federally or State Listed RTE Species	-	0	0	0

Key Point:

- Natural environmental impacts are focused in the parks and at the stream crossings

Public Meeting

Wednesday, September 28, 2016

6:30 PM – 8:30 PM

Montgomery County Executive Office Building (EOB) Cafeteria
101 Monroe Street
Rockville, MD 20850

Parking will be free on the G-2 level of the EOB garage (entrance off of Monroe Street)

Metrorail: Red Line; Metrobus: Q1, Q2, Q4, Q5, and Q6; Ride On: 44, 46, 47, 57, 56, and 63

- **Purpose:** Receive public comments on the alternatives and the results of the alternatives analysis

Public Meeting – What to Expect

- Open house format
- Video with background information
- Maps of the alternatives
- Boards showing the results of the analysis
- Time to talk with the project team
- Comment table



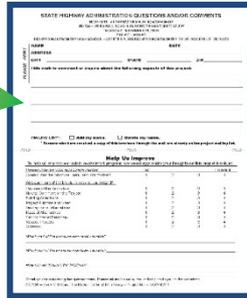
Next Steps

Public Meeting



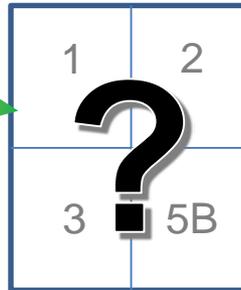
September 28, 2016

Public Comment Period Closes



October 14, 2016

Selection of a Recommended Alternative



December 2016

CAC Meeting #9



January 2017

Final Corridor Study Report



March 2017

The Recommended Alternative

What is it?

- The alternative that would be advanced when the project moves forward

How is it chosen?

- Using the comparison matrix and public comments, the project team will make a recommendation to the Montgomery County Planning Board and County Council
- The team will also brief the Rockville City Council, and the SHA and MTA Administrators
- Final recommended alternative will be agreed upon by Montgomery County, SHA, and MTA

Conclusion

- Meeting #9: January 2017
- Topic for Meeting #9: Review of recommended alternative
- Meeting #9 is expected to be the last CAC meeting during this stage of the project