WELCOME

MD 586

Veirs Mill Road

Bus Rapid Transit Study

Alternatives Public Workshop

November 21, 2013

PURPOSE OF THE ALTERNATIVES PUBLIC WORKSHOP

- Present preliminary alternatives for the Veirs Mill Road Bus Rapid Transit Study
- Obtain your project-related comments and concerns
- Present the next steps in the study process

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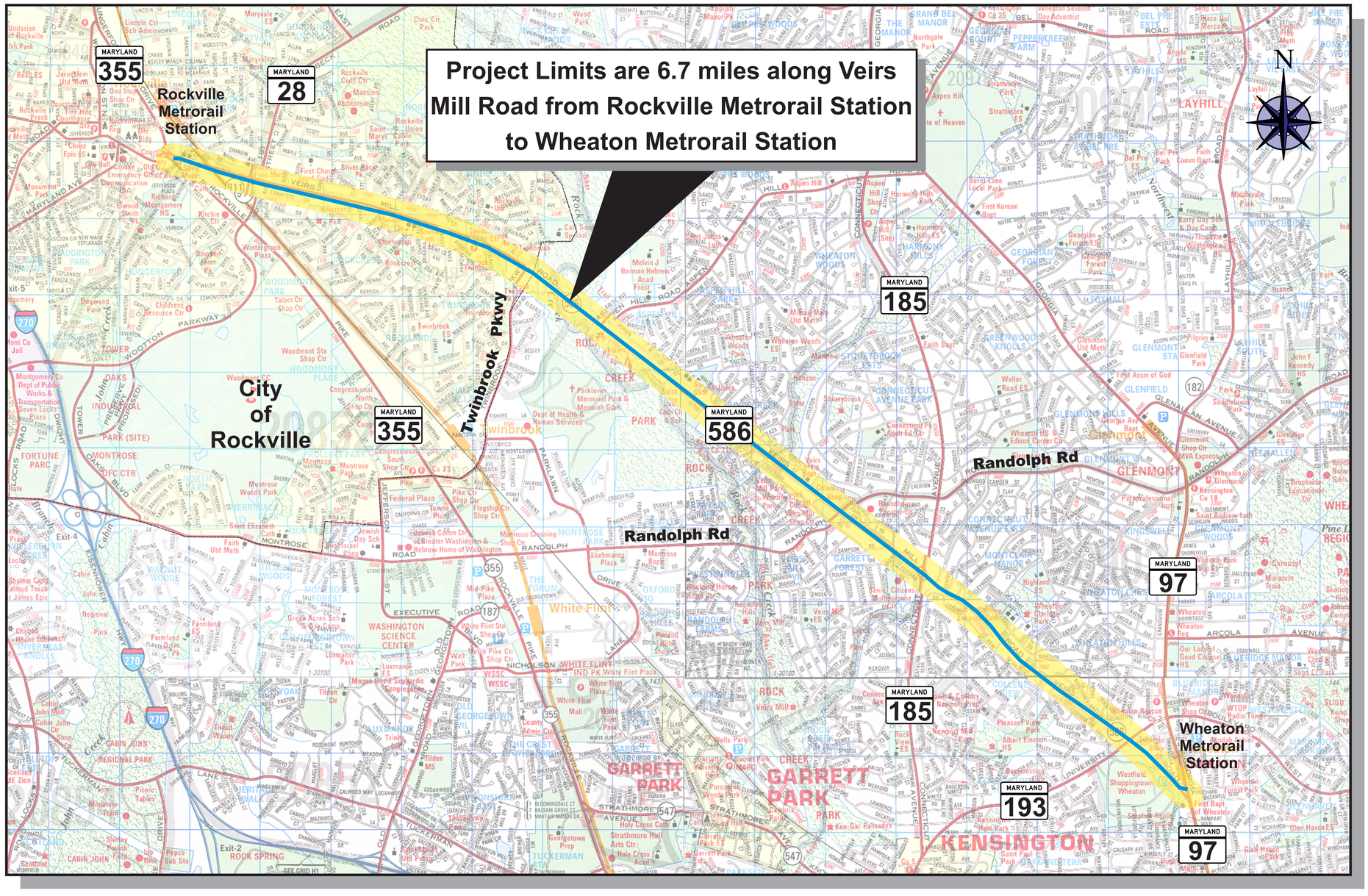
PROJECT LOCATION



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PURPOSE AND NEED

Provide new high-efficiency bus service along Veirs Mill Road between the Rockville Metrorail Station and the Wheaton Metrorail Station. Four specific needs for the project have been identified:

System Connectivity	• High-quality east-west transit connection not available between Rockville and Wheaton Metrorail Stations • Most heavily traveled/most congested segment of WMATA Q Line along Veirs Mill Road between the Rockville and Wheaton Metrorail Stations
Mobility	• Traffic congestion impedes bus mobility/results in unpredictable service and increased travel times • Buses often delayed 15 minutes or more • Frequent bus bunching • On-board fare collection causes delays
Transit Demand and Attractiveness	• High transit ridership throughout corridor • 2030 WMATA bus ridership: 45%-58% increase over existing • Existing and planned transit-oriented development at both stations would increase transit commuters • Bus unreliability results in poor level of transit service • Higher-quality service needed to attract and retain new transit riders
Livability	• Create more reliable, integrated, accessible transportation network • Enhance choices for transportation users • Improve access to affordable housing, employment, other destinations

EXISTING ROADWAY INFORMATION

- Project length: 6.7 miles
- Functional classification: Other Principal Arterial
- Number of lanes: varies from 4 to 6 including some bus treatments
- Number of intersections with traffic signals: 20
- Number of intersections without traffic signals: 26
- Bus service: Metro Bus and Ride-On
- Designated bicycle facilities: 0
- Service roads: along much of corridor
- Sidewalks: typically present, with some gaps

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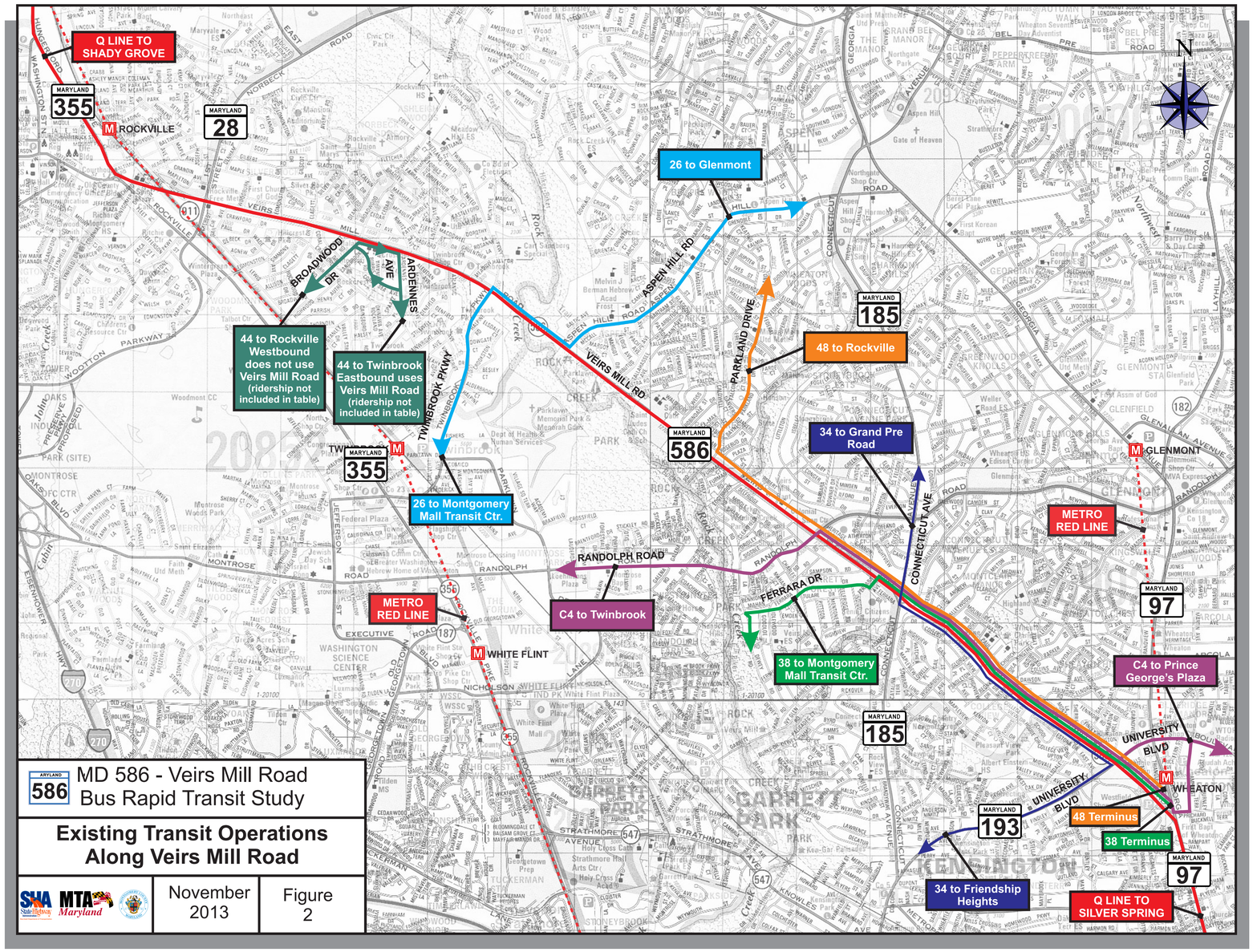
EXISTING TRANSIT SERVICES ALONG VEIRS MILL ROAD

- **Metro Bus Routes:**
  Q1, Q2, Q4, Q5, Q6, and C4
- **Ride-On Routes:**
  26, 34, 38, 44 and 48
- **Number of bus stops: 67**
- **Number of shelters: 30**
- **Frequency of buses:**
  10 to 30 minutes per route
- **WMATA's Metrobus - 11,300 to 12,200 passengers daily within study corridor**
- **Montgomery County's Ride On - 4,600 to 6,000 passengers daily within study corridor**
- **Bicycle racks mounted on all Metrobuses and Ride On buses**
- **All buses are ADA accessible**



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Existing Transit Operations Along Veirs Mill Road

November 2013

Figure 2

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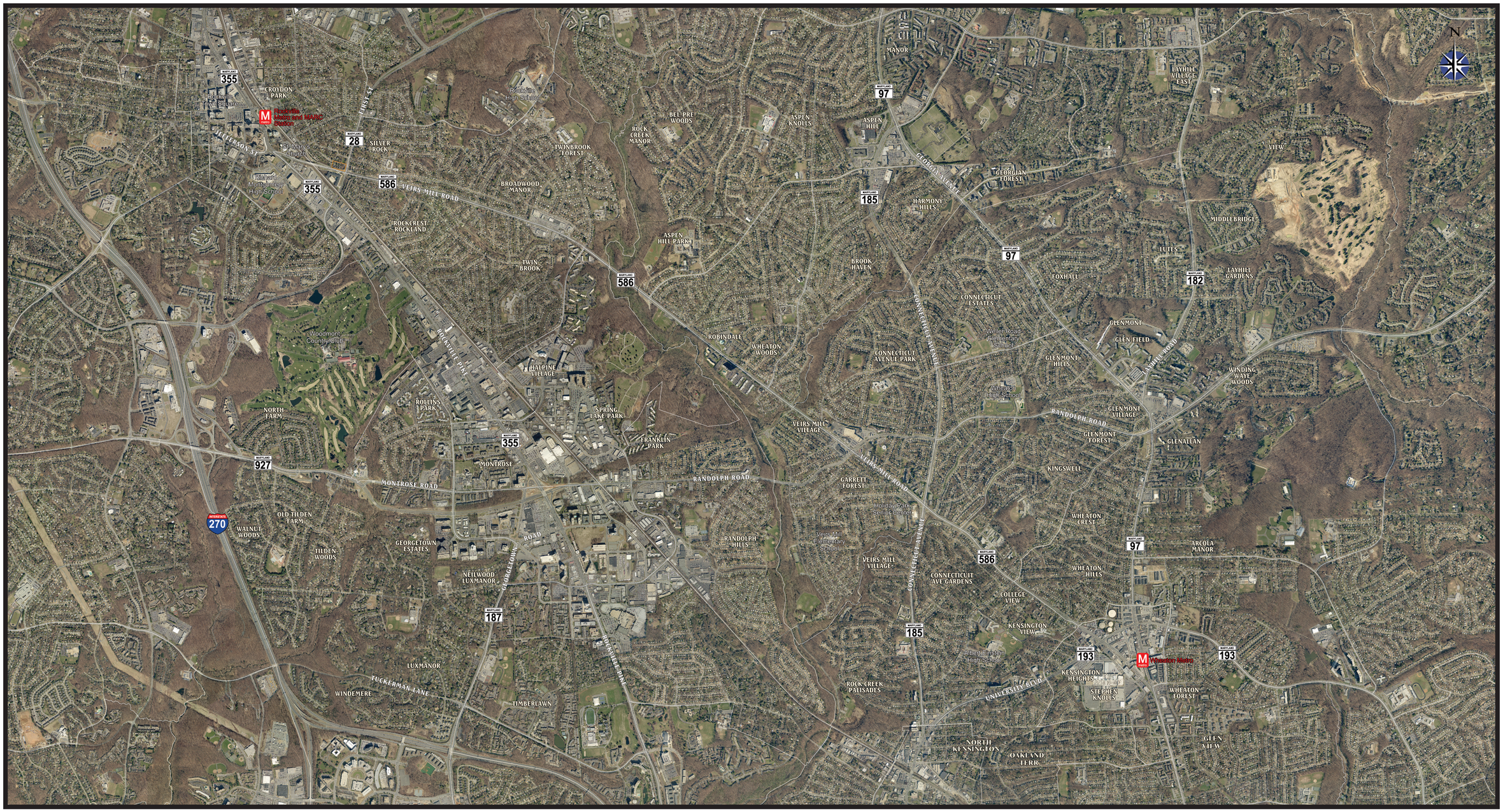
WHERE DO YOU LIVE?



BUS RAPID TRANSIT

What is BRT?

- Bus Rapid Transit (BRT) is a high-performance bus service that combines the quality of a light rail transit system with the flexibility, cost, and simplicity of a bus system.
- BRT buses may operate in dedicated lanes that set them apart from other roadway traffic, which reduces or eliminates delays.

What are some typical features of BRT?

- Attractive specialized buses
- Strong brand identity
- Enhanced stations
- Level boarding from platform to vehicle
- Off-vehicle ticketing/fare collection
- Local transfers with park-and-ride access

How does BRT differ from local bus service?

- Buses run all day in addition to local buses
- Time between buses is shorter
- Distance between stations is 1/2-mile to 1-mile
- Buses may operate in their own lane
- Buses may get priority at traffic signals
- Real-time passenger information

Successful BRT Systems in the USA

Eugene, OR

Phoenix, AZ

Boston, MA

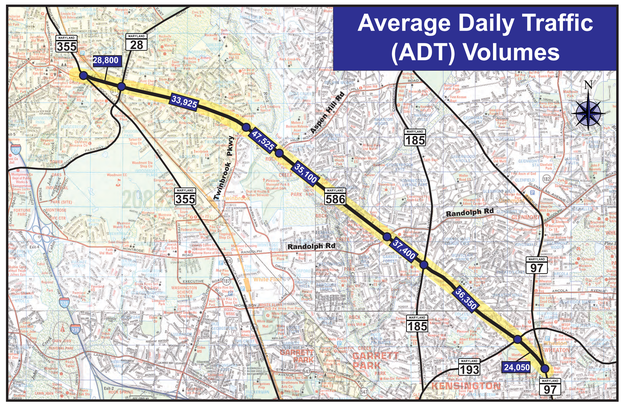
Cleveland, OH

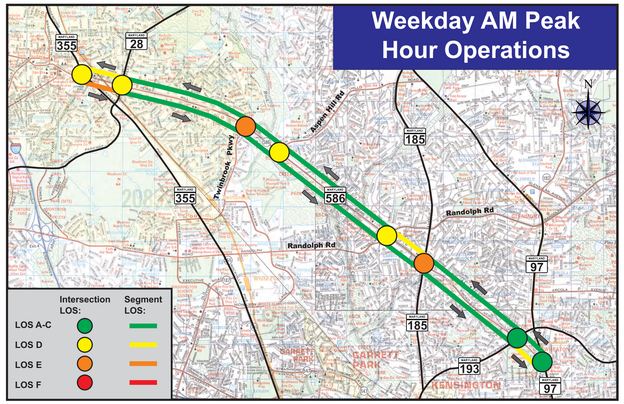
Albany, NY

Los Angeles, CA

TRAFFIC VOLUMES & OPERATIONS

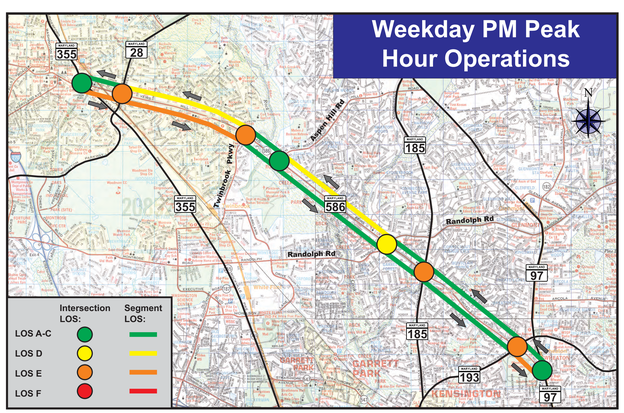
EXISTING





Average Auto. AM Travel Times
Eastbound: 19 minutes
Westbound: 17 minutes

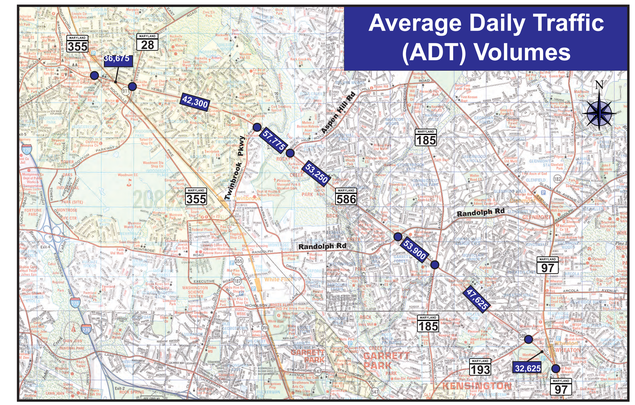
Average Auto. AM Speeds
Eastbound: 19 mph
Westbound: 21 mph

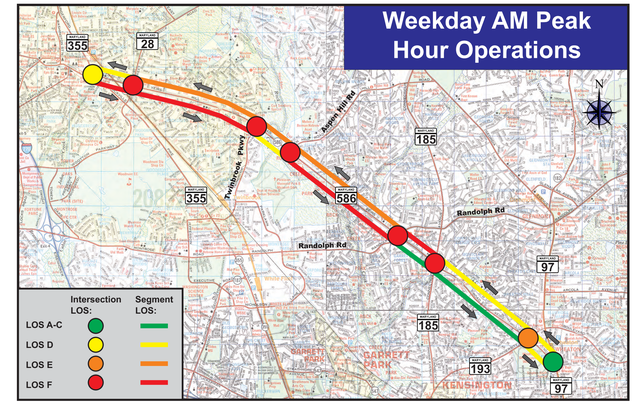


Average Auto. PM Travel Times
Eastbound: 17 minutes
Westbound: 16 minutes

Average Auto. PM Speeds
Eastbound: 21 mph
Westbound: 23 mph

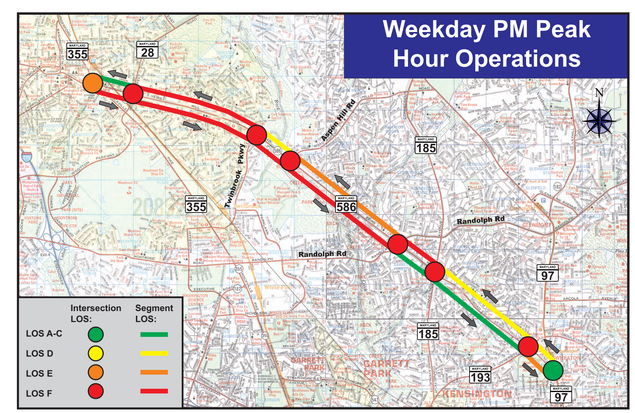
FUTURE NO-BUILD (2040)





Average Auto. AM Travel Times
Eastbound: 27 minutes
Westbound: 27 minutes

Average Auto. AM Speeds
Eastbound: 14 mph
Westbound: 14 mph



Average Auto. PM Travel Times
Eastbound: 35 minutes
Westbound: 21 minutes

Average Auto. PM Speeds
Eastbound: 11 mph
Westbound: 17 mph

ESTIMATED DAILY RIDERSHIP WITHIN STUDY AREA

	2040 NO-BUILD	2040 TSM	2040 BEST CASE BRT
BRT Boardings	0	4,500-5,600	7,300-9,100
Other Bus Boardings	23,500-29,400	21,800-27,200	20,000-24,800
TOTAL DAILY BUS BOARDINGS	**23,500-29,400**	**26,300-32,800**	**27,300-34,000**

- **A percentage of BRT ridership diverts from existing service**
- **Large percentage increase in Veirs Mill Road bus boardings**

ALTERNATIVES

- **Alternative 1:** No-Build-including planned & programmed improvements in Constrained Long Range Plan
- **Alternative 2:** Transportation Systems Management (TSM)-enhanced bus service in existing lanes; queue jumps at intersections
- **Alternative 3:** Enhanced Bus Service in dedicated lanes (where feasible)
- **Alternative 4:** New BRT in Dedicated Lanes (4A, 4B, 4C, 4D expected to be eliminated)
- **Alternative 5:** New BRT in Reversible or Bi-directional Dedicated Lanes
  - **5A:** One-Way, Reversible, Dedicated Median Lane
  - **5B:** Two-Way and Bi-directional Dedicated Median Lanes
- **Alternative 6:** New BRT in Dedicated Lanes and Mixed Traffic

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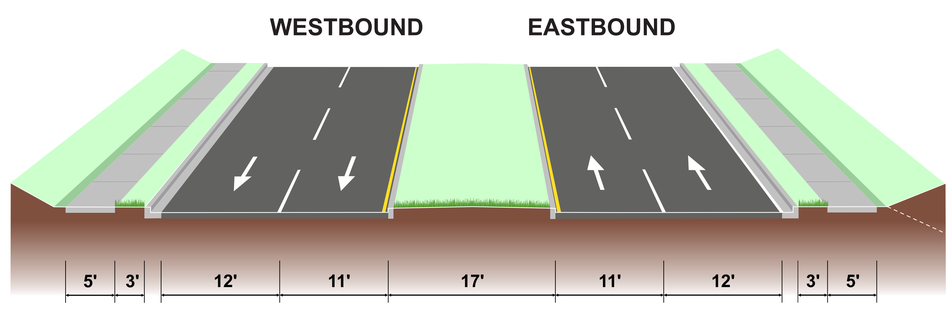
ALTERNATIVE 1

No-Build Alternative

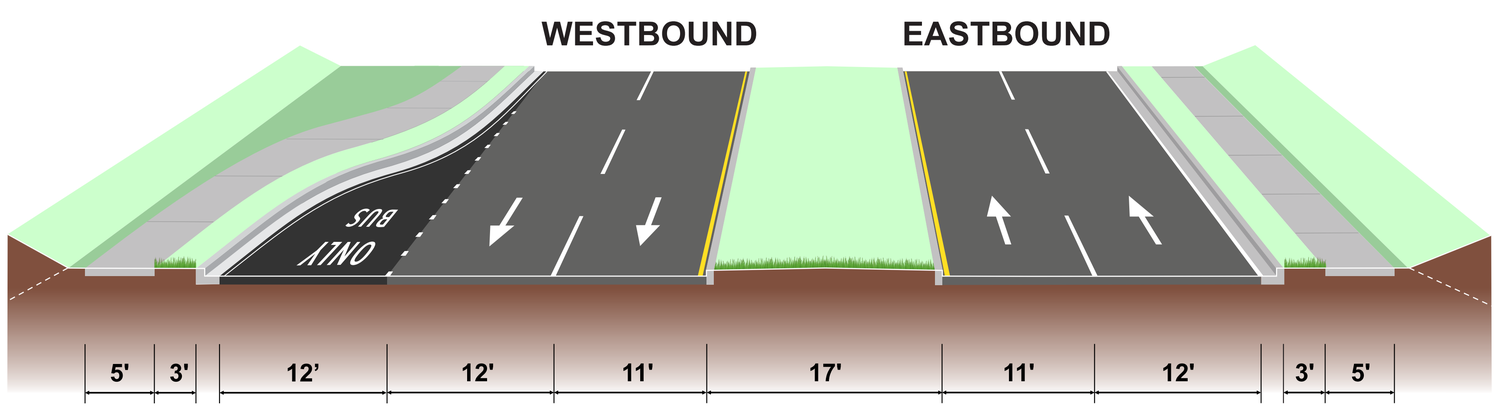
Includes planned and programmed transit and roadway improvments as currently listed in the Constrained Long-Range Plan

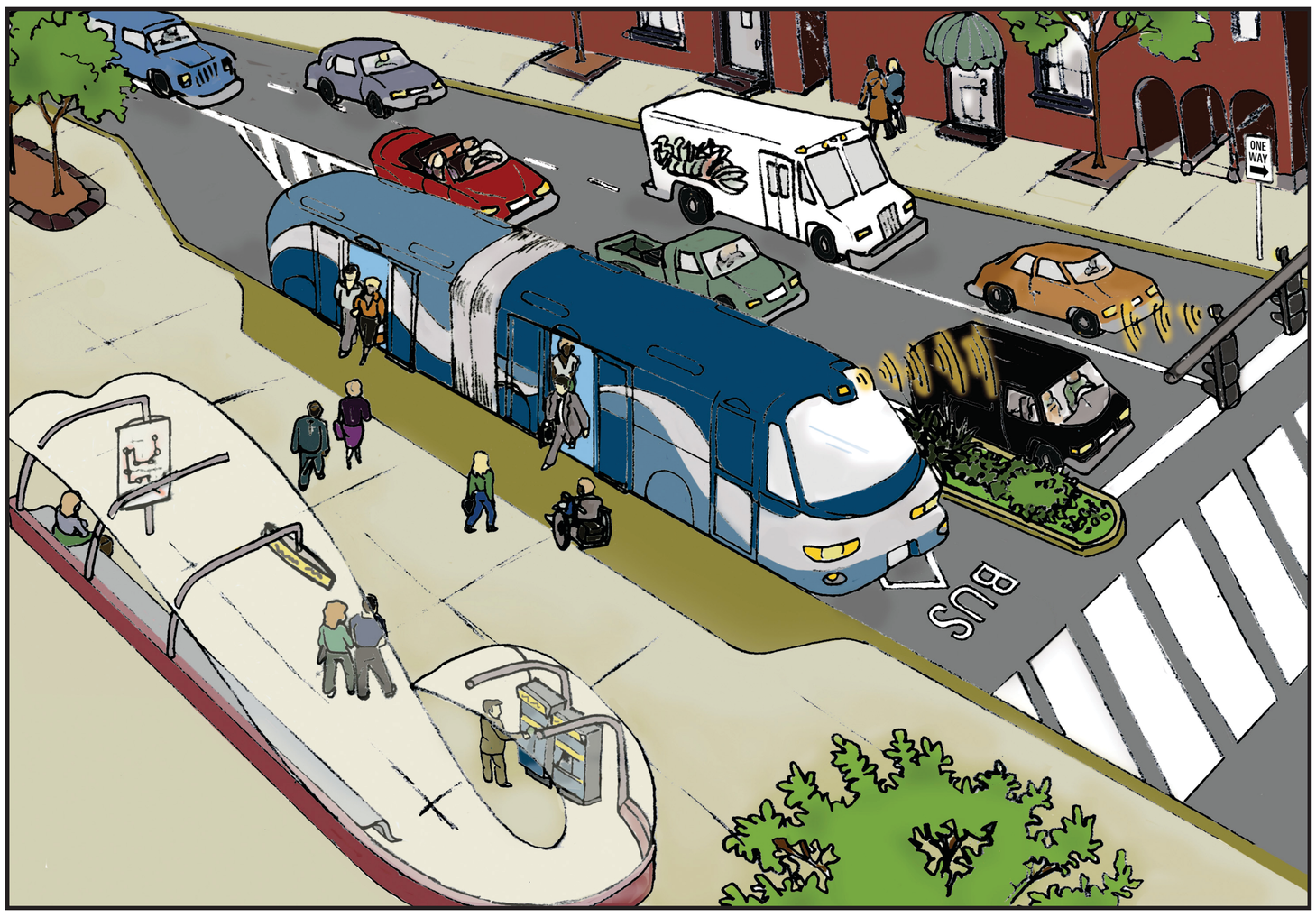


ALTERNATIVE 2

Transportation Systems Management (TSM)

- Enhanced bus service (WMATA's proposed Q9) in existing lanes
- Queue jumps at some intersections. Queue jump is short additional lane for transit vehicles, that allows them to pass through an intersection while traffic in the through lane waits at red light.
- Uses existing bus stops





Typical illustration for information purposes

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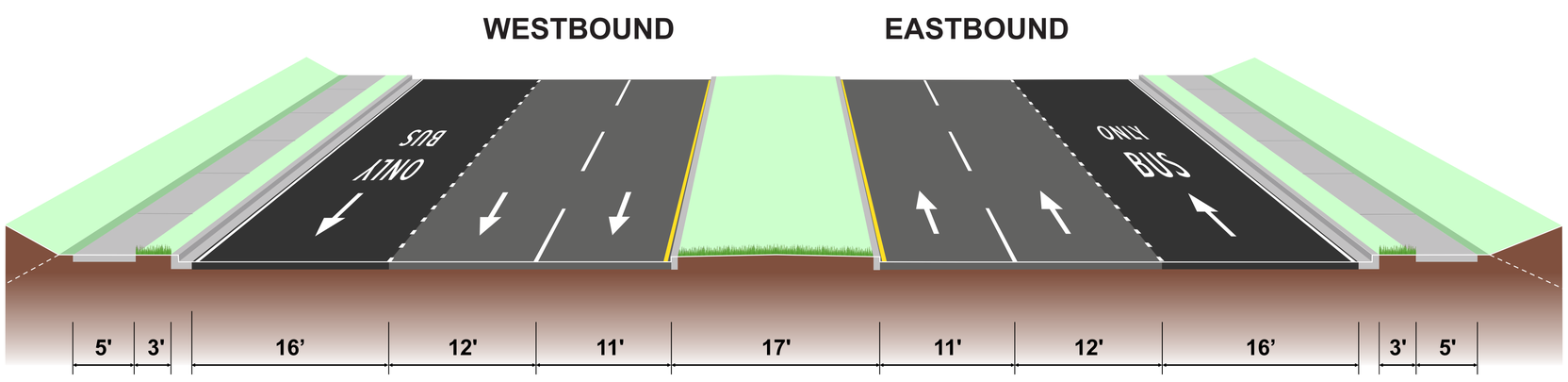
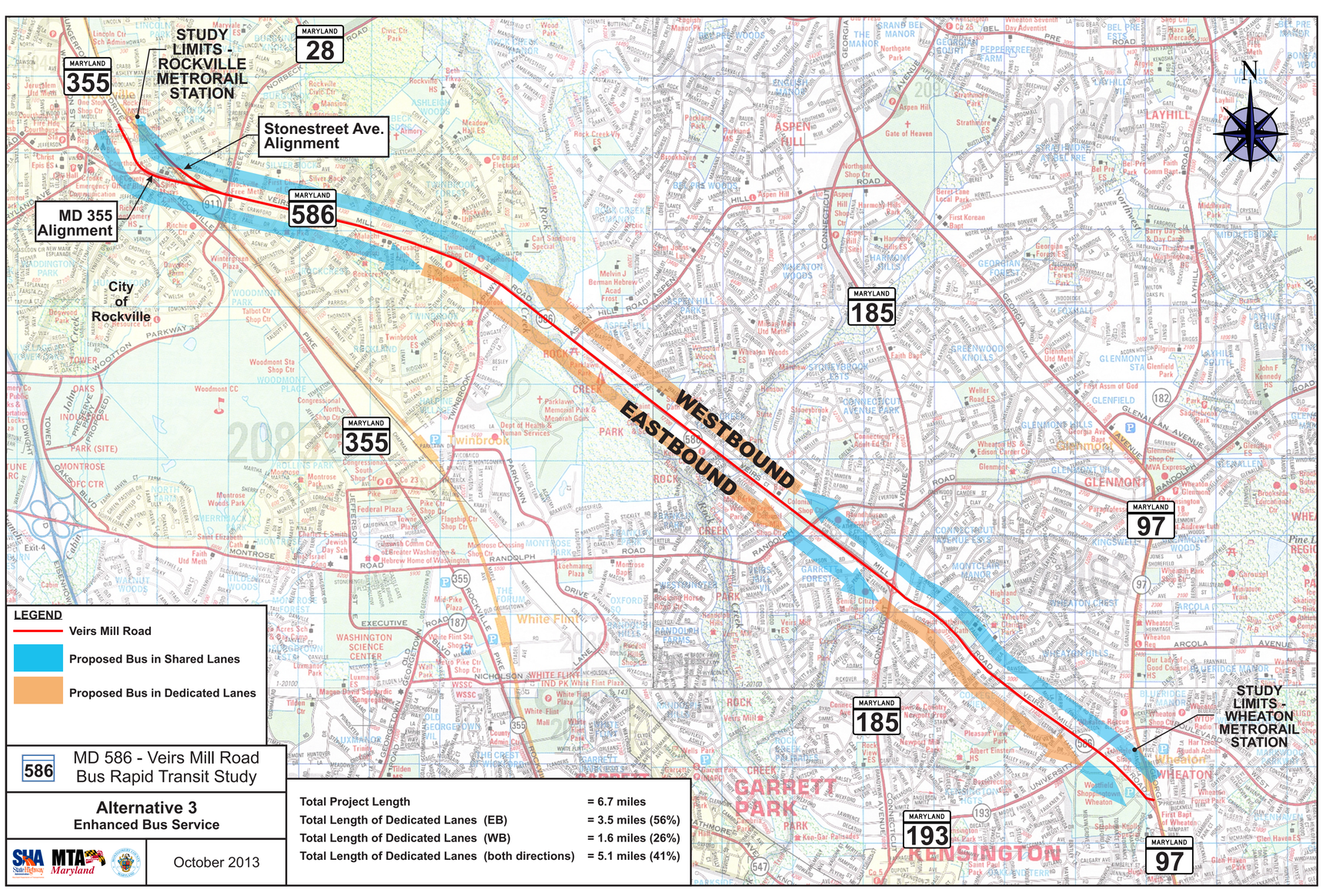
ALTERNATIVE 3
Enhanced Bus Service

- Dedicated bus lanes in curb lane, where feasible
- Enhanced bus service (WMATA's proposed Q9)
- Uses existing bus stops
- Dedicated lanes would be developed by roadway widening or repurposing existing lanes and shoulders

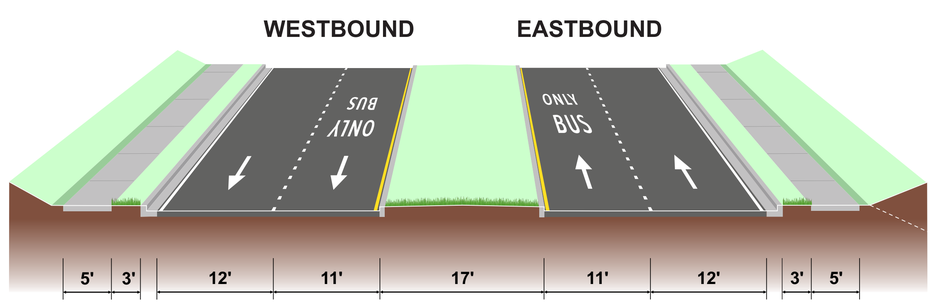




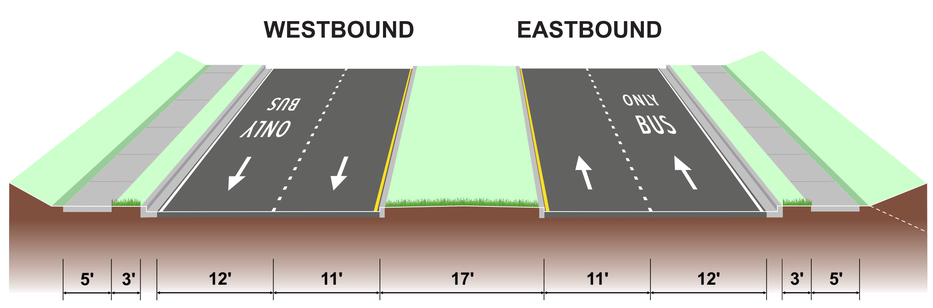
ALTERNATIVE 4
New BRT in Dedicated Lanes

- Dedicated bus lanes (entire length) in median or curb lanes
- New BRT service
- New BRT stations

4A Dedicated Median Lanes (Repurposed Lanes and/or Shoulders)

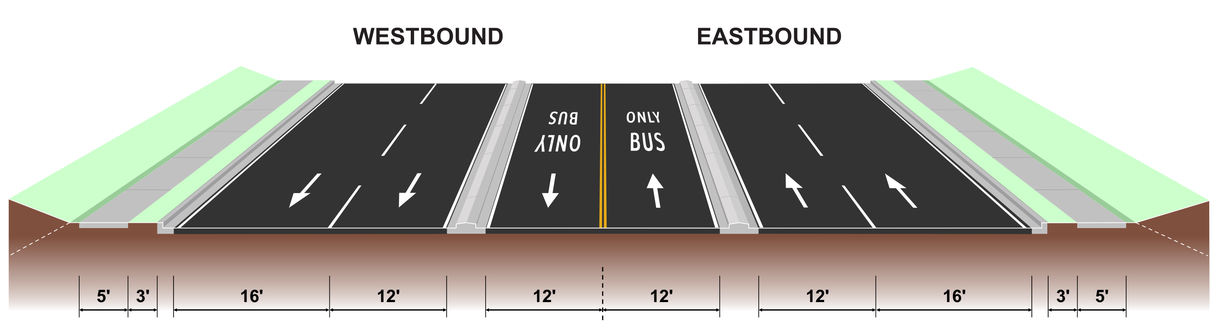


4B Dedicated Curb Lanes (Repurposed Lanes and/or Shoulders)

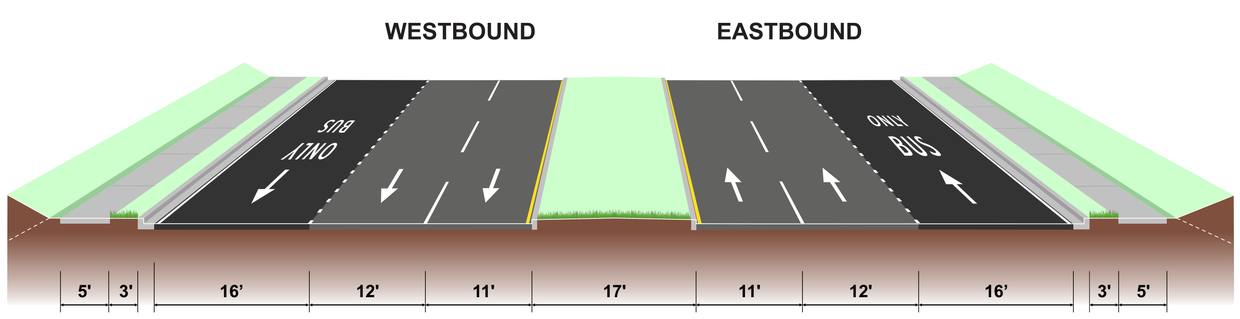


Not expected to be carried forward due to adverse traffic impacts

4C Dedicated Median Lanes (Roadway Widening)



4D Dedicated Curb Lanes (Roadway Widening)



Not expected to be carried forward due to large property impacts

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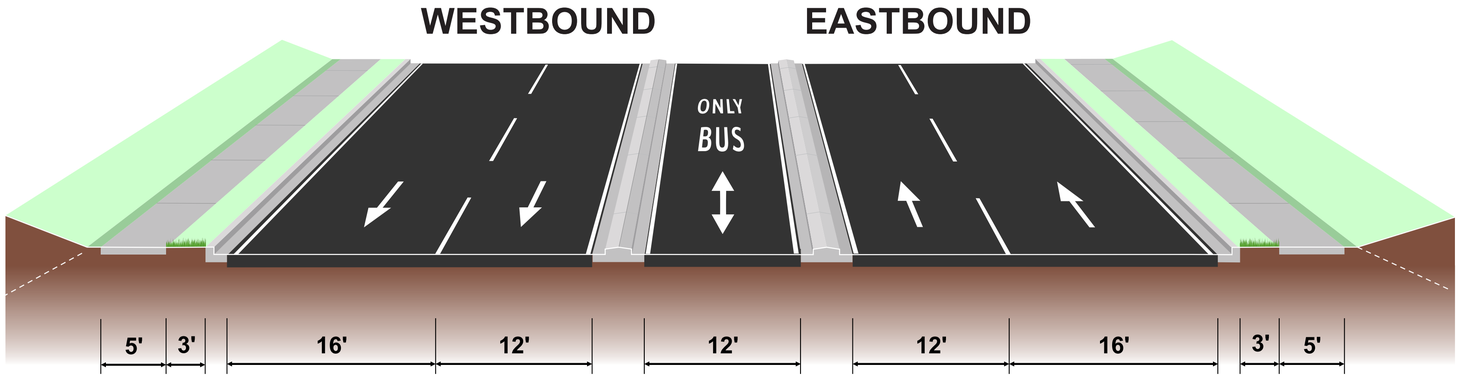
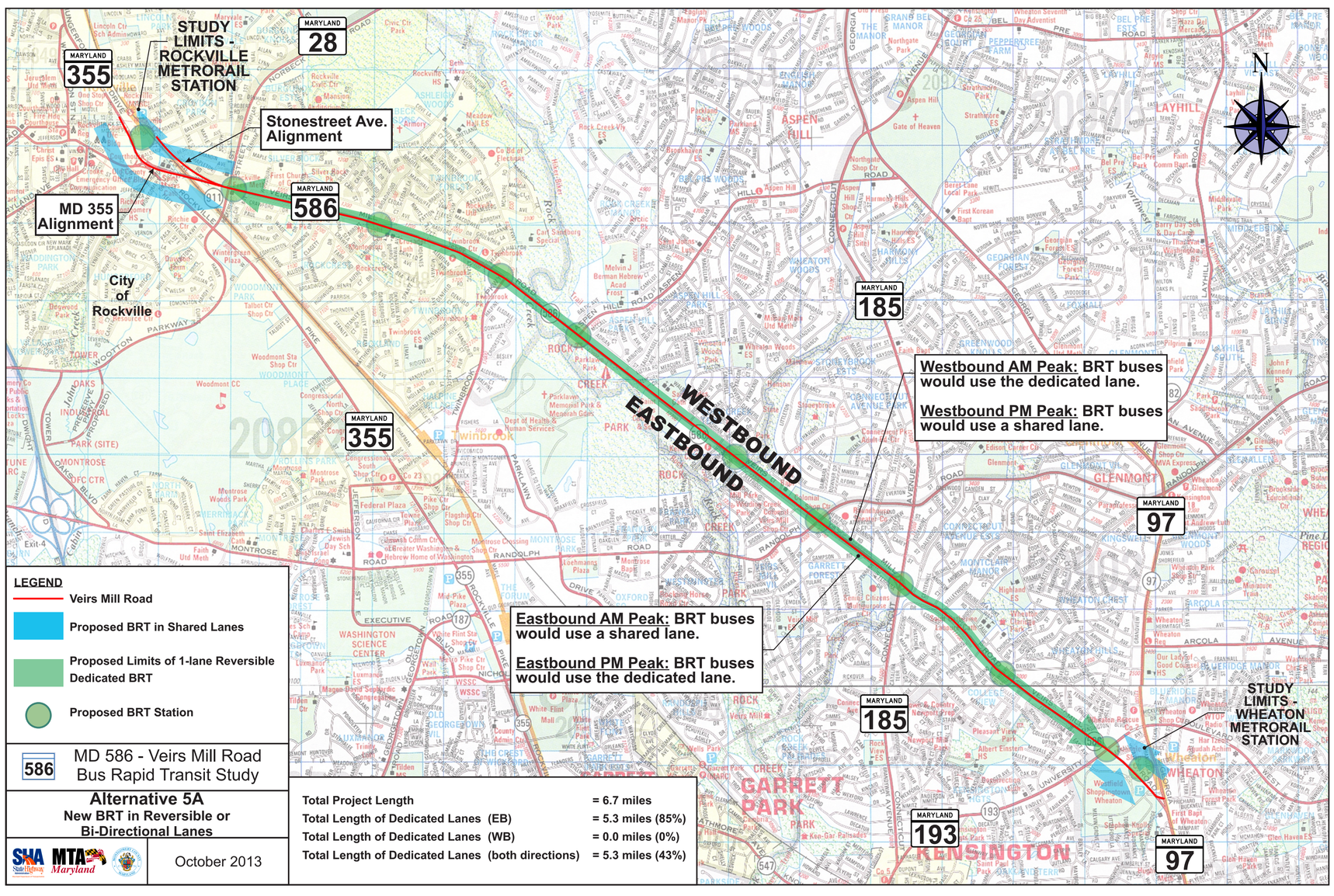
ALTERNATIVE 5A

New BRT in Reversible or Bi-Directional Dedicated Lane

- New BRT service
- New bus stations
- In peak direction, BRT buses use dedicated median lane
- In off-peak direction, BRT buses use shared lane
- Dedicated lane would be developed by roadway widening or lane and shoulder repurposing





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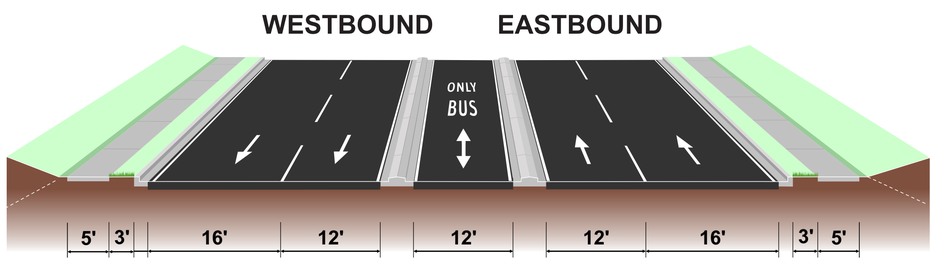
ALTERNATIVE 5B

Two-Way (B) and Bi-Directional (A) Dedicated Median Lanes

- New BRT service
- New bus stations
- In bi-directional lane, BRT buses pass each other at stations
- Dedicated lanes would be developed by roadway widening or lane and shoulder repurposing

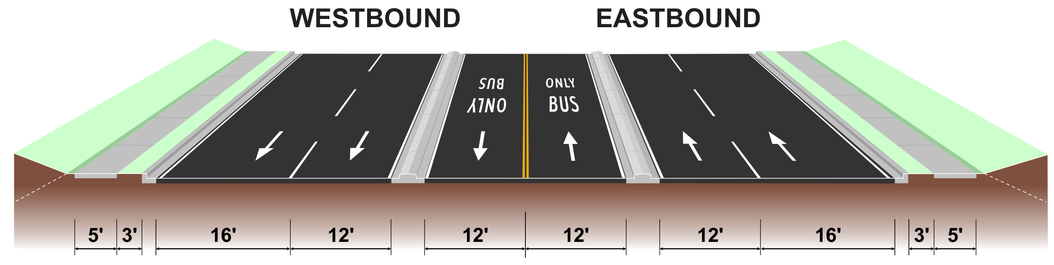
A

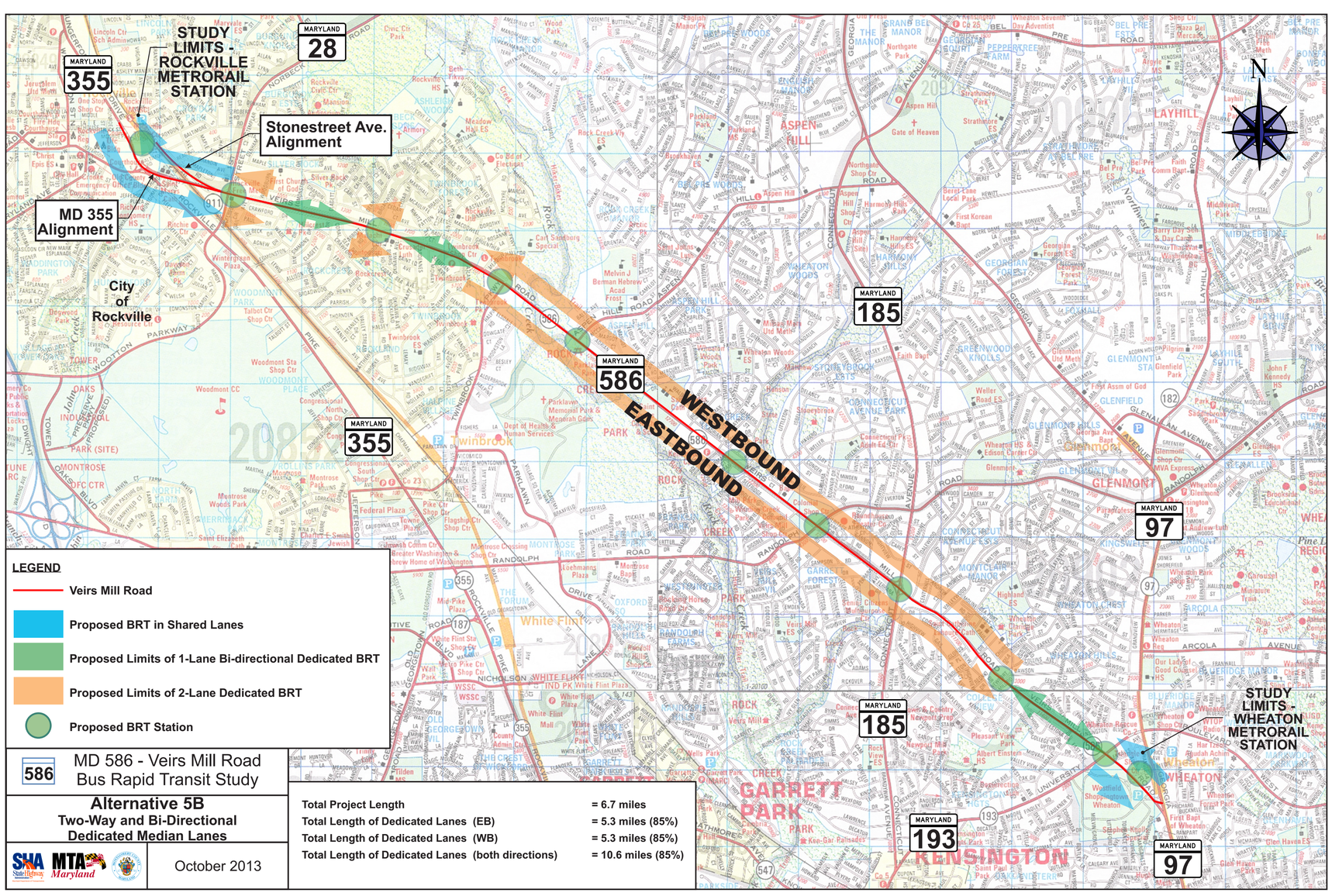
East and West Ends of Study Limits



B

Center of Study Limits (Twinbrook Parkway to East of Connecticut Avenue)





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Alternative 5B
Two-Way and Bi-Directional Dedicated Median Lanes

October 2013

Total Project Length	= 6.7 miles
Total Length of Dedicated Lanes (EB)	= 5.3 miles (85%)
Total Length of Dedicated Lanes (WB)	= 5.3 miles (85%)
Total Length of Dedicated Lanes (both directions)	= 10.6 miles (85%)

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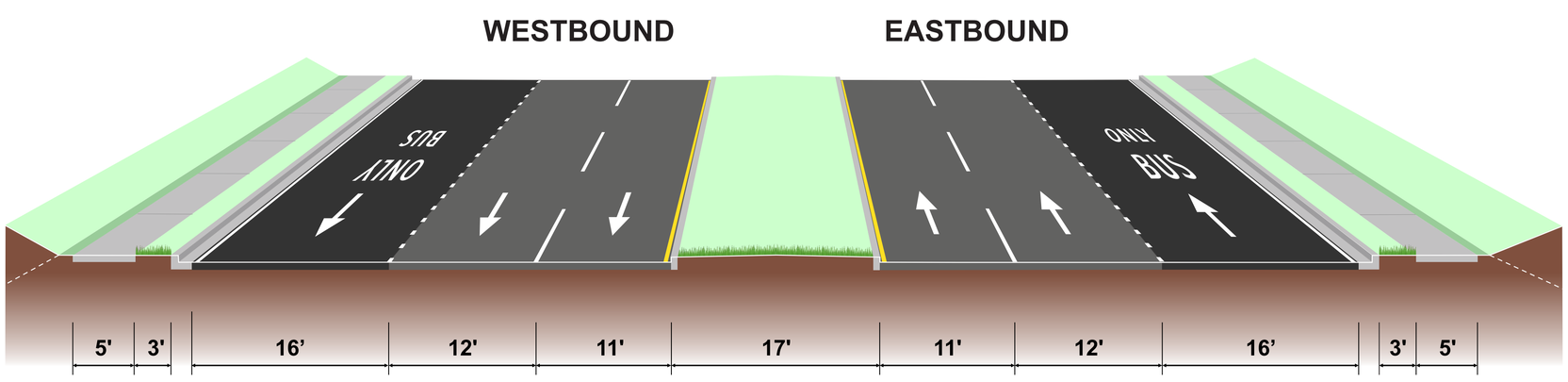
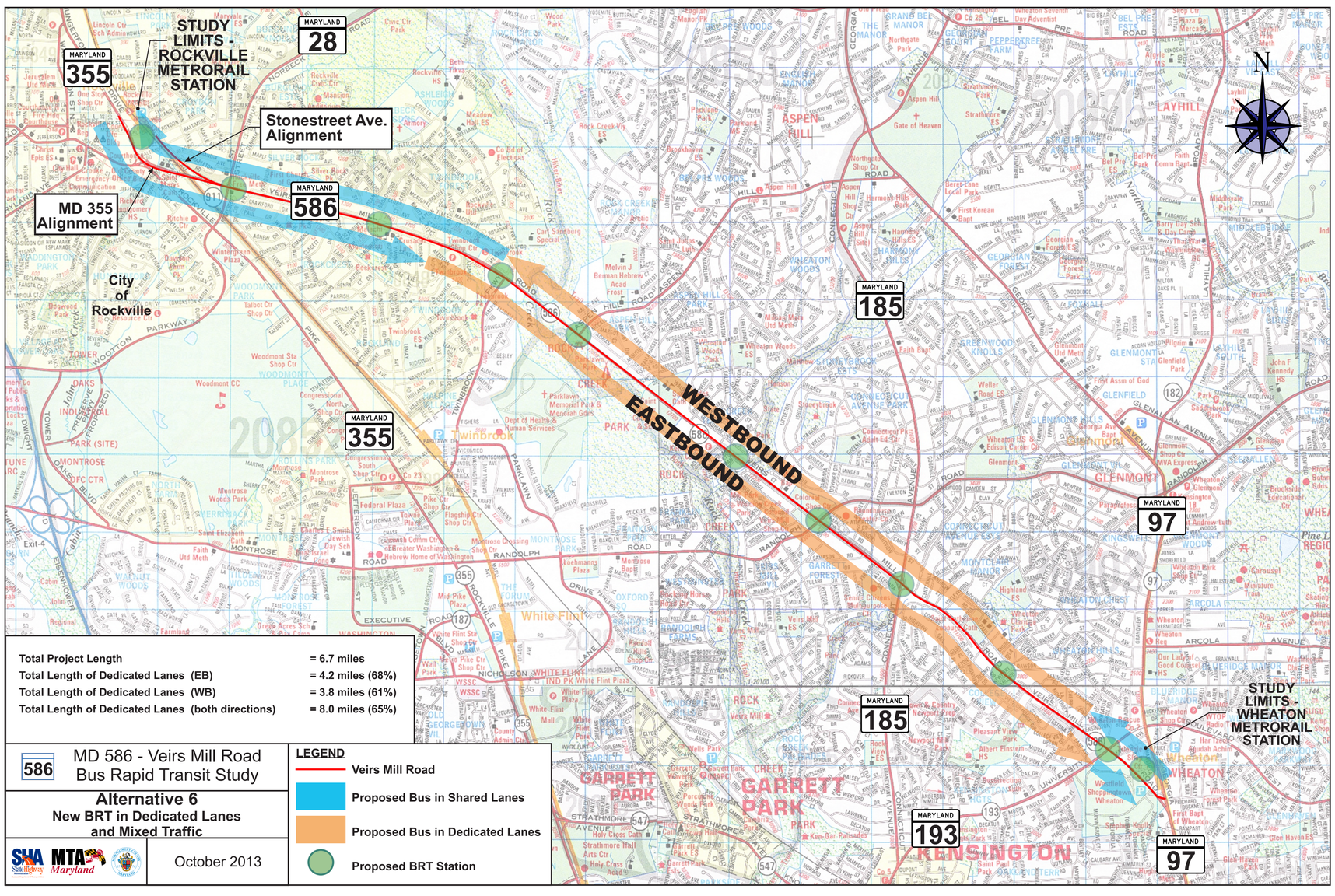
ALTERNATIVE 6

New BRT in Dedicated Lanes and Mixed Traffic

- Dedicated bus lanes in curb lane, where feasible
- New BRT service
- New bus stations
- Dedicated curb lanes would be developed by roadway widening or lane and shoulder repurposing





NEXT STEPS

Funded	Develop Detailed Alternatives	Winter/Spring 2014
	Perform Alternatives Analysis	Spring 2014
	Prepare Draft Environmental Document	Spring/Summer 2014
	Conduct Public Hearing	Fall 2014
	Select Locally Preferred Alternative	Fall 2014
	Prepare Final Environmental Document	Spring 2015
	Receive NEPA Approval	Summer 2015
Unfunded	Final Engineering	TBD
	ROW Acquisition	TBD
	Construction	TBD

RELATED TRANSPORTATION PROJECTS IN MONTGOMERY COUNTY

Draft Countywide Transit Corridors Functional Master Plan	• Identifies BRT network throughout County. Includes Veirs Mill Road BRT corridor • Recommends rights-of-way for individual transit corridors and station locations/makes other roadway recommendations for proposed transit network • Draft plan approved July 11, 2013 by M-NCPPC. County Council public hearing held September 24, 2013 • Expected Council action by end of 2013
Corridor Cities Transitway (CCT)	• 15-mile-long BRT project from COMSAT facility (near Clarksburg) to Shady Grove Metrorail Station • Metropolitan Grove to Shady Grove proceeding with engineering and environmental analysis • Funded for formal environmental documentation, final design, and right-of-way acquisition
MD 97 Georgia Avenue BRT Study	• Evaluating BRT service along MD 97 from Montgomery General Hospital in Olney to Wheaton Metrorail Station • Southern portion of study located adjacent to MD 586 BRT study area • Currently funded for project planning only
MD 97 Montgomery Hills Project Planning Study	• Evaluating improvements to MD 97 (Georgia Avenue) corridor between MD 192 (Forest Glen Road) and MD 390 (16th Street) • Purpose of study: establish balanced approach to transportation within MD 97 corridor • Currently funded for project planning only
Purple Line Study	• 16-mile-long light rail transit line from Bethesda in Montgomery County to New Carrollton in Prince George's County • Funded through design and right-of-way acquisition • Construction expected to begin 2015, assuming availability of funding
Montrose Parkway Extension	• MCDOT project, would provide new four-lane parkway intersecting Veirs Mill Road at Gaynor Avenue

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YOUR OPINION MATTERS

Thank you for participating in the Alternatives Public Workshop for the MD 586 – Veirs Mill Road Bus Rapid Transit Study. Please fill out a comment card at tonight's meeting or direct your questions or concerns to project team members by mail, telephone, or e-mail.

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QR code for cell phone link to project page

For more information about this project and others, visit our internet site at:

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Click on Projects and Studies, SHA Projects Page, Montgomery County, or use the QR Code.

Thank You

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PUBLIC COMMENTS RECEIVED AT MAY 2012 OPEN HOUSE

- Cost: Make careful study of No-Build Alternative; cost may outweigh benefits.
- Congestion: Transit option favored to reduce commute time, traffic, and pollution.
- Service: Improved access for commuters, bicyclists, and pedestrians.
- Safety: Increased corridor lighting would improve sense of safety.
- Connectivity: BRT would improve connectivity to west Gaithersburg, the Metrorail and other destinations.
- Operations: Need to decide who would operate and maintain BRT service and stations.
- Right of Way: Property impacts should be allowed because the transit connection is important.
- Opposed: Not convenient for daily commute; prefer personal vehicle.
- Development: Economic revitalization would have positive impact on neighborhoods.
- Bus Stop Recommendation: NB bus stop at Ferrara Drive obstructs a lane and increases congestion. Relocate bus stop.

COMMENTS RECEIVED AT MAY 2012 OPEN HOUSE

- Cost: Make a careful study of the 'No Build' option as the cost may outweigh the benefits.
- Congestion: The transit option is favored for reducing time of commute, traffic, and pollution.
- Service: Improved access for commuters, bicyclists and pedestrians.
- Safety: More lighting on the corridor would increase the sense of safety for night travel.
- Connectivity: BRT would benefit riders to west Gaithersburg, the Metrorail and other connections.
- Operations: Who would operate and maintain the service and stations?
- Right of Way: The importance of the transit connection should take preference for ROW.
- Opposed: Not convenient for daily commute, prefer personal vehicle.
- Development: Economic revitalization could positively impact the neighborhoods.
- Bus Stop Recommendation: Relocate the NB bus stop at Ferrara Drive that obstructs a lane and increases congestion.