US 29 BRT - SLIGO CREEK PARKWAY TO TECH ROAD

MANDATORY REFERRAL NO. MR2026016

Description

This is a Mandatory Referral review of a Montgomery County Department of Transportation (MCDOT) project to construct a series of median-running bus rapid transit (BRT) lanes for approximately five miles along US-29 (Colesville Road) between Sligo Creek Parkway and Tech Road, connecting Silver Spring and Briggs Chaney.

COMPLETED: 4/9/2026
PLANNING BOARD HEARING DATE: 4/23/2026
MCPB ITEM NO. 05

Montgomery County Planning Board
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LOCATION

US-29 between Sligo Creek Parkway and Tech Road

MASTER PLAN

1996 *Four Corners Master Plan*
1997 *White Oak Master Plan*
2014 *White Oak Science Gateway Master Plan*
2018 *Bicycle Master Plan*
2023 *Fairland and Briggs Chaney Master Plan*
2025 *University Boulevard Corridor Plan*
2025 *Master Plan of Highways and Transitways*

COMPLETE STREETS AREA TYPE

Town Center (Four Corners, Burnt Mills)

Suburban

APPLICANT

Montgomery County Department of Transportation

ACCEPTANCE DATE

2/17/2026

REVIEW BASIS

Md. Land Use Article, Section 20-301 et seq.

Summary:

- The project improves existing Flash BRT service along US-29.
- Staff recommends approval of the Mandatory Referral and transmittal of comments to the Montgomery County Department of Transportation.
- The Planning Board review of a Mandatory Referral is conducted pursuant to the Land Use Article of the Maryland Annotated Code, Sections 20-301 et seq.

CONTENTS

SECTION 1 – COMMENTS AND CONDITIONS

Planning Staff recommends approval of Mandatory Referral No. MR2026016, US-29 BRT – Sligo Creek to Tech Road, and the transmittal of the following comments to the Montgomery County Department of Transportation:

1) Consider additional measures to lower posted speeds throughout the corridor so motor vehicles travel at the master-planned target speed. (see staff report p. 35)
2) Construct the master-planned breezeway sidepath in the portion of Lockwood Drive the project is removing. (p. 36)
3) Provide long-term bicycle parking near rebuilt Flash station areas. (p. 39)
4) Narrow travel lanes to default widths and use excess space to provide concrete transit buffers where none exist in the current design. (p. 43)
5) Prioritize pedestrian and bicycle improvements at the identified stations in the US-29 Pedestrian and Bicycle Improvements CIP. (p. 46)
6) Provide additional CIP funding to meet multimodal corridor needs that exceed $25 million. (p. 46)
7) Ensure that a 15-foot curb radius is provided where the proposed design modifies existing curb ramps. (p. 47). Locations include:
    a. Woodmoor Circle
    b. Southwood Avenue
    c. Crestmoor Drive
8) Add pedestrian-scale lighting at appropriate locations to meet Streetlighting Design Requirements target values to the extent MDOT SHA allows to address deficiencies in illuminance in station areas. (p. 47)
9) Consider changes to the US-29 median at Timberwood Avenue to prevent left turns from the westbound approach. (p. 47)

Montgomery Parks will require the following conditions in a future Park Construction Permit:

1. Construction plans must be submitted to the Maryland-National Capital Park and Planning Commission (M-NCPPC) Montgomery County Department of Parks (Montgomery Parks) for review as part of the Park Construction Permit process to ensure that all work is performed in accordance with M-NCPPC standard details, specifications, and policies. No work on parkland may occur until an approved Park Construction Permit is issued for the project.
2. MCDOT must continue to coordinate with M-NCPPC Montgomery Parks on the sidewalk design at Hastings Mill NCA to ensure the roadway improvements complement long-term park improvement plans.
3. MCDOT must continue to coordinate with M-NCPPC Montgomery Parks on the roadway and sidewalk design at Burnt Mills East Special Park to ensure the roadway improvements

complement the proposed uses at the park and stay within the current road and sidewalk footprint.

4. A perpetual easement will be granted for any approved Commission parkland to be added to the MCDOT Road ROW, as appropriate. The Commission must be paid the fair market value of the perpetual easement. MCDOT and Parks will finalize the proposed ROW area during the final stages of design.
5. No storage or staging of materials or equipment will be authorized on parkland unless the locations are included in the Park Construction Permit review.

SECTION 2 – INTRODUCTION

The Montgomery County Department of Transportation (MCDOT) proposes constructing median-running bus rapid transit (BRT) lanes for approximately five miles along US-29 (Colesville Road/Columbia Pike) from Sligo Creek Parkway to Tech Road.

The project is one of the county's most significant efforts to date to create a high-quality, high-capacity transit option in East County. As designed, the project will improve the existing Flash service between Silver Spring, Briggs Chaney, and Burtonsville. The capital improvements identified as part of this project will allow for faster transit vehicle speeds by increasing reliability at the most congested locations along the US-29 corridor. By increasing speed, travel time for transit users is reduced and MCDOT can offer more frequent service with the same number of buses.

SECTION 3 – PROJECT DESCRIPTION

Project Description

The Montgomery County Department of Transportation (MCDOT) is proposing to construct median-running bus rapid transit (BRT) lanes for approximately five miles along US-29 (Colesville Road/Columbia Pike) from Sligo Creek Parkway to Tech Road. This project—called US-29 Flash BRT Phase 2—will improve the existing BRT Flash service currently operating along US-29 between Silver Spring and Briggs Chaney (with weekday peak hour service to Burtonsville). A description of bus rapid transit and its components can be found in Attachment A.

The project includes one-lane and two-lane median-running BRT lanes, the relocation of four BRT stations (two at Four Corners and two at Burnt Mills), and transit signal priority at 16 intersections. Although the project calls for improved pedestrian and bicycle mobility and safety along the corridor, this specific design effort is focused solely on the transit component. A separate study (https://apps.montgomerycountymd.gov/BASISCAPITAL/Common/Project.aspx?ID=P502304) (with dedicated funding for construction) will identify pedestrian and bicycle connections to be upgraded along US-29.

Figure 1 shows the locations of the project's single median lane, two median lanes, and BRT mixed-traffic-running segments.

Figure 1: Lane Configuration for Phase 2 US-29 BRT

Background

A vision for dedicated transit facilities along US-29 in this corridor has existed since at least 1996. The array of studies, analyses, plans, and reports in which this project was envisioned, designed, modeled, and planned (organized by type) can be found in Attachment B: Previous Study Tables. Over the years, BRT and the provision of dedicated transit lanes in this corridor have been analyzed in at least 20 county and state studies and nine countywide and regional studies. The project has been incorporated into more than a dozen functional and master plans and has become the core component of the transportation vision for eastern Montgomery County.

The Planning Board has played a significant role in shaping this project and advancing the master-planned vision for the corridor by guiding decisions that will help make it more transit-friendly with safer, more accessible transportation options.

Planning Staff led a detailed review of MCDOT's *US 29 Mobility and Reliability Study* in 2020. The study evaluated different options for providing higher-quality transit service in this corridor, including the use of dedicated lanes and managed lanes (combined transit and high-occupancy vehicle lanes). At the time, the Planning Board, supported by Staff, pushed for additional County funding to further analyze dedicated lane options to better optimize the BRT concept and ensure it was more competitive with passenger vehicles from a travel time perspective. This successful advocacy led to MCDOT undertaking the *US 29 Mobility and Reliability Study Phase 2*, completed in 2022 (Attachment C). The purpose of the additional analysis, per a Transportation and Environment (T&E) Committee staff report from the time, was to "render the Median Lane Bus Rapid Transit (BRT) alternative more cost effective, as was done for the Managed Lane… Alternative. [With the goal that each] alternative should include similar roadway/intersection, bikeway/pedestrian, and traffic management improvements so that a more accurate 'apples-to-apples' comparison can be made."

After completing the Phase 2 study, MCDOT resubmitted the project to the Planning Board in November 2022 for review. Both the Planning Board and the County Executive supported the Median Lane option, with the DOT Director indicating the Median Lanes provide "significant improvement for transit travel times in the corridor, and… greater reliability given the degree to which [the transit vehicles are] separate from recurring delays due to traffic congestion."

Furthermore, in transmitting its Median Lane recommendation to the County Council, the Planning Board identified the additional roadway capacity provided in the Managed Lanes alternative as contrary to the transportation goals of *Thrive Montgomery 2050*.

The Council supported and funded design of the Median Lane option and this design has subsequently been advanced in the intervening years, and it is the design being reviewed today.

MCDOT submitted this project to Planning Staff for Mandatory Referral on February 17, 2026. At a T&E committee worksession on March 2, 2026, Councilmember Mink encouraged MCDOT to reevaluate the decisions made in 2022 related to the provision of dedicated transit lanes through Four Corners. The committee asked MCDOT to study the impact of removing one or both dedicated transit lanes through Four Corners and report back to the County Council with their findings (likely in 2027). However, there has been no change to the project design at this point, and MCDOT intends to continue toward final design with the concept being presented to the Planning Board.

Project Corridor

Lanes (Number, Width, and Operations)

US-29 is a six-lane, two-way roadway through most of the project area (approximately five miles from Sligo Creek Parkway to Tech Road), with auxiliary lanes at certain interchanges and intersections. At Four Corners, it is an eight-lane road (four lanes in each direction). The roadway is divided with a combination of curb and grass medians.

A summary of the proposed number of transit lanes and their operations along US-29 are shown in Table 1. Flash operates in mixed traffic along the Lockwood Drive spur.

Table 1: Transit Lanes and Operations

Segment	Number of Dedicated Transit Lanes	Operation of Dedicated Transit Lanes	Source of Space for Transitway
Sligo Creek Parkway to Franklin Avenue	0	None	N/A
Franklin Avenue to I-495	1	Northbound	Median, Left Turn Lane
I-495 to Timberwood Avenue	2	Both Directions	Innermost Thru Lanes, Median, Sidewalk Buffer
Timberwood Avenue to Burnt Mills Shopping Center	1	Reversible	Median, ROW Acquisition
Burnt Mills Shopping Center to Lockwood Drive	1	Southbound	Left Turn Lane, ROW Acquisition
Lockwood Drive to North of Stewart Lane	1	Reversible	Median
North of Stewart Avenue to End of Project	2	Both Directions	Median, Inner Shoulders

The project will convert travel lanes and turn lanes to transit lanes at the following locations:

- Leighton Avenue: the left-turn lanes are repurposed.
- Brewster Avenue: the left-turn lanes are repurposed.
- I-495 to Timberwood Avenue: the eight-lane cross-section will be reduced to a six-lane one, with the innermost travel lanes repurposed for the median-running BRT.

- Burnt Mills Shopping Center: the northbound left-turn lane into the Colesville Professional Park is repurposed.
- Hillwood Drive: the left-turn lanes are repurposed.
- Lockwood Drive: the southbound left-turn lane onto Lockwood Drive is repurposed.
- Northwest Drive: the left-turn lanes are repurposed.

Franklin Avenue to I-495: Single Median Lane (Northbound)

Starting at the southernmost extent of the project, a single northbound median-running dedicated transit lane begins just north of Franklin Avenue and continues to the I-495 interchange. There will be three general purpose travel lanes in both directions, with two 11-foot-wide lanes and one 10.5-foot-wide curb lane. The existing and proposed cross-sections of US-29 from Franklin Avenue to I-495 are shown in Figure 2.

Operationally, northbound Flash buses will use the median lane at all times and southbound Flash buses will be in mixed traffic.

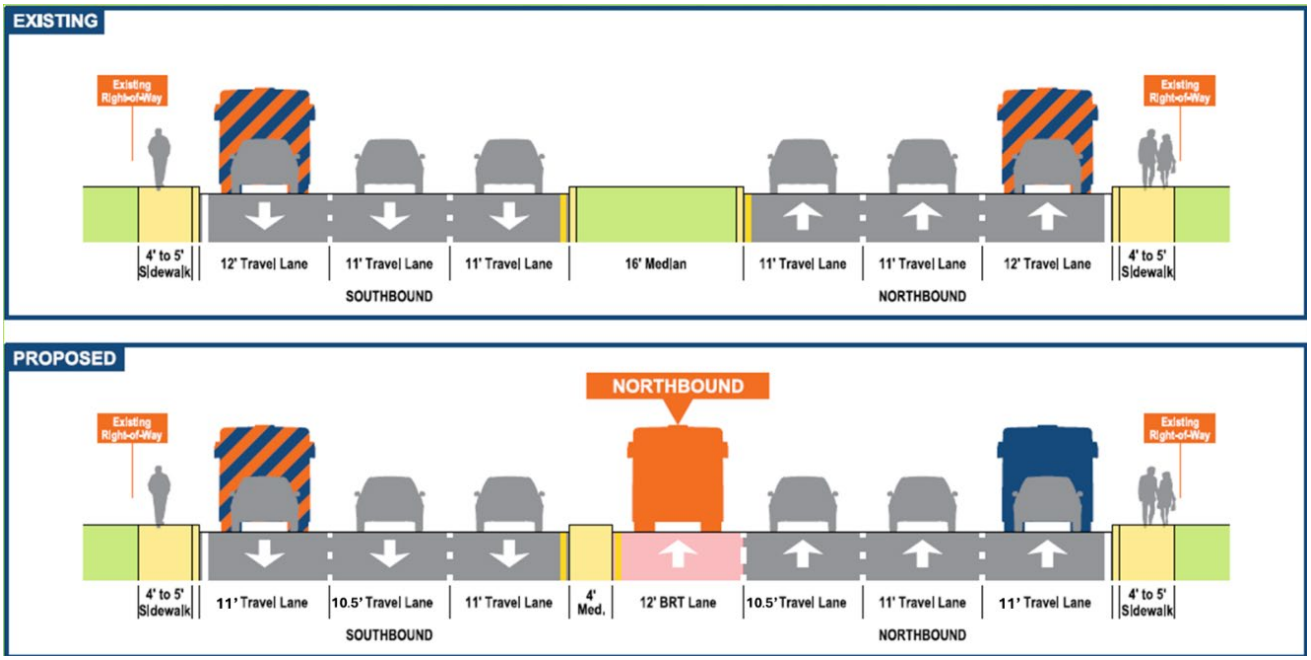

Figure 2: Existing and Proposed Cross-Section from Franklin Avenue to I-495

I-495 to Timberwood Avenue: Two-Way Median Lanes

The northbound median lane continues to the bridge over I-495, where an additional median-running lane begins. The transition zone is seen in Figure 3.

Operationally, northbound and southbound Flash buses will use the two median lanes at all times.

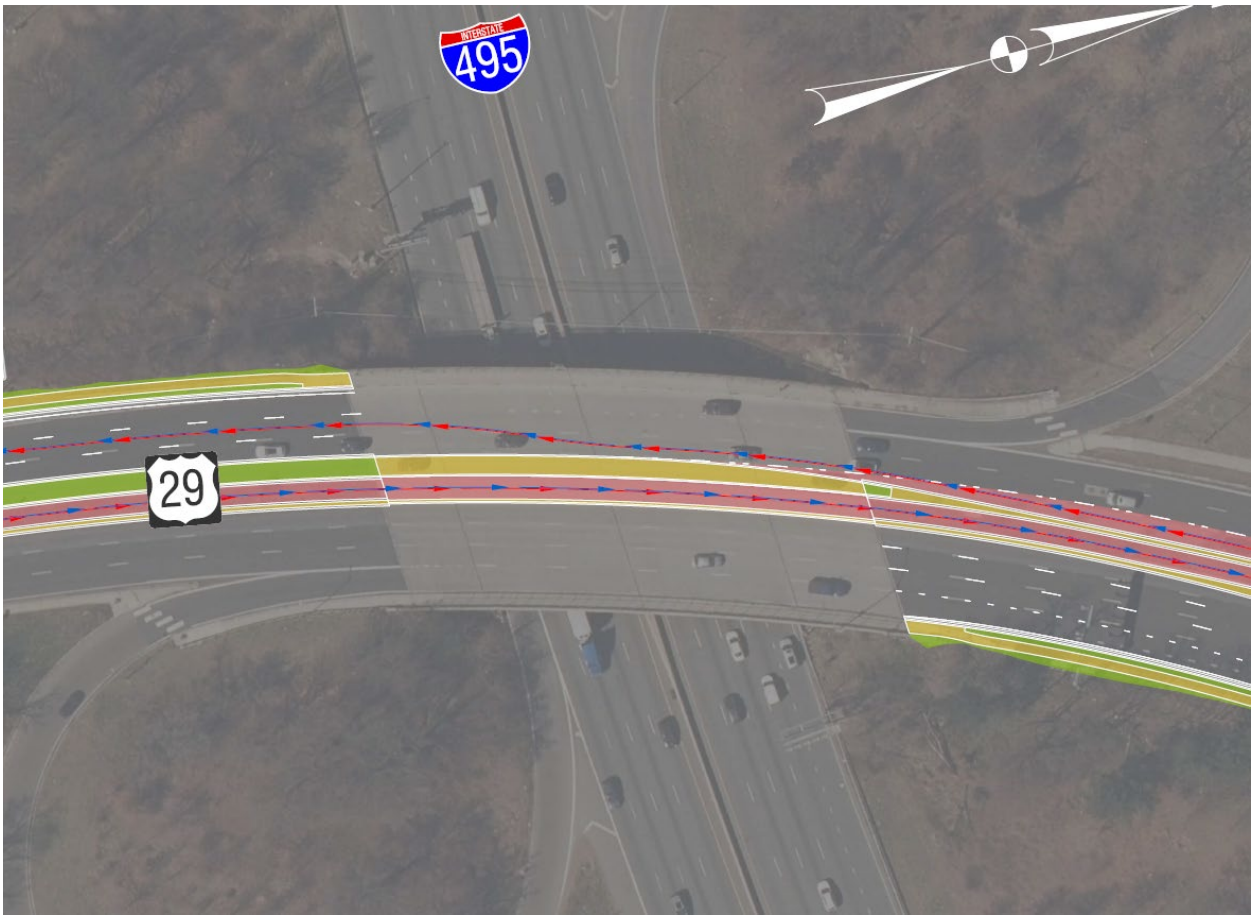

Figure 3: Transition from One Median Lane to Two Median Lanes at I-495

The two median lanes will run from I-495 to Timberwood Avenue. The space for the dual median lanes will be repurposed from the existing innermost travel lanes in both directions throughout the Four Corners area, reducing the total number of general purpose lanes from eight to six, as shown in Figure 4. The general purpose travel lane widths will remain the same. Two travel lanes will be 11 feet wide and the outermost/curb lane will be 12 feet wide and shared with local buses.

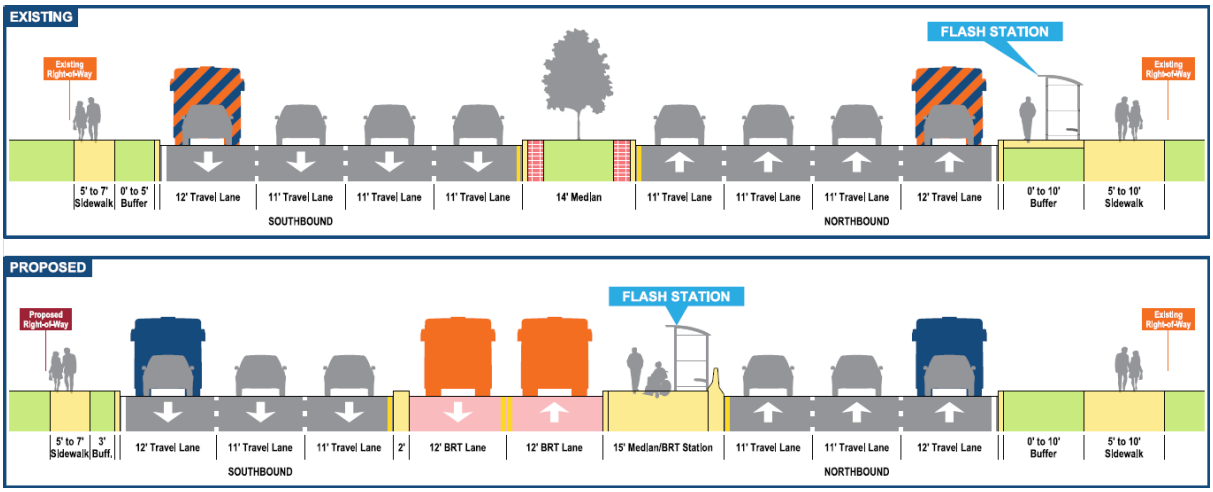

Figure 4: Existing and Proposed Cross-Section from I-495 to Timberwood Avenue

Timberwood Avenue to Burnt Mills Shopping Center: Single Median Lane (Reversible)

The two median lanes continue through Four Corners to Timberwood Avenue, where they transition to a single median lane, as seen in Figure 5.

Figure 5: Transition from One Median Lane to Two Median Lanes at Timberwood Avenue

The cross-section for the single median lane from Timberwood Avenue to the Burnt Mills Shopping Center at Hillwood Drive can be seen in Figure 6. Space for the median-running lane will be obtained by expanding the right-of-way (ROW). The general-purpose travel lane widths will remain the same: two lanes will be 11 feet wide and the outermost/curb-running lane will be 12 feet wide and shared with local buses.

Operationally, Flash buses will use this single median lane in the peak direction: southbound in the morning and northbound in the evening.

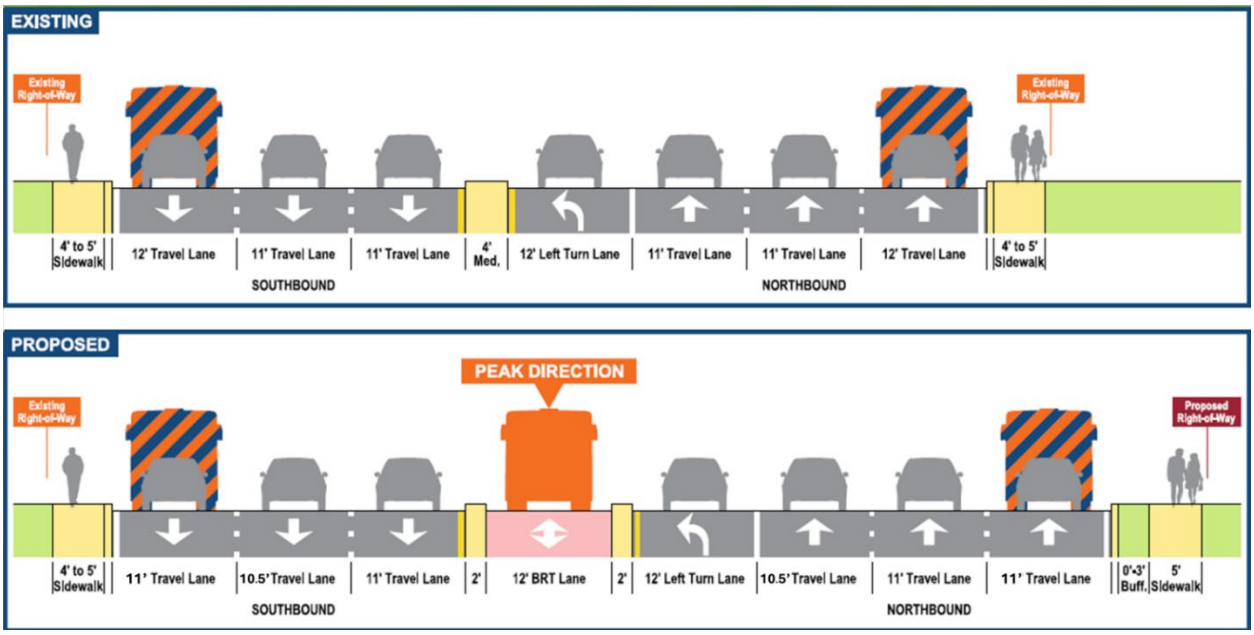

Figure 6: Existing and Proposed Cross-Section from Timberwood Avenue to Burnt Mills Shopping Center

Burnt Mills Shopping Center to Lockwood Drive: Single Median Lane (Southbound)

The single median lane continues from the Burnt Mills Shopping Center (Hillwood Drive) to Lockwood Drive. Space for the median running lane will be obtained by repurposing existing turn lanes and limited ROW expansion. General purpose travel lane widths will narrow: two lanes will be 11 feet wide and the third will be 10.5 feet wide. A cross-section of the single median lane from Burnt Mills Shopping Center to Lockwood Drive is shown in Figure 7.

Operationally, southbound Flash buses will use the single median-running lane at all times. Northbound Flash buses will be in mixed traffic.

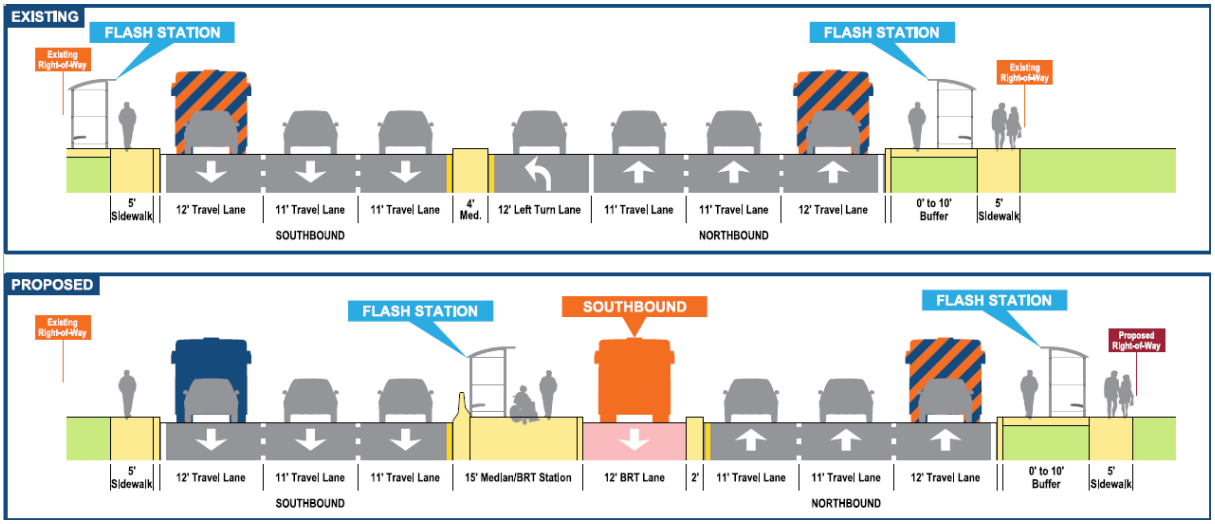

Figure 7: Existing and Proposed Cross-Section from Burnt Mills Shopping Center to Lockwood Drive

Lockwood Drive to North of Stewart Lane: Single Median Lane (Reversible), Start of Spur

At Lockwood Drive, the single median lane continues along US-29. Space for the median running lane will be obtained by repurposing the existing 16-foot-wide grass median. No changes to the number or width of general purpose lanes are proposed. Two general purpose lanes will be 11 feet wide, and the outermost/curb-running lane will be 12 feet wide and shared with local buses, as seen in Figure 8.

Lockwood Drive is the start of the mixed-traffic Flash spur along Lockwood Drive and Stewart Lane, shown in Figure 1. The Flash Orange service is shown as the orange arrow in Figure 9. The Flash Orange bus service will run in the median lanes south of Lockwood Drive and then transition to mixed traffic on Lockwood Drive.

Operationally, Flash buses will use this single median lane in the peak direction: southbound in the morning and northbound in the evening.

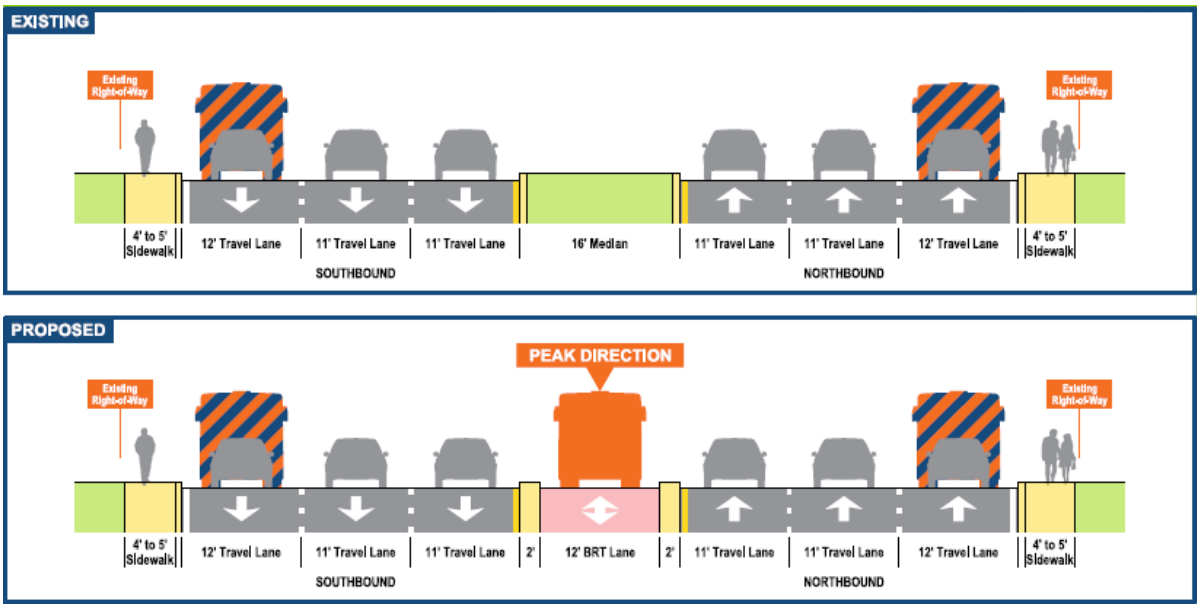

Figure 8: Existing and Proposed Cross-Section from Lockwood Drive to North of Stewart Lane

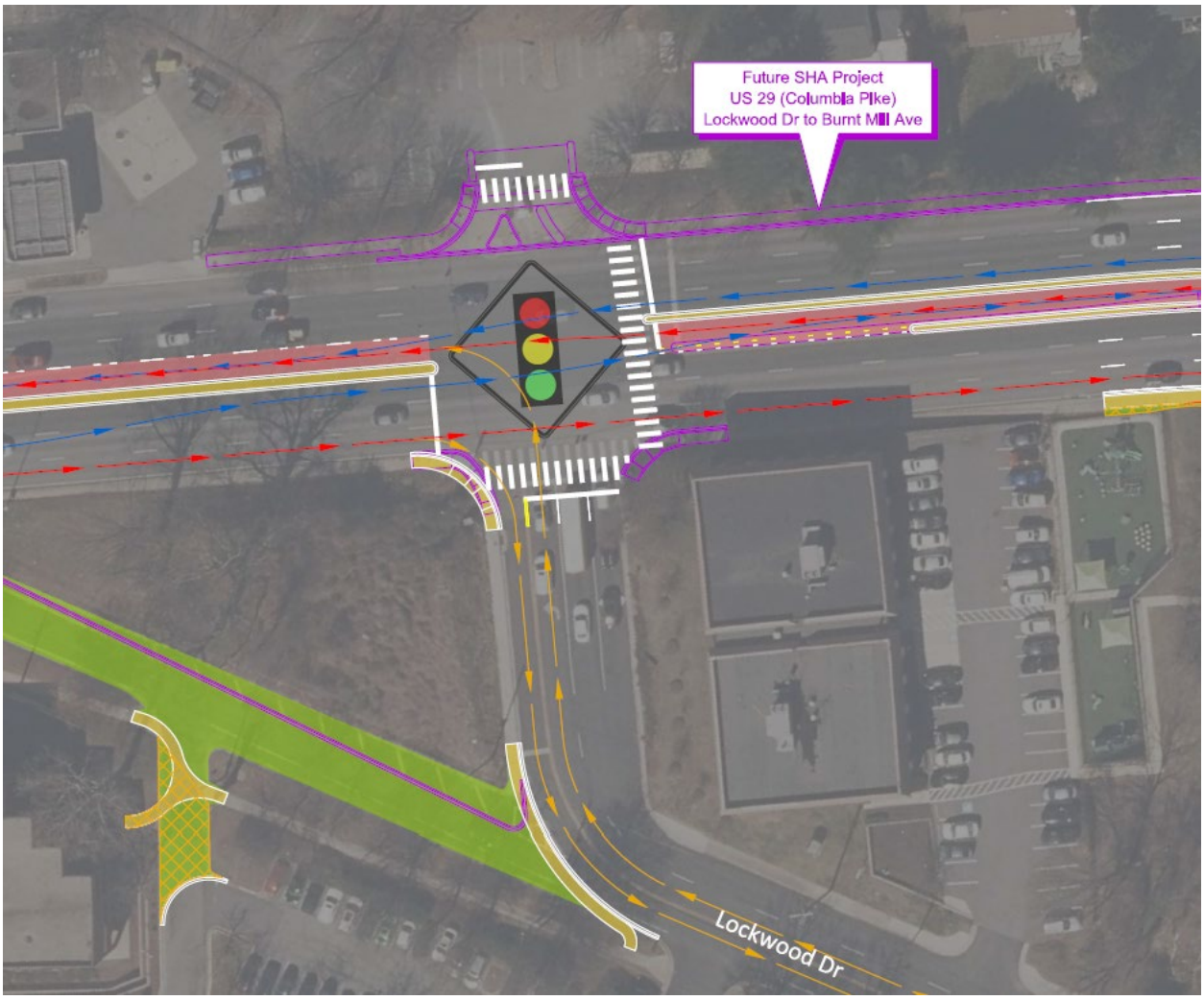

Figure 9: Transition from Single Median Lane (Southbound) to Single Median Lane (Reversible) at Lockwood Drive

North of Stewart Lane to End of Project: Two-Way Median Lanes, End of Spur

The single median lane continues until several hundred feet north of Stewart Lane. There, it transitions to two median lanes, one for each direction. The transition zone can be seen in Figure 10.

This is also where the spur rejoins US-29, and Flash Orange service returns from Stewart Lane. On US-29, Flash Orange service will also use the median lanes.

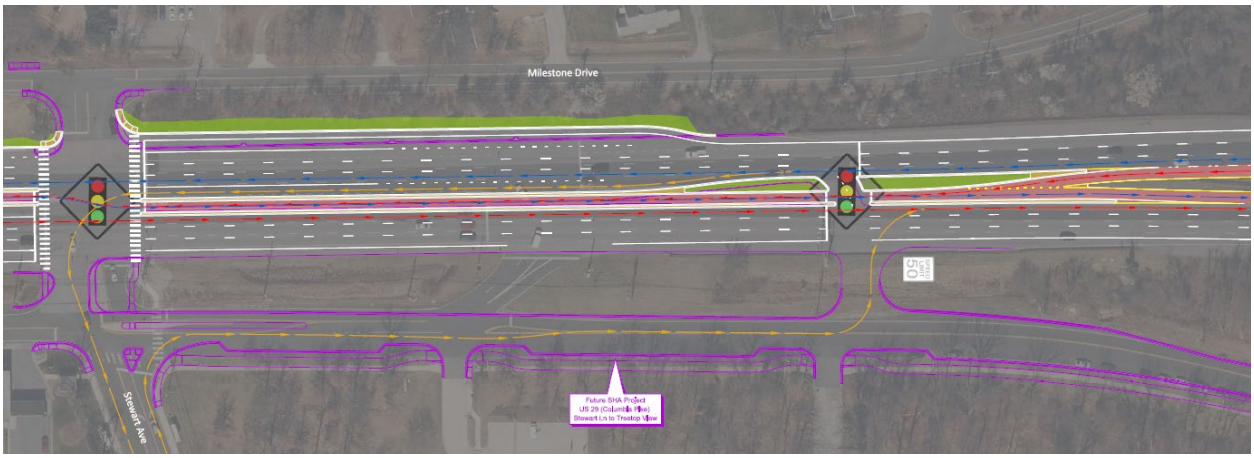

Figure 10: Transition from Single Median Lane (Reversible) to Two-Way Median Lanes

Space for the two median lanes will come from the existing grass median and from the existing four-foot inner shoulders on both sides of the road, as shown in Figure 11. No existing ROW will be acquired, and existing general purpose lanes will retain their same widths: all lanes will be 12 feet wide.

Operationally, these two-way median lanes will run in both directions at all times of day.

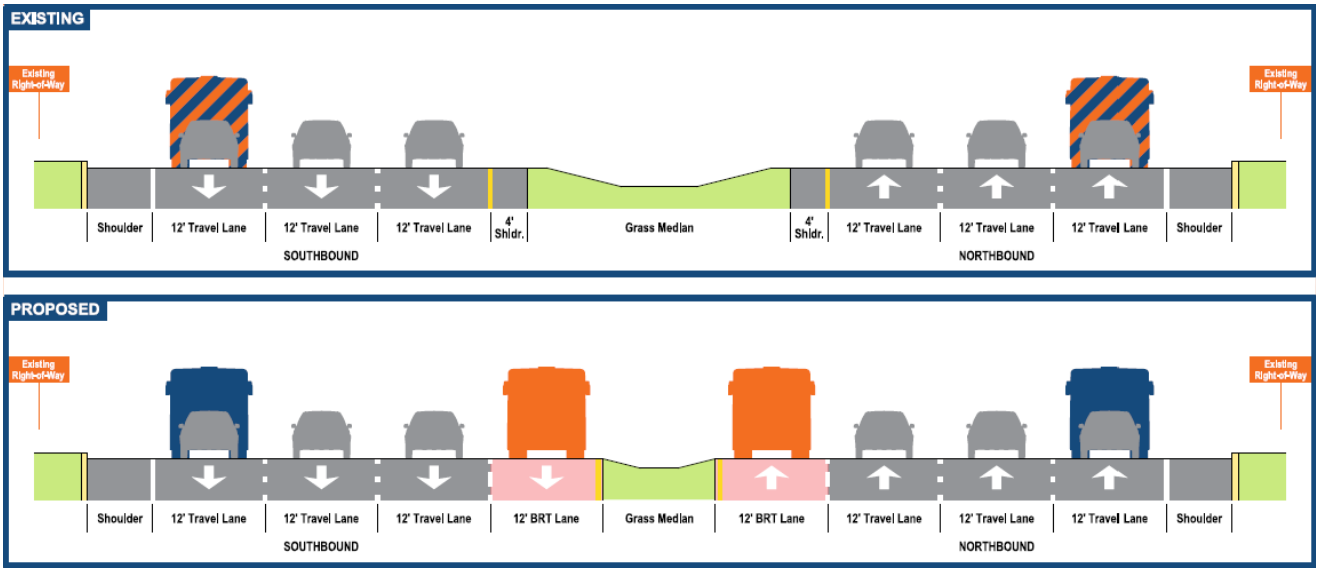

Figure 11: Existing and Proposed Cross-Section from North of Stewart Lane to End of Project

Classification

The county roadway classification of US-29 varies throughout the corridor.

- Sligo Creek Parkway to I-495 interchange: Boulevard
- I-495 interchange to Four Corners Town Center southern boundary: Growth Corridor Boulevard

- Four Corners Town Center southern boundary to Four Corners Town Center northern boundary: Town Center Boulevard
- Four Corners Town Center northern boundary to Lorain Ave: Growth Corridor Boulevard
- Lorain Ave to Burnt Mills Town Center southern boundary: Boulevard
- Burnt Mills Town Center southern boundary to Burnt Mills Town Center northern boundary: Town Center Boulevard
- Burnt Mills Town Center northern boundary to New Hampshire Ave (MD 650): Boulevard
- New Hampshire Ave (MD 650) to Tech Road: Controlled Major Highway

A map of the roadway classifications within the study area are shown in Figure 12.

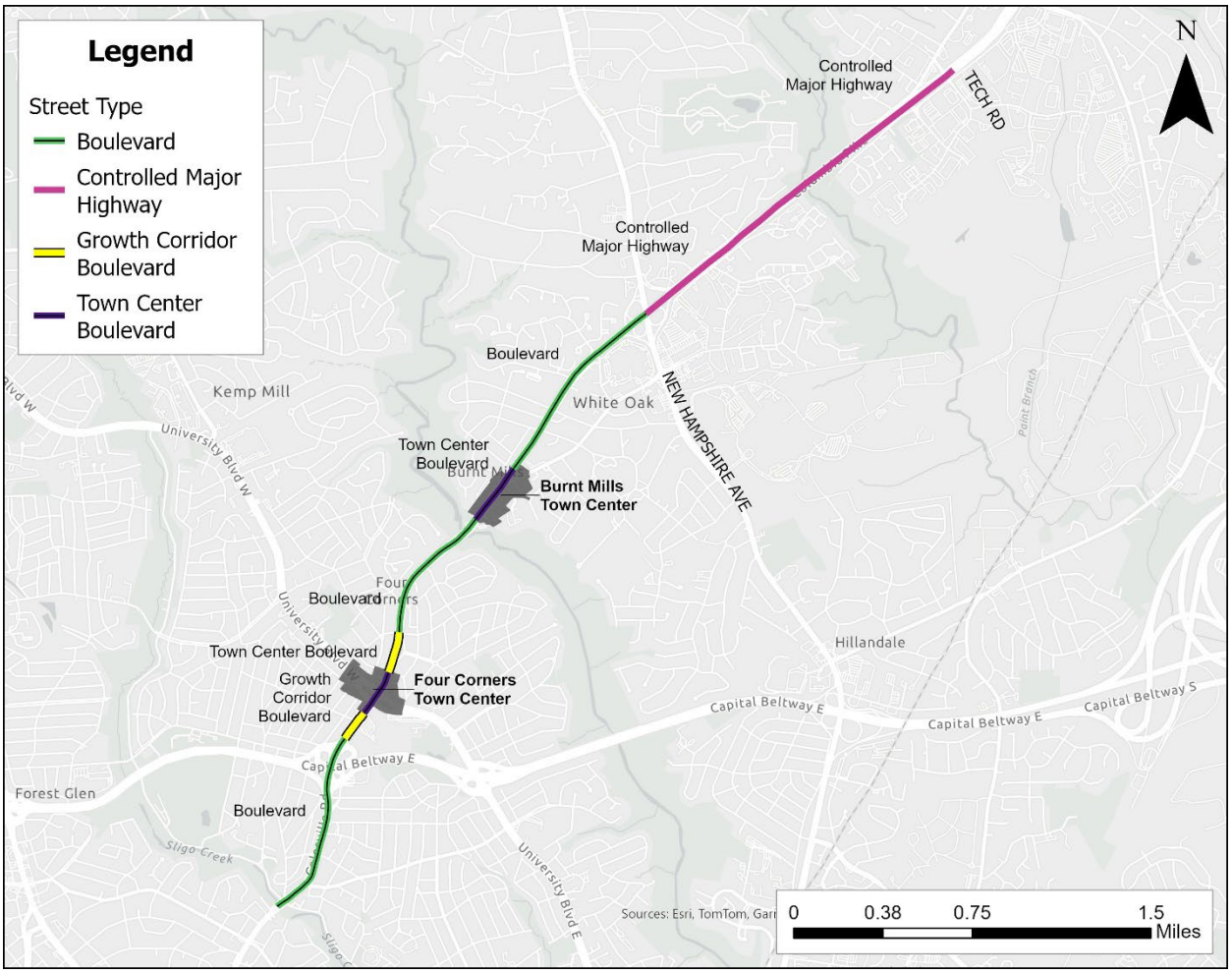

Figure 12: Roadway Classification

There are no proposed changes to county roadway classifications as a result of this project.

Speed Limit

Starting at Sligo Creek Parkway, US-29 northbound has a speed limit of 35 MPH. It increases to 40 MPH approaching Lorain Avenue (north of Four Corners), and increases again at Southwest Drive to 45 MPH. Finally, it increases to 50 MPH about 600 feet north of Stewart Lane, continuing at 50 MPH until the northernmost limit of the study area at Tech Road.

Starting at Tech Road, US-29 southbound has a speed limit of 50 MPH. It decreases to 45 MPH at Stewart Lane, then decreases again to 40 MPH at Burnt Mills Avenue. Finally, it decreases to 35 MPH at Lorain Avenue, continuing at 35 MPH until the southernmost limit of the study area at Sligo Creek Parkway. A map of existing speed limits throughout the study area is shown in Figure 13.

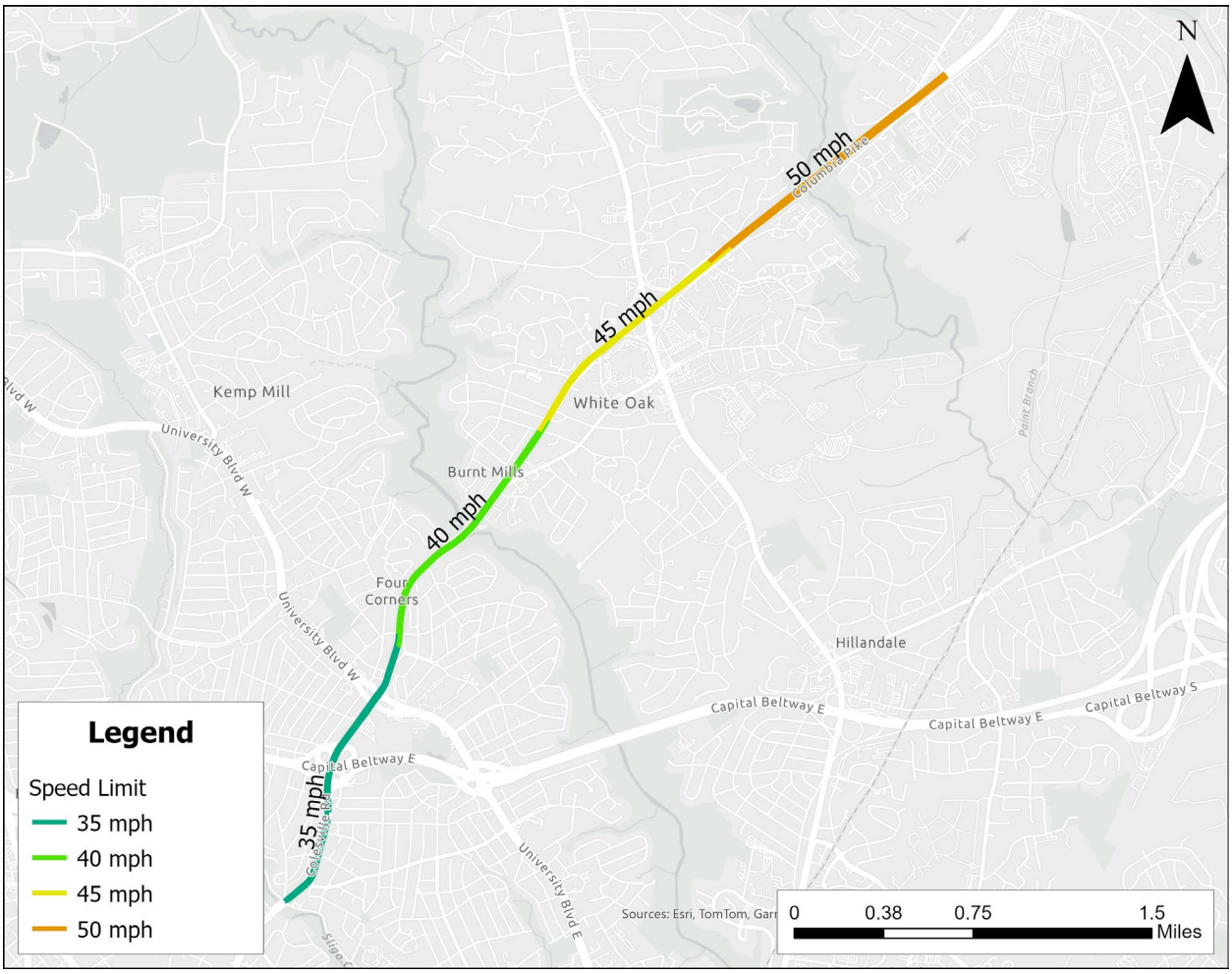

Figure 13: Existing Speed Limits Along US-29

Speed limit reductions are proposed in specific parts of the project to improve pedestrian, bicyclist, and vehicular safety along the corridor.

From Lorain Avenue to Burnt Mills Town Center, and within Burnt Mills Town Center, the existing posted speed is 40 MPH. It will be reduced to 35 MPH as a result of this project, improving safety for all modes of transportation, including walking, bicycling and driving.

Transit Service

The Washington Metropolitan Area Transit Authority's (WMATA) Metrobus and MCDOT's Ride On provide existing transit service as a mix of local bus service (shorter-distance trips, frequent stops) and commuter transit service (peak hour, fewer stops).

The existing Flash service has eleven stops from Silver Spring Transit Center to Briggs Chaney on Flash Orange, and an express route to Burtonsville with six stops on Flash Blue. Flash Orange and Flash Blue each run every fifteen minutes, and both offer level boarding and ramp access for easy boarding and alighting. There is a Memorandum of Understanding between Montgomery County and Howard County to extend Flash service to four Howard County stations, including Maple Lawn, Downtown Columbia and the Johns Hopkins Applied Physics Laboratory (APL).

Existing ridership along the corridor can be seen in Table 2. Note that the table uses the old WMATA bus routes (Z6, Z7, Z8), as this data was collected in 2024.

Table 2: Existing Average Daily Weekday Ridership (2024)

Route	All Route Trips	Project Corridor: Entering Corridor Aboard a Bus	Project Corridor: Boarding In Corridor	Project Corridor: All Corridor Trips
RO Route 8 North	213	0	91	91
RO Route 8 South	209	104	9	113
RO Route 9 North	439	0	188	188
RO Route 9 South	442	217	68	285
RO Route 13 North	135	60	6	66
RO Route 13 South	121	0	52	52
RO Route 14 North	195	75	8	82
RO Route 14 South	121	0	52	52
RO Route 21 North	72	0	61	61
RO Route 21 South	72	44	13	57
RO Route 22 North	88	0	63	63
RO Route 22 South	88	35	36	71
Flash 29 North	1,201	0	1,201	1,201
Flash 29 South	1,304	0	1,304	1,304
WMATA Z6 North	1,446	0	743	743

Route	All Route Trips	Project Corridor: Entering Corridor Aboard a Bus	Project Corridor: Boarding In Corridor	Project Corridor: All Corridor Trips
WMATA Z6 South	1,363	676	107	783
WMATA Z7 North	187	0	167	167
WMATA Z7 South	186	77	86	163
WMATA Z8 North	1,284	0	1,278	1,278
WMATA Z8 South	1,304	126	1,173	1,300
Total	***10,471***	***1,414***	***6,706***	***8,120***

*RO = Ride On

Vehicle Volumes

Vehicular Average Daily Traffic ranged from 65,000 to 70,000 vehicles per day, with roughly 7,000-8,000 bus passengers per day in 2018 (US 29 Mobility & Reliability Study Technical Report, July 2020). The prevailing direction of travel is southbound during the morning peak and northbound during the afternoon peak. There are 5,000-6,000 automobiles on the road during the peak hour, with 800-1,000 bus passengers and several hundred pedestrians and trucks, as seen in Figure 14.

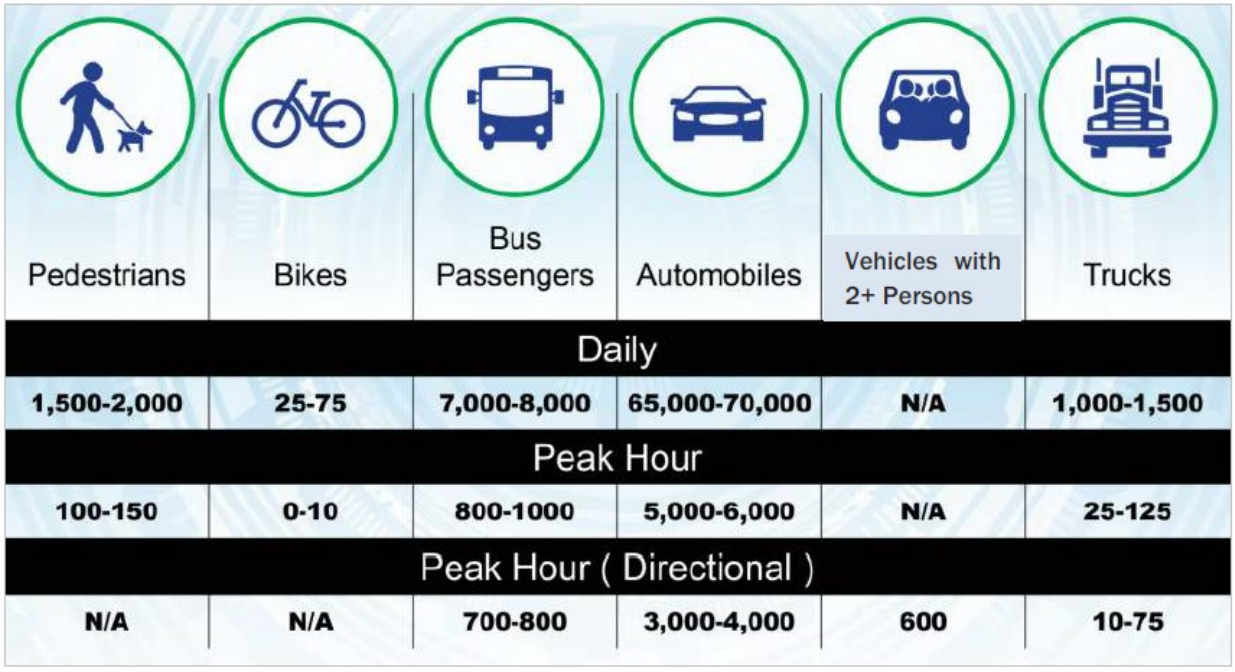

Figure 14: 2018 Traffic Volumes by Mode (US 29 Mobility & Reliability Study Technical Report, July 2020)

Vehicle and Transit Travel Times

Figure *15* shows existing (2018) travel times by mode of transportation by time of day and direction of travel between Tech Road and Georgia Avenue. Travel times between Tech Road and Georgia Avenue

are substantially higher for Local Bus compared to Passenger Vehicles during all times of day and are substantially higher for all modes of transportation in the peak direction compared to the off-peak direction. Specifically:

- Passenger Vehicle travel times from Tech Road to Georgia Avenue range from under 15 minutes in the off-peak direction (AM northbound direction), to over 25 minutes in the peak direction (AM southbound direction).
- Local Bus travel times from Tech Road to Georgia Avenue range from about 25 minutes in the off-peak direction (AM northbound direction), to 35 minutes in the peak direction (AM southbound direction).
- Express Bus travel times are only provided for the peak direction. Express Bus travel time in the morning peak direction (AM southbound direction) is just under 30 minutes, and in the afternoon peak direction (PM northbound direction), it is approximately 22 minutes.

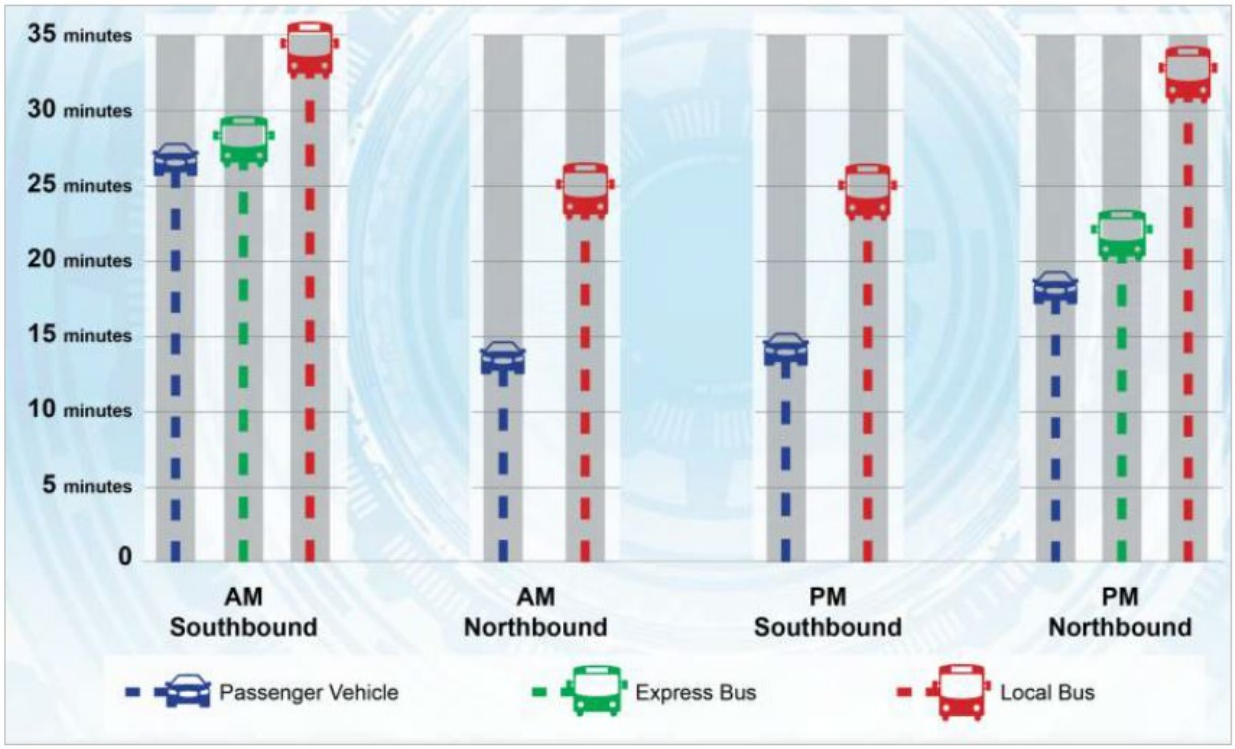

Figure 15: Existing Travel Times by Mode from Tech Road to Georgia Avenue (US 29 Mobility & Reliability Study Technical Report, July 2020)

Travel times for the Median Bus Lane scenario for passenger vehicles and buses are shown in Figure 16. In general, travel times appear substantially higher than those in Figure 15 because modeling assumes continued increases in congestion into the future. Compared to the No Build scenario travel times, transit users will save about 20 minutes during the southbound morning peak, and about five minutes in the northbound afternoon peak while passenger vehicle travel times in the median lane

scenario are comparable in the southbound morning peak and decrease by about 10 minutes in the northbound afternoon peak.

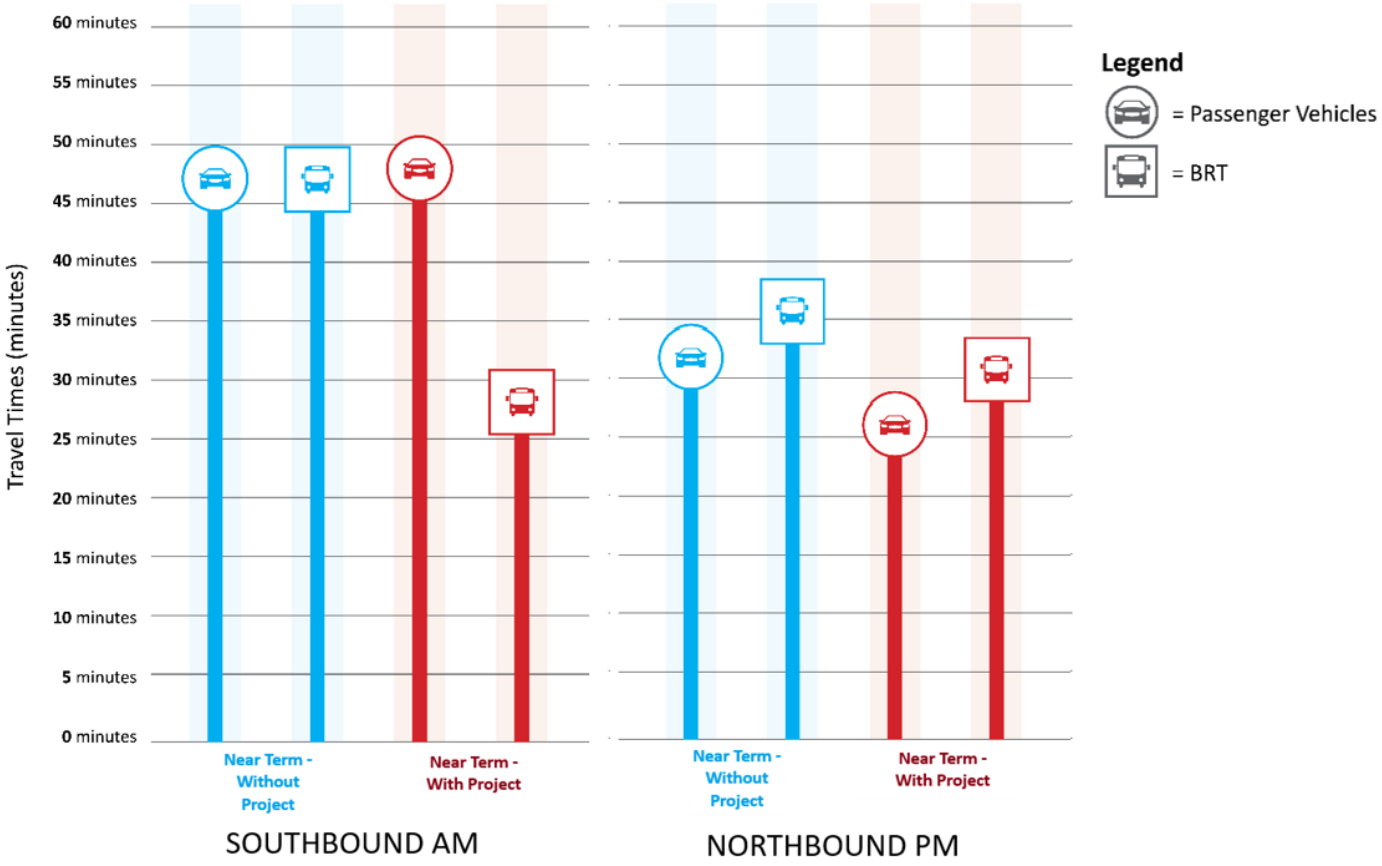

Figure 16: Travel Time Comparison

Modeled Level of Service (LOS)

Vehicular Level of Service (LOS) is a way to grade how well traffic is moving for drivers on a road or through an intersection. It describes a driver's experience, mainly based on delay, congestion, and ease of movement, and is reported as a letter grade from A to F. "A" represents free flow with minimal delay. "F" represents heavy congestion and long delays. When the existing traffic analysis was conducted in 2020, several intersections operated at LOS E or LOS F during at least one peak hour (US-29 at Tech Road, Burnt Mills Shopping Center, Southwood Avenue, and Sligo Creek Parkway). Without any roadway improvements or mode shift, the travel model anticipated several additional intersections to operate at LOS E or F by 2025. These intersections are shown in Table 3.

Table 3: Intersection Level of Service without Project Implementation (2022 Mobility Study Addendum)

Intersection	Existing (AM)	Existing (PM)	No Action (AM)	No Action (PM)
US 29 & Tech Road	F	F	F	F
US 29 & Industrial Pkwy	-	-	-	-
US 29 & Milestone Drive/ Stewart Lane	-	-	-	E
US 29 & Prelude Dr	-	-	-	-
US 29 & Burnt Mills Ave	-	-	-	-
US 29 & Lockwood Drive	-	-	-	-
US 29 & Burnt Mills Shopping Center	-	F	E	F
US 29 & Southwood Ave	E	-	F	-
US 29 & MD 193 WB	-	-	-	-
US 29 & MD 193 EB	-	-	E	-
US 29 & Lanark Way	-	-	E	-
US 29 & Hastings Drive	-	-	-	-
US 29 & Franklin Ave	-	-	-	F
US 29 & Sligo Creek Parkway & St. Andrews Way	F	F	F	F

Level of Service (LOS) for the existing, no build/no action, and median bus lane alternatives can be seen in Table 4. Compared to not building the transit lanes (no action), the Median Bus Lane option degrades LOS at the intersection with University Boulevard (MD 193) Westbound, the intersection with University Boulevard (MD 193) Eastbound, the intersection with Lanark Way, and the intersection with Hastings Drive (all bolded in the table below).

Table 4: Intersection Level of Service Changes with Proposed Project (Mobility Study Addendum 2022)

Intersection	Near Term – No Project		Median Bus Lane Near Term – With Project	
	AM	PM	AM	PM
US 29 & Blackburn Rd	E	-	E	-
US 29 & Greencastle Rd	F	F	F	F
US 29 & Fairland Rd	E	-	E	-
US 29 & Musgrove Rd	-	-	-	-
US 29 & Tech Road	F	F	F	F
US 29 & Industrial Pkwy	-	-	-	-
US 29 & Milestone Drive/ Stewart Lane	-	E	-	E
US 29 & Prelude Dr	-	-	-	-
US 29 & Burnt Mills Ave	-	-	-	-
US 29 & Lockwood Drive	-	-	-	-

Intersection	Near Term – No Project		Median Bus Lane Near Term – With Project	
	AM	PM	AM	PM
US 29 & Burnt Mills Shopping Center	E	F	E	F
US 29 & Southwood Ave	F	-	F	-
US 29 & MD 193 WB	-	-	**F**	**E**
US 29 & MD 193 EB	E	-	**F**	-
US 29 & Lanark Way	E	-	**F**	-
US 29 & Hastings Drive	-	-	-	**E**
US 29 & Franklin Ave	-	F	-	F
US 29 & Sligo Creek Parkway & St. Andrews Way	F	F	F	F
US 29 & MD 391 (Dale Dr)	F	F	F	F
US 29 & Spring St	F	F	F	F
US 29 & Fenton St	-	E	-	E
US 29 & Georgia Ave	-	-	-	-
Colesville Road & Wayne Ave/ 2nd Street	E	-	E	-

Flash Station Relocations

Four existing Flash stations will be relocated as a result of this project.

Four Corners

At Four Corners, the northbound Flash station will be relocated from the curb to the median to align with the proposed bus lane. This can be seen in Figure 17.

Figure 17: Existing and Proposed Northbound Flash Station (Four Corners)

The southbound Flash station will also be relocated from the curb to the median to align with the bus lane. This can be seen in Figure 18.

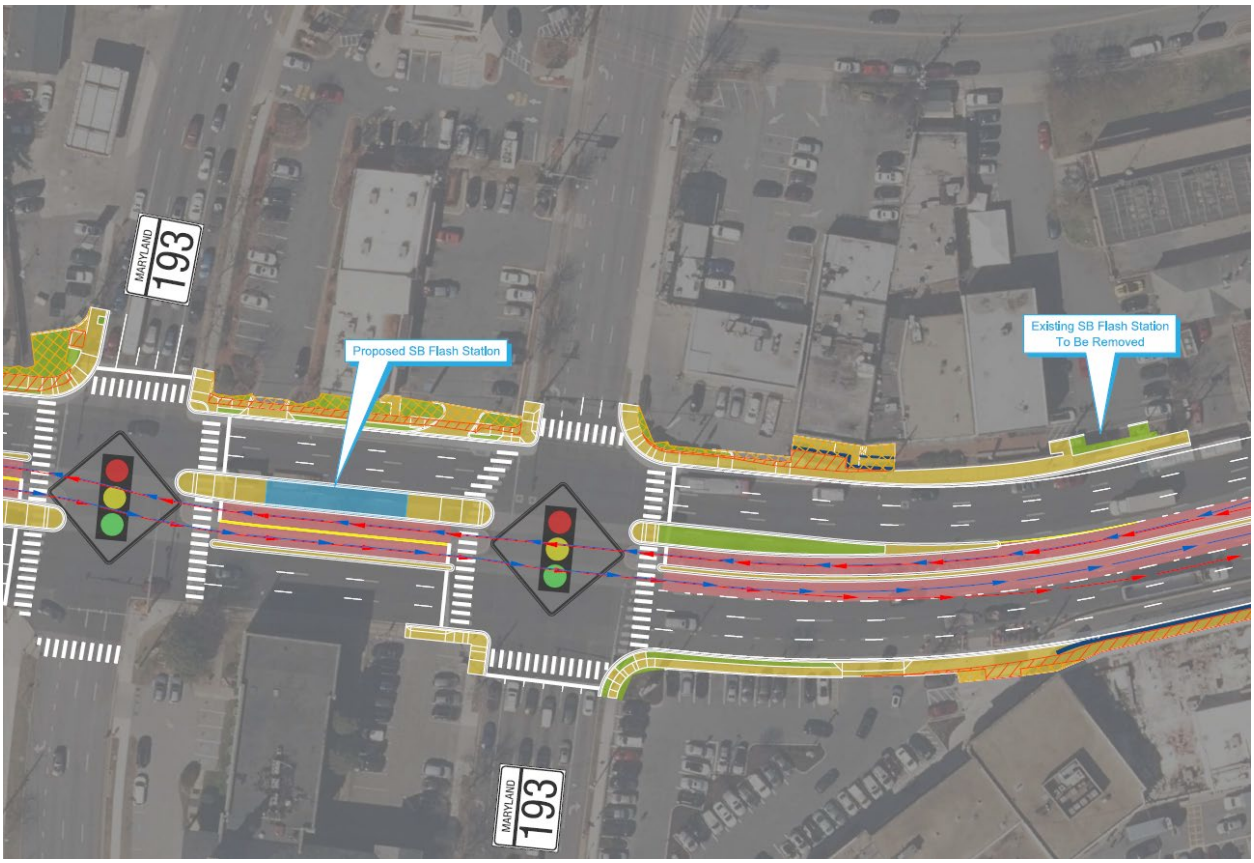

Figure 18: Existing and Proposed Southbound Flash Station (Four Corners)

Burnt Mills

In Burnt Mills, the northbound Flash station will be relocated from in front of the Burnt Mills Shopping Center to several hundred feet north near Hillwood Drive, still on the curb.

The southbound Flash station will be relocated from the curb to the median near Hillwood Drive.

Both relocations can be seen in Figure 19. As shown, the northbound station relocation requires acquiring the Burnt Mills Auto Body property, but conversations with the MCDOT team after Mandatory Referral submission indicate that the station could be moved further north toward Hillwood Drive to minimize impacts to the Auto Body property.

Figure 19: Existing and Proposed Northbound and Southbound Flash Stations (Burnt Mills)

Turn Restrictions/Modifications/Signalization

To ensure the safety and reliable operation of the median-running bus lanes, any location where the median is interrupted must be controlled by a signalized intersection. To that end, several uncontrolled intersections along US-29 with existing full access will be modified. Likewise, there are roads that intersect with US-29 at a stop sign today that are proposed to be converted to signalized intersections. From south to north, the proposed changes are:

1) Leighton Avenue: Right-in/right-out only; left turns from US-29 prohibited
2) Brewster Avenue: Right-in/right-out only; left turns from US-29 prohibited
3) Lorain Avenue: Right-in/right-out only; left turns from US-29 prohibited
4) Crestmoor Drive: Convert existing stop signs on the side streets to a signalized intersection
5) Hillwood Drive: Stop-controlled to full signal conversion
6) Northwest Drive: Right-in/right-out only; left turns from US-29 prohibited

Crash History

US-29 between Sligo Creek Parkway and Tech Road has an extensive crash history, including several fatalities and severe injuries over the past five years (2021-2025). Table 5 shows the number and type of crashes throughout the study area over the past five years.

Table 5: Summary of Crash History on US-29

	2021	2022	2023	2024	2025
Pedestrian (Minor)	3	13	8	3	7
Pedestrian (Severe Injury)	0	0	0	0	3
Pedestrian (Fatal)	0	0	0	0	1
Bicycle (Minor)	2	1	1	2	3
Motor Vehicle (Minor)	243	263	249	252	228
Motor Vehicle (Severe Injury)	0	0	0	5	1
Motor Vehicle (Fatal)	0	0	0	1	1
Total	***248***	***277***	***258***	***263***	***244***

Crash Severity

There was one pedestrian fatality in 2025 at the northernmost extent of the study area. There was one fatal motor vehicle crash in 2024 at US-29 and Lockwood Drive, and one fatal motor vehicle crash in 2025 between Southwood Avenue and Lorain Avenue (just north of Four Corners).

There were multiple severe injury crashes throughout the study area across all categories, affecting pedestrians and motor vehicle users. Crashes are concentrated in a few notable hotspots: the area around Franklin Avenue south of Four Corners (two motor vehicle severe injuries), US-29 and University Boulevard in Four Corners (one pedestrian severe injury, one motor vehicle severe injury), and the area around Stewart Lane north of the interchange with MD 650/New Hampshire Avenue (two pedestrian severe injuries). There was also a bicyclist severe injury crash just outside the study area at the interchange with MD 650/New Hampshire Avenue.

A map of the fatal and severe crashes in the study area and surrounding streets is shown in Figure 20. To see more detailed breakdowns of crash history, including non-fatal and non-severe crashes, please refer to the Montgomery Planning's interactive crash map.

Figure 20: Fatal and Severe Crashes (2021-2025)

Surrounding Areas

Land Use and Zoning

The surrounding area has a mix of residential, commercial, and institutional land uses. In the southern section of the study area from Sligo Creek Parkway to I-495, the corridor is zoned R-60. In the Four Corners and Burnt Mill Town Centers, parcels are zoned with a variety of Commercial Residential Town zones (CRT-0.25, CRT-0.75, CRT-1.5, and CRT-2.25). North of Burnt Mills, the zoning becomes Residential Detached (R-90), Residential Multi-Unit High Density (R-10), Townhouse High Density (THD), and Townhouse Low Density (TLD).

As US-29 continues toward New Hampshire Avenue (MD 650) and beyond, the west side of the corridor is predominantly zoned R-90, while the east side has commercial and more dense residential and mixed-use zoning (an assortment of CR and CRT zones as well as R-10/R-20 zones). A zoning map is shown in Figure 21.

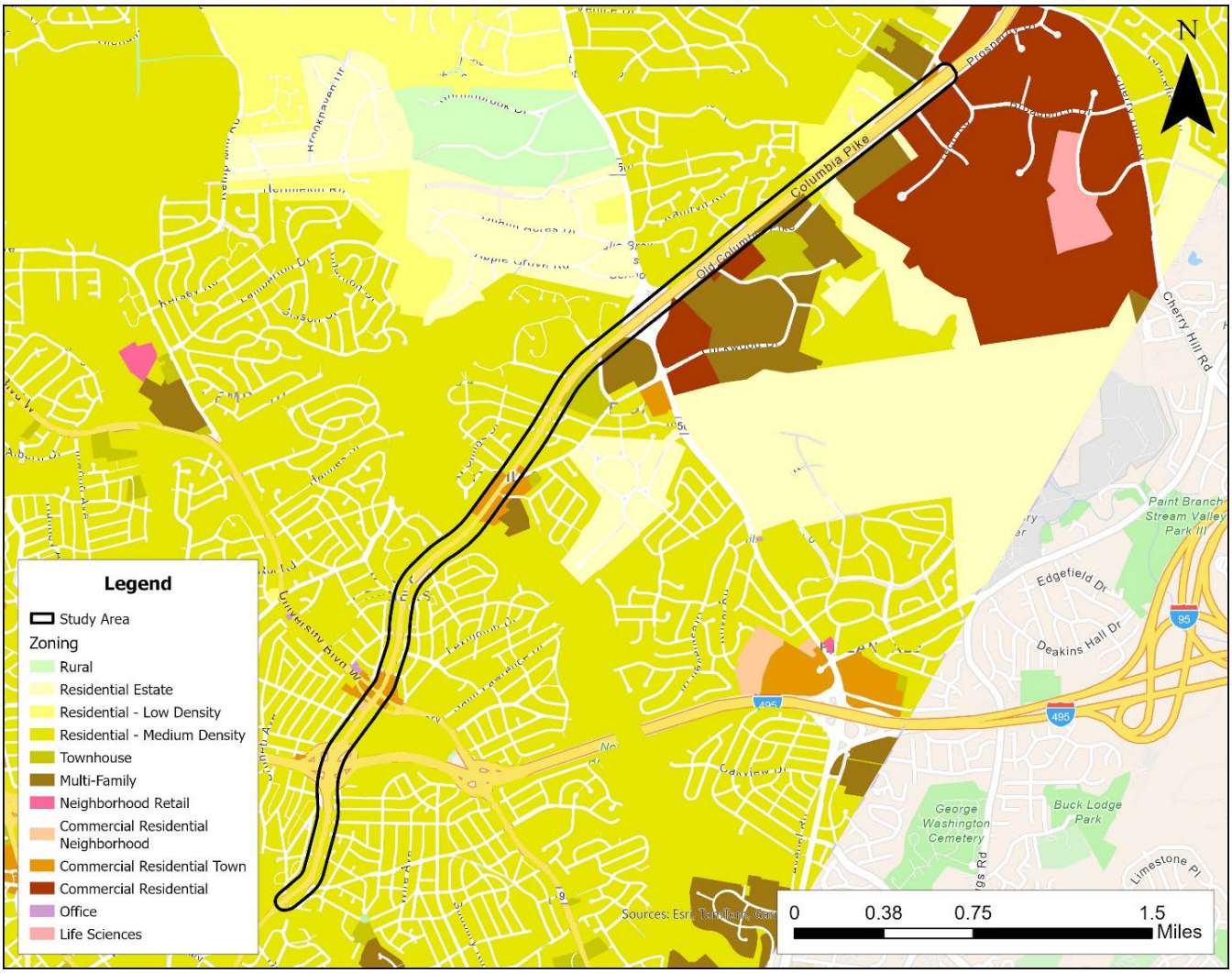

Figure 21: Zoning

Development Pipeline

There are no projects in the development pipeline along the study corridor (Sligo Creek Parkway to Tech Road). However, the Viva White Oak project is located in the vicinity of the northeast portion of the project area.

Viva White Oak

The Viva White Oak project proposes to redevelop a 280 acre industrial site between the US-29 and Industrial Parkway intersection and Cherry Hill Road and FDA Boulevard into a mixed-use community, as per the *White Oak Science Gateway Master Plan* (2014). The master plan vision for the site transforms the location from an industrial area into a dense mixed-use commercial and residential center where people can walk to their jobs, retail, and transit stops.

A Sketch Plan was approved for Viva White Oak in 2025, allowing over 12 million square feet of development on the site, up to half of which may be residential. A Preliminary Plan Amendment was approved concurrently with the Sketch Plan, allowing construction of the master-planned public roads that span the site. Site Plan applications to allow vertical construction on the site are forthcoming. Phase 1 includes major infrastructure and roadway improvements, including 33,000 linear feet of new roads. Recently, the County Council approved the creation of a Development District for Viva White Oak to allow Tax Increment Financing to help fund infrastructure in the area.

US-29 as a high-frequency BRT corridor has been seen as an essential component of the success of the Viva White Oak project. The 2014 *White Oak Science Gateway Master Plan* made clear that the redevelopment requires a "robust transit network that connects the area to the rest of the eastern County and the region's transit and highways." Specifically, the US-29 BRT is seen as the north-south transit spine connecting White Oak to Silver Spring and the rest of the county's transit network, supported by the Randolph Road and New Hampshire Avenue BRT corridors.

The location of the Viva White Oak project can be seen in Figure 22.

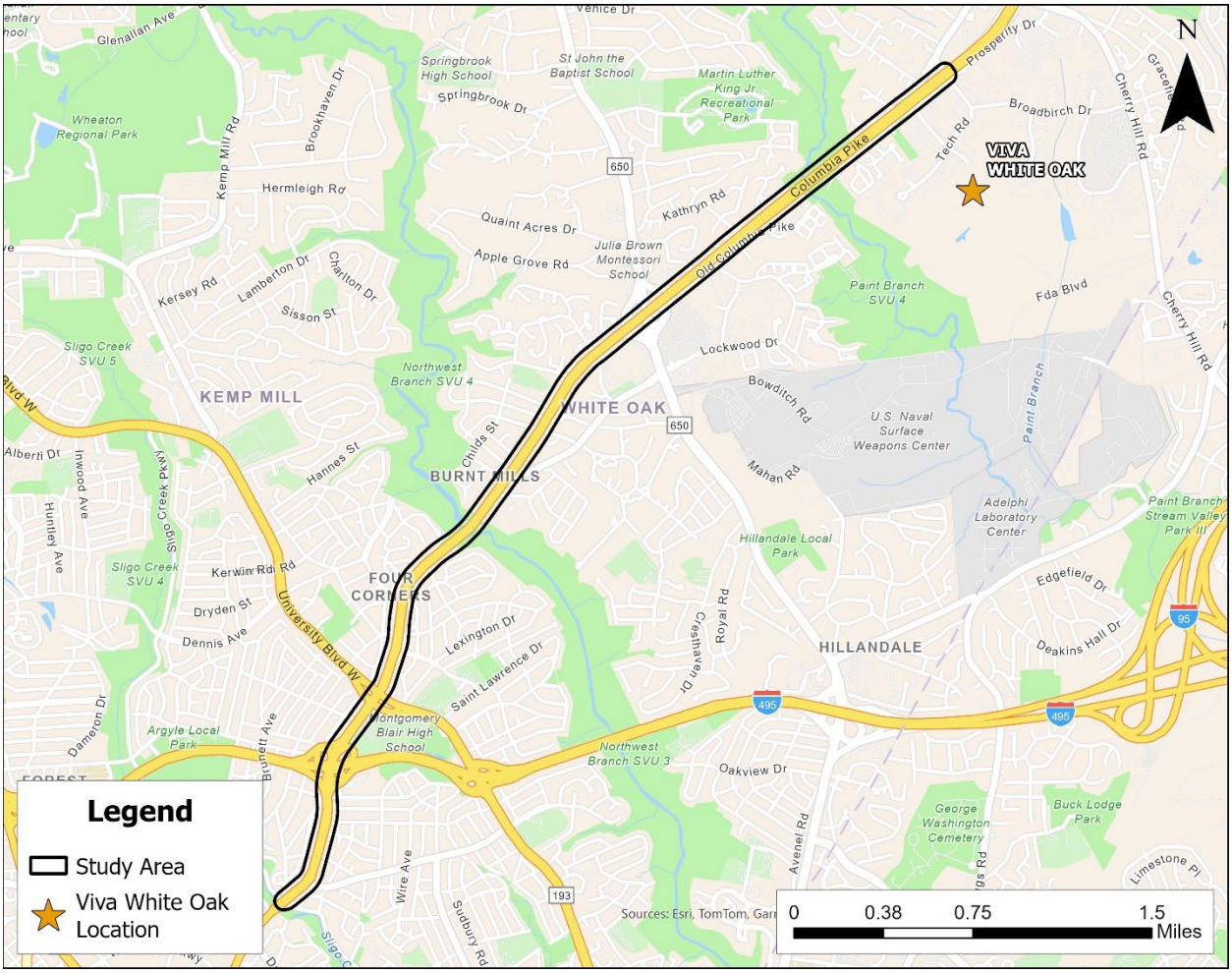

Figure 22: Location of Viva White Oak

SECTION 4 – COMMUNITY OUTREACH

The project team has held community meetings along this corridor on several occasions over the past five years. The following is a list of relevant meetings during that time. Items with leading asterisks have summary materials included in the engagement attachment (Attachment D).

1. Corridor Advisory Committee (CAC) Meeting - November 16, 2021
2. US 29 Mobility and Reliability Study Workshop - December 16, 2021
3. Corridor Advisory Committee (CAC) Meeting - June 9, 2022
4. US 29 Corridor Advisory Committee Meeting - October 6, 2022
5. US 29 Mobility and Reliability Study Workshop - October 13, 2022
6. *Corridor Advisory Committee (CAC) Meeting - Wednesday, April 24, 2024
7. *Corridor Advisory Committee (CAC) Meeting - Thursday, January 30, 2025
8. *Public Meeting - Tuesday, April 8, 2025
9. *Corridor Advisory Committee (CAC) Meeting - Tuesday, June 3, 2025
10. *Public Meeting - Tuesday, June 10, 2025
11. Public Meeting - Tuesday, August 28, 2025
12. Corridor Advisory Committee (CAC) Meeting - Thursday, September 25, 2025
13. *Public Meeting - Tuesday, October 7, 2025

Beyond these project-specific meetings, the project team has presented to the East County Citizens Advisory Board, the Silver Spring Citizens Advisory Board, Columbia Towers, and at Winterfest.

In general, the following issues were raised by community members:

- Traffic and Congestion: Will removing lanes worsen congestion, particularly at Four Corners and Burnt Mills?
- Cut-through Traffic: Will streets that connect to US-29 see more traffic volume as drivers seek alternate routes?
- Left Turn Restrictions: This makes it more difficult to access residences and businesses
- Pedestrian and Bicyclist Safety: What measures are being taken so pedestrians and bicyclists can travel along the corridor and access stations safely?
- Property/Right of Way/Construction Impacts: Will additional Right-of-Way be required? Where and how much? What does the construction period look like?
- Cost and Funding: What is the cost and who is paying for it?

After Planning Staff accepted the Mandatory Referral for review, Montgomery Planning notified local civic and homeowners' associations and other interested parties of this proposal. As of the date of this report, Staff have corresponded with eighteen individuals interested in this project.

SECTION 5 – MANDATORY REFERRAL CONSIDERATIONS

Mandatory Referral review is guided by Montgomery Planning's Uniform Standards for Mandatory Referral Review (December 2022), and the authority granted to the Planning Board in Section 20-301 of the Land Use Article of the Maryland Code. In order to ensure comprehensive review of public projects, the Planning Board has jurisdiction over applications filed by the State, Federal, and County governments, including Montgomery County Public Schools, as well as municipalities located within the Montgomery County portion of the Regional District. This includes the following activities: (i) acquiring or selling land; (ii) locating, constructing or authorizing a road, park, public way or ground, public building or structure, or publicly owned or privately owned public utility; or (iii) changing the use of or widening, narrowing, extending, relocating, vacating or abandoning any of the previously mentioned facilities. The Planning Board, or its Staff, must review such projects pursuant to the Uniform Standards and transmit comments to the applicant within the prescribed timeframe.

As described in the Uniform Standards, the Planning Board, or its Staff, considers all relevant land use and planning aspects of the proposal including, but not limited to, the following:

1. ***whether the proposal is consistent with the County's General Plan, functional plans such as the master plan of highways, environmental guidelines, the approved and adopted area master plan or sector plan, and other public plans, guidance documents, or programs for the area;***
2. ***whether the proposal is consistent with the intent and the requirements of the zone in which it is located;***
3. ***whether the nature of the proposed site and development, including but not limited to its size, shape, scale, height, arrangement, design of structure(s), massing, setback(s), site layout, and location(s) of parking is compatible with the surrounding neighborhood and properties;***
4. ***whether the locations of buildings and structures, open spaces, landscaping, recreation facilities, and pedestrian and vehicular circulation systems are adequate, safe, and efficient;***
5. ***whether the proposal has an approved NRI/FSD and a preliminary SWM Concept Plan, and meets the requirements of the Forest Conservation Law (Chapter 22A of the County Code). Forest Conservation Plan, if applicable, must be approved by the Planning Board, either before or at the time of the Board's mandatory referral review and action on the project. Unlike the mandatory referral review by the Board, the conditions of the Forest Conservation Plan are binding on all county projects and require a Resolution of Approval.***
6. ***whether a Preliminary or a Final Water Quality Plan has been reviewed by the Planning Board if the project is located in a Special Protection Area. In addition, for a Water Quality Plan for a project on public property, the Board must determine if the plan meets any additional applicable standards for Special Protection areas, including the standards of***

Article V. WATER QUALITY REVIEW IN SPECIAL PROTECTION AREAS, of the County Code (pursuant to Section 19-65(d)(4));

7. ***whether or not the site would be needed for park use if the proposal is for disposition of a surplus school or other publicly-owned property.***
8. ***whether alternatives or mitigation measures have been considered for the project if the proposal is inconsistent with the General Plan or other plans and policies for the area, or has discernible negative impacts on the surrounding neighborhood, the transportation network, the environment, historic resources (including burial sites) or other resources.***

SECTION 6 – MANDATORY REFERRAL ANALYSIS

Master Plan Consistency

Thrive Montgomery 2050

Thrive Montgomery 2050, the County's General Plan, focuses on concentrating growth in centers of activity as well as along the county's major transportation corridors, including US-29, to maximize the efficient use of land and create Complete Communities. Specifically, *Thrive* recommends that the county "build a frequent, fast, convenient, reliable, safe, and accessible transit system." *Thrive* includes the following practices related to transit:

- Build a network of rail, bus rapid transit, and local bus infrastructure and services— including demand-responsive transit service—that make transit the fastest, most convenient, and most reliable way to travel to centers of economic, social, and educational activity and opportunity, both within and beyond Montgomery County.
- Convert existing general purpose traffic lanes to dedicated transit lanes, in a manner consistent with other county policies.
- Improve travel times and travel costs of transit services to achieve greater parity with automotive travel.

Consistency: Consistent. The proposed project is consistent with this plan because it provides BRT service by converting general traffic lanes to bus-only lanes, improving transit speed and reliability.

Functional Master Plans

2025 Master Plan of Highways and Transitways

The 2025 *Master Plan of Highways and Transitways* (MPOHT) recommends the following street classifications for US-29 in this project area:

- Sligo Creek Parkway to I-495 interchange: Boulevard

- I-495 interchange to Four Corners Town Center southern boundary: Growth Corridor Boulevard
- Four Corners Town Center southern boundary to Four Corners Town Center northern boundary: Town Center Boulevard
- Four Corners Town Center northern boundary to Lorain Ave: Growth Corridor Boulevard
- Lorain Ave to Burnt Mills Town Center southern boundary: Boulevard
- Burnt Mills Town Center southern boundary to Burnt Mills Town Center northern boundary: Town Center Boulevard
- Burnt Mills Town Center northern boundary to New Hampshire Ave (MD 650): Boulevard
- New Hampshire Ave (MD 650) to Tech Road: Controlled Major Highway

Table 6 compares the proposed project's lane allocation and proposed speed limits with the comparable master-planned values.

Table 6: Project and Master Plan Lane Allocations

Roadway Segment	Planned General Purpose Lanes	Planned Transit Lanes	Planned Total Lanes	Planned Target Speed	Project General Purpose Lanes	Project Transit Lanes	Project Total Lanes	Project Posted Speed
Tech Rd to Stewart Ln	4-7	1-2	6-8	50	6	2	8	50
Stewart Ln to New Hampshire Avenue	4-5	1-2	6	45	**6**	1	**7**	45
New Hampshire Avenue to Burnt Mills Town Center	4-5	1-2	6	35	**6***	1	**7***	**40/45**
Within Burnt Mills Town Center	4-5	1-2	6	25	**6**	1	7	**35**
Burnt Mills Town Center to Lorain Ave	4-5	1-2	6	35	**6**	1	**7**	35
Lorain Ave to Four Corners Town Center	6	1	7	30	6	1	7	**35**
Within Four Corners Town Center	6	2	8	30	6	2	8	**35**
Four Corners Town Center to I-495	4-5	1-2	6	30	**6***	2	**7***	**35**

Roadway Segment	Planned General Purpose Lanes	Planned Transit Lanes	Planned Total Lanes	Planned Target Speed	Project General Purpose Lanes	Project Transit Lanes	Project Total Lanes	Project Posted Speed
I-495 to Sligo Creek Parkway	4-5	1-2	6	35	**6**	1	**7**	35

* US-29 is reduced to two southbound lanes briefly at interchange

X	Aligns with master plan recommendations
X	Does not align with master plan recommendations

Consistency: Substantially Consistent. The proposed design meets the plan's dedicated transit lane specifications but tends to maintain an elevated speed limit and more general purpose travel lanes than the plan envisions. Additional reductions in posted speed and number of lanes likely requires land use and other changes beyond the scope of this specific project.

Comment: Consider additional measures to lower posted speeds throughout the corridor so motor vehicles travel at the master-planned target speed.

While current and projected traffic volumes make further reducing the number of general purpose travel lanes unattainable at this time, the project team should work with MDOT SHA to find opportunities to lower the posted speed limits in this corridor. Slower motor vehicle speeds lead to fewer crashes and fewer severe crashes. They help make the corridor more comfortable for pedestrians to walk along and cross. They reinforce the idea that the county's neighborhoods are places to be, not just places to travel through.

2018 Bicycle Master Plan

There are two main bikeways recommended in this project corridor. First, the Burtonsville-Silver Spring Breezeway connects Silver Spring to Howard County by way of Burtonsville using a variety of bicycle facility types (https://montgomeryplanning.org/wp-content/uploads/2019/08/Bike-Plan-Approved-Recommendations.pdf#page=42). Generally, in the project corridor, this bikeway parallels US-29 on adjacent streets, but there is a critical sidepath section along the east side of US-29 between Lorain Avenue and Lockwood Drive that would help bicyclists safely traverse the Northwest Branch.

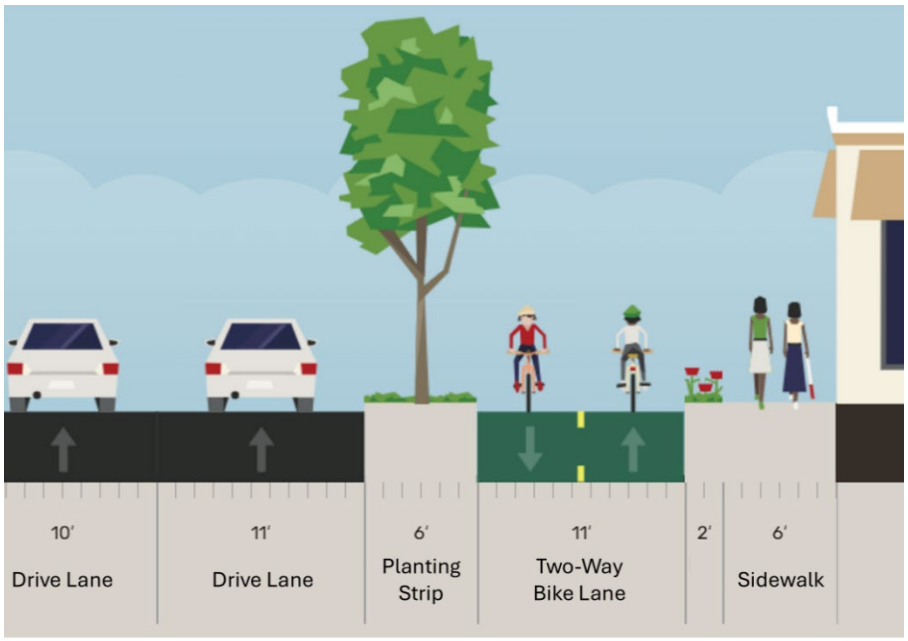

Figure 23: Example Breezeway Cross-Section

The second bikeway is a sidepath on the west side of US-29 that extends from the Northwest Branch in Burnt Mills to Tech Road.

The US-29 Bus Rapid Transit Phase 2 project has not been designed to and does not plan to construct these improvements. As with other transitway projects in Montgomery County, including the Purple Line, and Veirs Mill Road BRT, Montgomery County is advancing pedestrian and bicycle station access improvements like these bikeways as part of separate funding programs. For US-29, budget program #P502304 (https://apps.montgomerycountymd.gov/BASISCAPITAL/Common/Project.aspx?ID=P502304) includes $5.7 million to be spent on construction through fiscal year 2030. This is not enough money given the constrained rights-of-way in parts of this corridor, but it is a helpful start. In 2022, MCDOT estimated that excluding the cost of sidepaths and bicycle/pedestrian bridges, multimodal improvements along the project corridor would cost between $20-25 million. Given the constrained right-of-way and topographical challenges between Four Corners and Burnt Mills, complete buildout would likely be substantially higher.

Consistency: Partially consistent. With station access improvements advancing separately (albeit with limited funding), there are minimal opportunities to implement bikeway recommendations as part of this project. This project does not preclude future improvements, so it is "partially" consistent with the master plan.

Comment: Construct the master-planned breezeway sidepath in the portion of Lockwood Drive the project is removing.

While standalone bikeway projects are best considered as part of the separate capital project, there is one opportunity MCDOT should pursue as part of this project. The Burtonsville-to-Silver Spring Breezeway transitions from US-29 onto Lockwood Drive as a sidepath. As shown in Figure 24, the project proposes to close a slip lane that allows northbound US-29 traffic to turn right onto Lockwood Drive. In the proposed condition, right-turning vehicles instead turn at the signalized Lockwood Drive intersection.

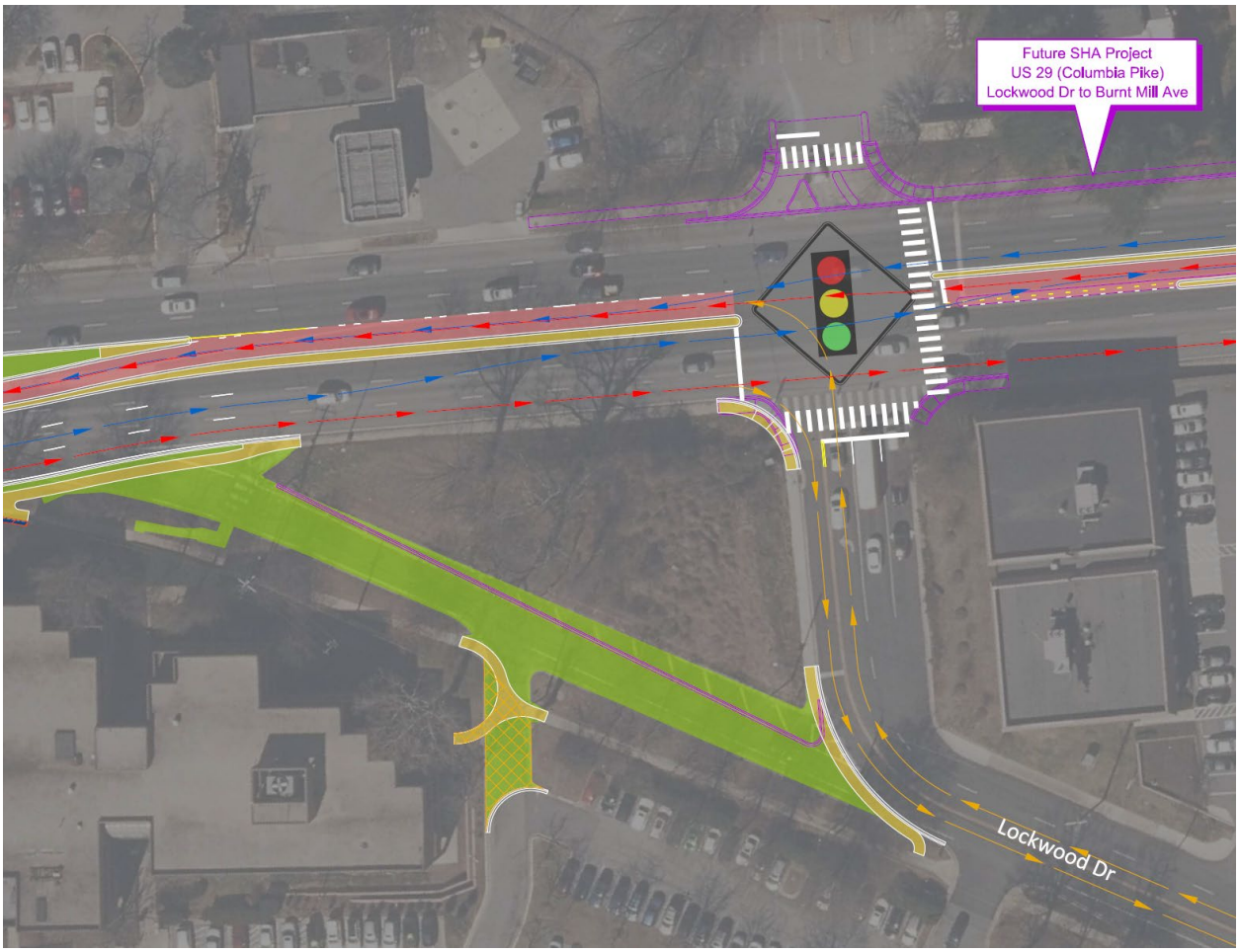

Figure 24: Project Proposed Realignment of Lockwood Drive

Rather than close this slip lane connection to all modes, the project team should design and construct the master-planned breezeway sidepath in part of this space. It would facilitate more direct, low-stress pedestrian and bicycle access to the Burnt Mills Flash stations and take advantage of the decision to make roadway changes at this location to implement a high-quality master-planned bikeway.

Area Master Plans

1996 Four Corners Master Plan

The southernmost portion of the project is located within the 1996 *Four Corners Master Plan* (FCMP) area. The FCMP Plan seeks to maintain and preserve the character and integrity of the residential

neighborhoods surrounding the commercial district at the intersection of Colesville Road and University Boulevard. The FCMP recognizes the challenges inherent in accommodating large volumes of regional through-traffic while striving to preserve and enhance the community character.

The plan notes that work needs to be done to provide a long-term solution for significantly improving transit along US-29. Based on demand projections at the time, a transit improvement was identified as necessary between Burtonsville at MD 198 and the Silver Spring Metro station.

Consistency: Consistent.

1997 White Oak Master Plan

The 1997 *White Oak Master Plan* envisions the area remaining primarily residential in nature, with higher-density residential development located around commercial centers that provide convenient access to transit.

The plan recommends improving pedestrian access to transit by providing sidewalks leading to and along roads served by transit and installing crosswalks at transit stops. The following locations in the project area were specifically identified:

1) Burnt Mills Avenue identified as needing a sidewalk on one side
2) US-29 from Burnt Mills Avenue to Four Corners Master Plan boundary needing sidewalks on both sides
3) Lockwood Drive crosswalk needed at north side of US-29 intersection

Consistency: Consistent. The proposed design provides a crosswalk on the north side of the Lockwood Drive intersection. SHA is pursuing the Burnt Mills Avenue sidewalk and the sidewalk along the north side of US-29 as part of a separate project, as shown in the attached roll plot (Attachment E).

2014 White Oak Science Gateway Master Plan

The 2014 *White Oak Science Gateway Master Plan* (WOSGMP) seeks to leverage White Oak's assets and establish the foundation upon which the area can evolve into a community that offers more opportunities to live-work-play locally. The WOSGMP recognizes that BRT is essential to achieving the plan's vision, and most commercial properties were rezoned to the CR or CRT Zone where BRT stations are located to encourage redevelopment with a mix of uses, including the areas around the Tech Road and White Oak Shopping Center stations. The Life Sciences/FDA Village Center, which includes the large Viva White Oak development, is envisioned as a focal point of the BRT network serving the East County, and the WOSGMP notes that the US 29 BRT network could potentially serve the development (p. 49). The Burnt Mills Shopping Center was rezoned to CRT, but the WOSGMP does not anticipate development in the area, given the new (at the time) retail and lack of available land.

Consistency: Consistent.

2023 Briggs-Chaney Master Plan

The 2023 *Briggs-Chaney Master Plan* (BCMP) seeks to build upon the early successes of the US-29 Flash BRT service by embracing a future for a more complete, equitable, transit-oriented, and compact community. The BCMP envisions new, compact, mixed-use development near BRT stations to help address the county's challenge of reducing its carbon footprint in the transportation sector.

BRT is a core component of the area's transit network, and the Plan recommends it be enhanced and expanded, with the following specific recommendations for the US 29 BRT network:

> Enhance existing BRT stations and park-and-ride facilities as "mobility hubs" for multi-modal, last-mile connectivity options to transform and contribute to the character of the surrounding neighborhood, including public artworks, interpretative signage, adequate seating, electric vehicle charging stations at park-and-ride lots, bicycle storage, green space, shade, and solar panels.
>
> All BRT stations should include short- and long-term bike parking to meet parking goals set by the Bicycle Master Plan, with a minimum of 20 long-term and 6 short-term spaces.

Consistency: Partially consistent. The project enhances and expands the BRT service, but the proposed station design does not have most of the features envisioned. No stations within this master plan area are anticipated to be changed as part of this project.

Comment: Provide long-term bicycle parking near rebuilt Flash station areas.

The stations built for Flash Phase 1 included short-term bicycle parking U-racks, but no long-term secure bicycle parking. As Flash service is intended to be used by people who may not return to the station area for hours at a time, long-term bicycle parking such as lockers or bicycle parking stations is a more appropriate choice.

Figure 25: Short-Term Parking (far left) at the Oak Leaf Drive Station

2025 University Boulevard Corridor Plan

The 2025 *University Boulevard Corridor Plan* (UBCMP) envisions the transformation of approximately 3.5 miles of University Boulevard MD 193) into a pedestrian-oriented multimodal corridor that supports safe movement for all people, especially those walking, biking, and rolling. The UBCMP also envisions a more compact, corridor-focused land use pattern that concentrates future development along University Boulevard and near planned BRT stations. Near existing and proposed BRT stops along Colesville Road and University Boulevard, the UBCMP recommends zoning that will encourage mixed-use redevelopment of existing single-use commercial properties.

The plan recommends reconfiguring the US-29 interchange with I-495 to improve safety for all modes. Short-term recommendations include:

1) Ensure the existing pavement markings are in good operating condition using high-visibility treatments.
2) Ensure consistent levels of lighting throughout the corridor and eliminate “dark zones” by adding appropriate lighting where necessary.
3) Trim foliage to avoid blocking lighting, signage, and sight distances at ramps, intersections, and pedestrian crossings.
4) Consider a coordinated, HAWK-type signal at existing pedestrian ramp crossings to provide a protected pedestrian crossing phase.

Longer-term recommendations include:

1) Reconstruct interchange ramps to conventional 90-degree intersections instead of merge lanes, consistent with MDOT SHA Bicycle and Pedestrian Design Guidelines.
2) Signalize all turning movements to provide protected phases for pedestrian and bicyclist crossing.
3) Orient curb ramps to the intended direction of travel for people walking, rolling, and biking, typically perpendicular to crossing vehicular traffic.
4) Reduce corner radii to calm vehicular traffic speeds and provide additional cues to drivers that they are exiting a controlled highway and entering a multimodal environment.
5) Consider grade-separated crossings of the I-495 ramps on the west side of Colesville Road, particularly at the westbound on-ramp, where two planned uncontrolled on-ramp lanes would present a significant barrier to crossings for people walking, biking, and rolling.

Consistency: Consistent. The project provides higher-quality BRT service in the plan area, which should support the more compact, corridor-focused vision. While the proposed project does not make the master-planned changes to the US-29 interchange with I-495, it is beyond the scope of the project to do so.

Transportation Best Practices

2024 *Complete Streets Design Guide*

The 2024 *Complete Streets Design Guide* identifies preferred, default, and minimum widths for different roadway elements. Due to this project's focus on transit facilities generally located between the existing curbs, the most relevant considerations for this project are the guide's proposed lane widths and transit lane buffers, shown below in Table 7.

Table 7: Complete Streets Design Guide Lane/Buffer Widths

Street Classification	Inside Travel Lanes	Outside Travel Lanes (Against Curbs or Parking)	Transit Lanes	Transit Lane Buffer
Boulevard	10'	11'	12' (13' preferred)	2' (6' preferred)
Town Center Boulevard	10'	11'	12' (13' preferred)	2' (6' preferred)
Growth Corridor Boulevard	10'	11'	12' (13' preferred)	2' (6' preferred)
Controlled Major Highway	11	12'	12' (13' preferred)	2' (6' preferred)

In general, the project's roadway cross-sections show wider lane widths for the general purpose travel lanes (inside and outside) than the Complete Streets Design Guide defaults. Typically, on the Boulevard, Town Center Boulevard, and Growth Corridor Boulevard segments between Sligo Creek Parkway and New Hampshire Avenue, inside travel lanes are shown as 11 feet and outside travel lanes are shown as 12 feet, but there are locations where outside lanes are 11 feet and at least one inner lane is 10.5 feet (Figure 26).

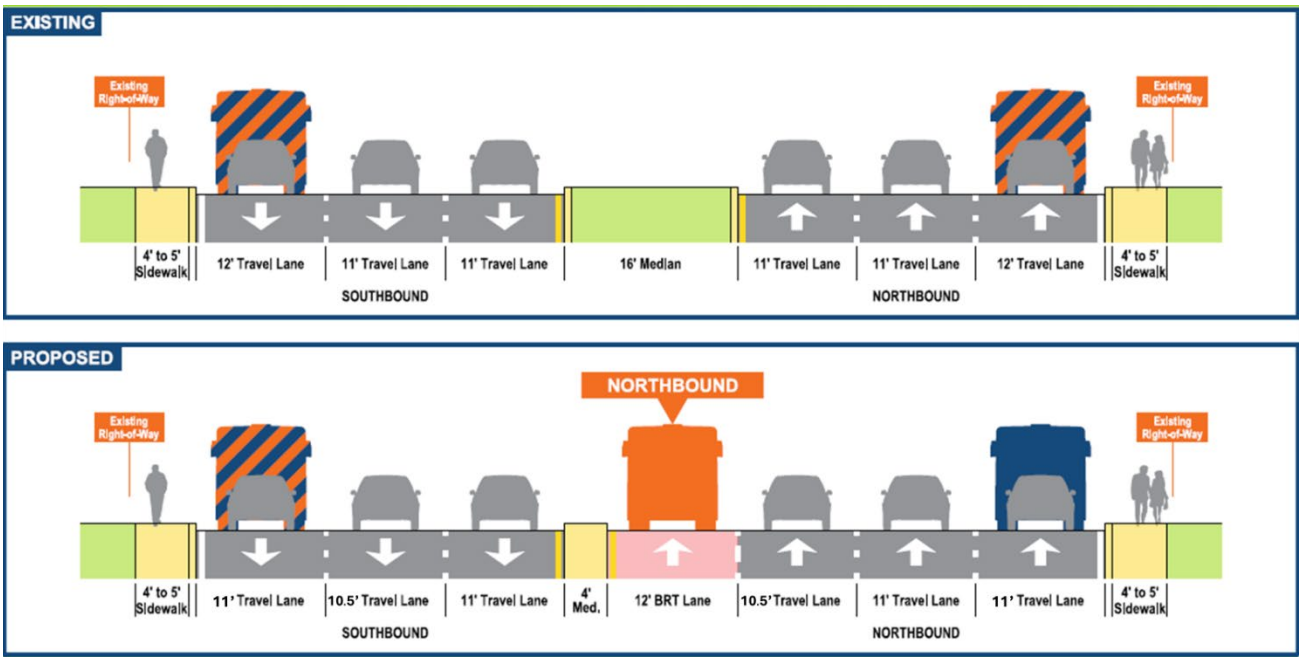

Figure 26: Existing/Proposed Cross-Section Inside the Beltway

Along the Controlled Major Highway section, all general purpose travel lanes are shown as 12 feet (Figure 27).

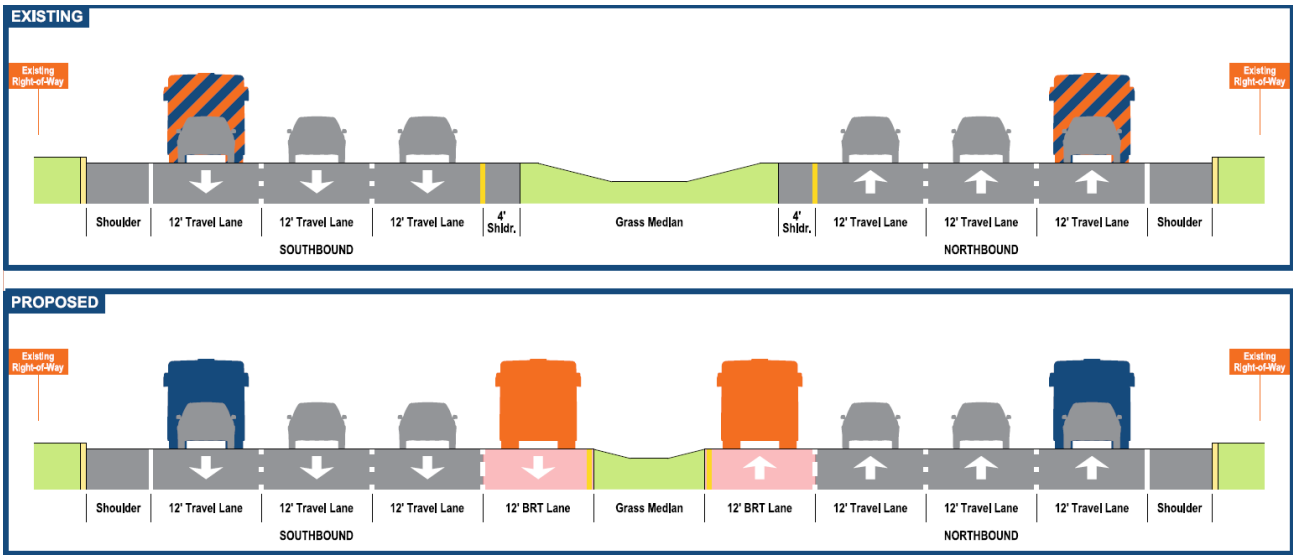

Figure 27: Existing/Proposed Controlled Major Highway Cross-Section

Throughout the project, the dedicated transit lanes are shown as 12 feet in line with design guidelines, while the concrete transit lane buffers, where present, vary from 2 to 4 feet. In some locations without buffers, like the southern terminus of the busway, where the transit lanes begin, and at some transition points, it makes sense for the dedicated lanes to be easily accessible from adjacent general purpose lanes. The buses should be able to easily enter and exit the dedicated transit lanes when they need to. However, there are certain locations where the project team should take advantage of excess lane width to provide concrete transit buffer protection for Flash bus service.

Comment: Narrow travel lanes to default widths and use excess space to provide concrete transit buffers where none exist in the current design.

Without additional concrete buffering at certain locations, the dedicated transit lanes will likely be used by opportunistic drivers to bypass congestion, and potentially impede transit vehicles, delaying transit riders and harming the reliability of proposed transit service. Even short segments of additional concrete curbing would be beneficial, like in the highlighted portion in Figure 28 where southbound buses heading toward Silver Spring begin transitioning into mixed traffic south of Lanark Way.

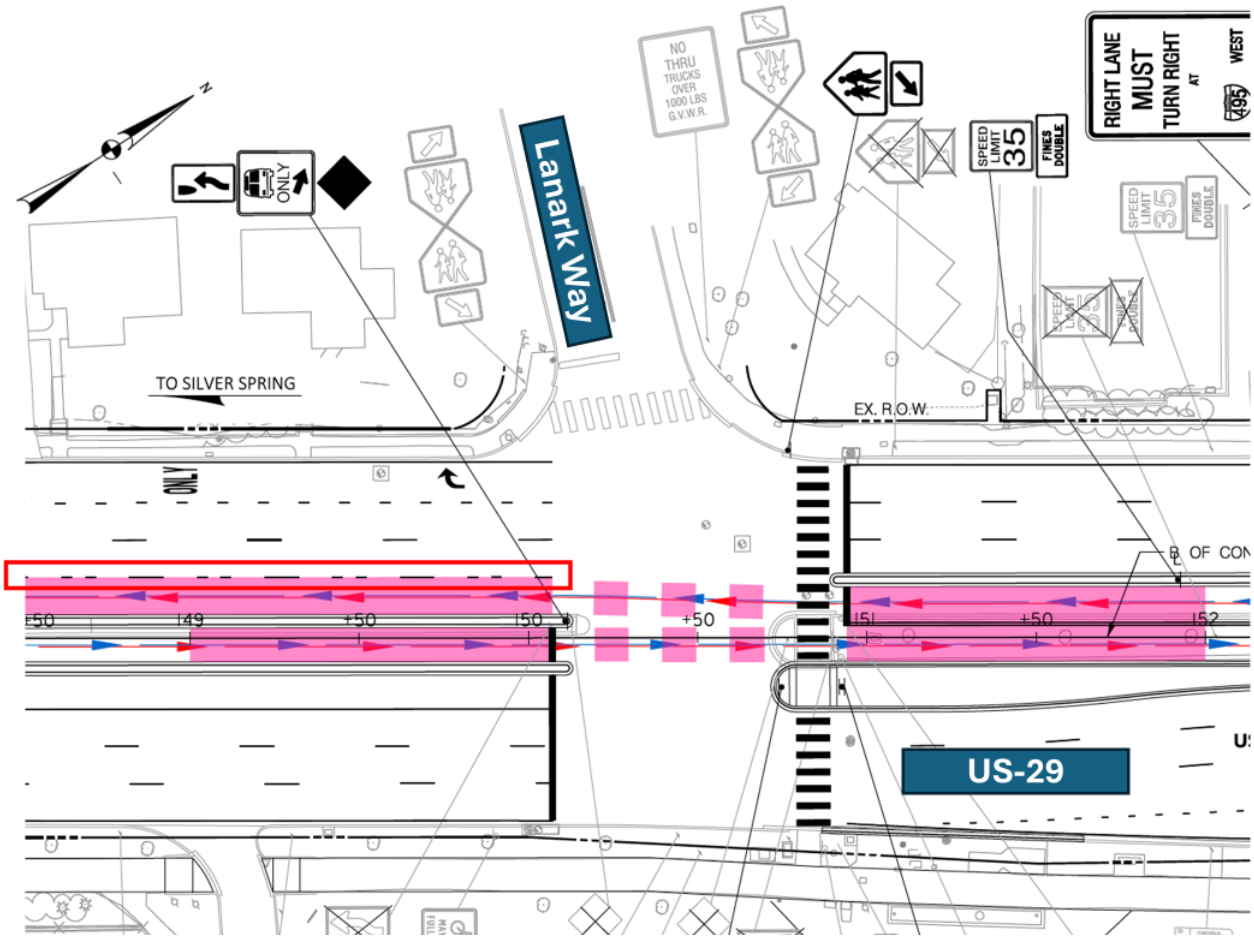

Figure 28: Unprotected bus lane location south of Lanark Way

If this section had curbing past the I-495 Outer Loop on-ramp, it would eliminate the impulse of drivers to merge into that lane while driving through the Lanark Way intersection.

Similarly, additional curbing should be explored in the following locations:

1) Northbound between University Boulevard West and Timberwood Avenue
2) Northbound and southbound between Stewart Lane and Industrial Parkway

Planning Staff understands that US-29 is a state route and that the geometric design shown is based on MDOT SHA requirements, but this comment speaks to the fundamental success of US-29 as a transit corridor, and these changes should be pursued strongly.

Pedestrian Level of Comfort and Bicycle Level of Traffic Stress

Existing Pedestrian Level of Comfort

The Pedestrian Level of Comfort (PLOC) methodology captures how comfortable it is to walk and roll in different conditions in Montgomery County. A variety of pathway and crossing factors are

considered to determine a comfort score for each crossing and pathway segment. The four main scores are: Undesirable, Uncomfortable, Somewhat Comfortable, and Very Comfortable.

Throughout the study area, the existing PLOC is poor. PLOC scores are currently Undesirable from the southernmost extent of the study area, north through Four Corners, and up to White Oak, though portions of the study area have better PLOC scores. In the northern portion of the study area (north of MD 650/New Hampshire Avenue) there is very limited sidewalk coverage, and many sidewalks that are of good quality within 200' of the centerline of the road are actually on side streets and not on US-29 itself. An interactive PLOC map can be found at www.mcatlas.org/pedplan.

In Burnt Mills, PLOC is generally either Undesirable or Uncomfortable, with side streets often lacking sidewalks entirely. Portions of Lockwood Drive are Very Comfortable, but overall, sidewalks along US-29—where they exist—are Uncomfortable or Undesirable for pedestrians.

Although sidewalks exist along US-29 throughout much of Four Corners, the existing PLOC is also poor (either Undesirable or Uncomfortable). Crossings tend to score as Uncomfortable, with sidewalks as Undesirable, except in front of Montgomery Blair High School, where sidewalks are wide and buffered.

Existing Bicycle Level of Traffic Stress

Similarly, the Bicycle Level of Traffic Stress (BLTS) methodology captures how comfortable it is to bicycle in different conditions in Montgomery County. The LTS methodology assigns a numeric stress level to streets and trails based on attributes such as the presence of a bikeway, traffic speed, number of lanes, frequency of parking turnover, ease of intersection crossings, and others. The main scores are: Very Low Stress (appropriate for most children), Low Stress (appropriate for most adults), and High & Moderate Stress (inappropriate for children and most adults).

Throughout the corridor, existing LTS is High Stress – Inappropriate for Children and Most Adults, with several sections Restricted (mostly where interchanges intersect with US-29). While there are a few areas of lower LTS throughout the corridor, most of the study area is high stress for all types of bicyclists, as seen in the interactive bicycle stress map at www.mcatlas.org/bikestress.

In Burnt Mills, the existing LTS is almost universally high stress, with some crossings an exception.

In Four Corners, the existing LTS is also high stress, with the frontage along Montgomery Blair High School an exception. There, the existing LTS is Very Low Stress – Appropriate for Most Children.

Station Access Priorities

As discussed earlier in the Master Plan Consistency section, MCDOT has opted to pursue pedestrian and bicycle improvements that would result in favorable changes to the PLOC and LTS scores along this corridor through a separate CIP effort.

Planning Staff have conducted an analysis to prioritize station access improvements with a focus on pedestrian accessibility and Flash station boardings. The two data points used are the station's PLOC Accessibility Score[1] within a half mile of each station and each Flash station's Average Daily Boardings. The PLOC Accessibility Score and Average Daily Boardings for each station are scaled to be between 0 and 10, as shown in the Table 8 Relative Pedestrian Comfort and Relative Daily Boardings columns respectively. The numbers from these two columns are summed together to create a priority score.

Together, this evaluation paints a picture of locations where multimodal improvements are most needed and most likely to be used. The parenthetical next to the station name in Table 8 indicates its relative priority among the Flash stations between Sligo Creek Parkway and Tech Road. Attachment F is a set of station accessibility maps.

Table 8: Station Access Prioritization

Station	**Relative Pedestrian Comfort** Worse: 10 Better: 0	**Relative Daily Boardings** Better: 10 Worse: 0	**Priority Score**
Tech Road (3)	0.4	9.0	**9.4**
April Lane	2.1	4.0	**6.2**
White Oak Transit Center (T2)	0.0	10.0	**10.0**
Oak Leaf Drive	0.9	0.7	**1.6**
Burnt Mills Shopping Center (T2)	10.0	0.0	**10.0**
Four Corners (1)	6.7	8.3	**15.1**

Comment: Prioritize pedestrian and bicycle improvements at the identified stations in the US-29 Pedestrian and Bicycle Improvements CIP

Comment: Provide additional CIP funding to meet multimodal corridor needs that exceed $25 million.

[1] PLOC Accessibility Score evaluates the total "somewhat comfortable" and "very comfortable" distance of all residential trips within the station area as a percent of the total distance of all residential trips in the station area.

Other Transportation Comments

Comment: Ensure that a 15-foot curb radius is provided where the proposed design modifies existing curb ramps. Locations include:

1) **Woodmoor Circle**
2) **Southwood Avenue**
3) **Crestmoor Drive**

Providing tight turning radii is essential for reducing the turning speed of motor vehicles, improving visibility between motorists, pedestrians, and bicyclists, and reducing the likelihood and severity of collisions between roadway users. A tighter radius makes it easier for curb ramps to guide pedestrians directly across the street on the shortest path, reducing exposure to traffic. Montgomery County Code § 49-32(f) identifies the 15-foot radius as standard for the street types being altered as part of this project.

Comment: Add pedestrian-scale lighting at appropriate locations to meet Streetlighting Design Requirements target values to the extent MDOT SHA allows to address deficiencies in illuminance in station areas.

MCDOT adopted updated street lighting requirements in December 2024 that include target lighting values for different elements of the streetscape to ensure sufficient lighting exists so people traveling by any mode can see and be seen. The target values are context-specific and change based on the street's Complete Streets Design Guide classification. While US-29 is a state roadway and MDOT SHA has its own lighting standards, to the extent possible, the project team should review future station lighting plans against the county's own target values to ensure high-quality lighting is provided.

Comment: Consider changes to the US-29 median at Timberwood Avenue to prevent left turns from the westbound approach.

The proposed triangular median at US-29 and Timberwood Avenue (Figure 29) is intended to:

1) Allow transit vehicles to transition between curb-running and median-running operations.
2) Allow cars traveling southbound on US-29 to turn left onto Timberwood Avenue.
3) Prevent cars from driving from one block of Timberwood Avenue across US-29 to the other.
4) Prevent cars from turning left onto southbound US-29.

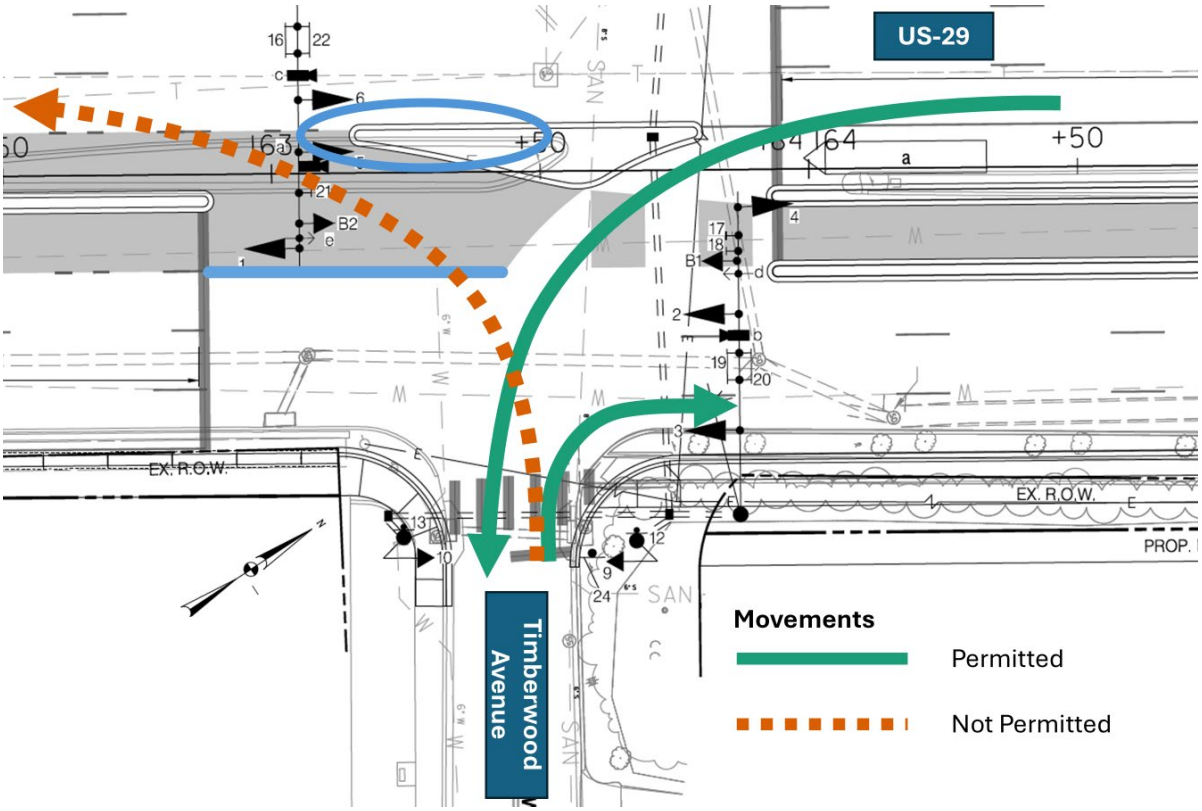

Figure 29: Westbound Timberwood Avenue Movements

However, the proposed median design allows drivers to turn left from westbound Timberwood Avenue (the dashed red arrow in Figure 29), enter the transit lane temporarily, and then merge into southbound US-29 traffic. The project team should consider extending the triangular median a bit further south to close the gap highlighted by the blue circle in Figure 29. Extending this median a few feet would still provide curb-running southbound buses ample space to enter the dual dedicated transit lanes while removing the temptation to turn left from westbound Timberwood Avenue. Alternatively, designers could add a short curb to the edge of the northbound transit lane highlighted by the blue line in the figure.

Environment and Climate

The project area crosses through three watersheds: the Paint Branch, Water Use Class III; the Northwest Branch, Water Use Class IV; and Sligo Creek, Water Use Class I. It also intersects with two 100-year floodplains, 5 perennial and intermittent streams, and 2 wetland areas. DNR has noted that the work is within the area of a potential Rare, Threatened, or Endangered species: the Acuminate Crayfish (*Cambarus acuminatus*). This species has a designated status of In Need of Conservation and has been documented where the project crosses both the Paint and Northwest Branches. The applicant is encouraged to implement stringent best management practices during all phases of work to minimize impact to this species and all aquatic life. The proposed work takes place within Right of Way and in the existing roadway, minimizing environmental impacts.

Forest Conservation

All Forest Conservation Law, Chapter 22A requirements are satisfied. The Application satisfies all the applicable requirements of the Forest Conservation Law, Montgomery County Code, Chapter 22A, and is in compliance with the Montgomery County Planning Department's Environmental Guidelines. The project has an approved Forest Conservation Exemption No. 42025148E, issued on January 8, 2026.

Stormwater Management

The project has an approved stormwater management concept, accepted by DPS on November 21, 2025.

Sustainability

The project described supports sustainability efforts in the County by providing improved public transportation, thereby increasing connectivity and reducing reliance on single-passenger vehicles.

Historic Preservation

The project area goes through the Robert B. Morse Water Filtration Plant Master Plan Site (#33/22). The Master Plan site is significant for its association with the development of suburban Montgomery County and Georgian Revival architecture. The Maryland Historical Trust has evaluated the property and determined it is eligible for listing on the National Register of Historic Places. Before beginning any work within the environmental setting of the Master Plan Site, an approved Historic Area Work Permit is required.

The Historic Preservation Staff has reviewed the proposal and finds that the proposed alterations will not impact the historic structures or the historic character of the site and supports the proposed work.

Parks Department

Montgomery Parks will require the following conditions in a future Park Construction Permit:

1. Construction plans must be submitted to the Maryland-National Capital Park and Planning Commission (M-NCPPC) Montgomery County Department of Parks (Montgomery Parks) for review as part of the Park Construction Permit process to ensure that all work is performed in accordance with M-NCPPC standard details, specifications, and policies. No work on parkland may occur until an approved Park Construction Permit is issued for the project.
2. MCDOT must continue to coordinate with M-NCPPC Montgomery Parks on the sidewalk design at Hastings Mill NCA to ensure the roadway improvements complement long-term park improvement plans.
3. MCDOT must continue to coordinate with M-NCPPC Montgomery Parks on the roadway and sidewalk design at Burnt Mills East Special Park to ensure the roadway improvements

complement the proposed uses at the park and stay within the current road and sidewalk footprint.

4. Any approved Commission parkland to be added to the MCDOT Road right-of-way will be transferred to the County, as appropriate, via perpetual easement. The Commission must be paid the fair market value of the perpetual easement. MCDOT and Parks will finalize the proposed right-of-way area during the final stages of design.
5. No storage or staging of materials or equipment will be authorized unless the locations are included in the Park Construction Permit review.

Parkland Impacts

Hastings Neighborhood Conservation Area

Hastings Neighborhood Conservation Area (Hastings NCA) is a 0.45-acre park located directly adjacent to US-29; it is also bordered by Hastings Drive on the south and east sides and Granville Drive on the north side. The border along the west side contains a fence between the park and the sidewalk along US-29. Montgomery Parks is currently considering improvements to the park to promote more public use as described in the preliminary recommendations for the ongoing *East Silver Spring Communities Plan*. Hastings NCA contains no recreational amenities and consists of mowed grass and landscape trees.

The proposed design includes sidewalk and curb alterations that will affect the western and southern perimeter of the park through temporary construction access; currently, no additional ROW is proposed for this section. There is potential to improve pedestrian connectivity from the US-29 sidewalk into Hastings NCA by extending or creating a sidewalk, most likely along Granville Drive. Parks and MCDOT will continue to collaborate on ways to promote park access during the latter stages of design.

Burnt Mills East Special Park

Burnt Mills East Special Park (Burnt Mills East) is a 2.64-acre park acquired in 1996 to preserve a portion of the former Robert B. Morse Water Filtration Plant. Burnt Mills East Special Park provides parking for a section of the Northwest Branch Trail, a 12.9-mile trail that runs from Randolph Road south to the Prince George's County line. The park is situated along the Northwest Branch of the Anacostia River, which flows into the Potomac River. The portion of the stream valley near Burnt Mills East is located along the "Fall Line," which is the transition from the piedmont geologic province to the coastal plain geologic province. This transition is highlighted by a steep gorge and waterfalls within the stream.

The historic use of the site was the WSSC Robert B. Morse Water Filtration Plant, a function it served for approximately three decades from the 1930's to the 1960's. The two main buildings on either side of US-29, the dam, the sedimentation basin (parking lot), and the small pump building on the east side of the sedimentation basin make up the historic site.

Figure 30: Parking Lot and Building Located at Burnt Mills East Special Park

Burnt Mills East Special Park is also the focus of two other active projects, a State Highway Administration Stormwater Management Facility and the proposed Springsong Museum. A State Highway Administration Stormwater Management Facility project, which is currently in the final stages of Park Construction Permit review process, proposes a stormwater management (SWM) facility located in the northeast portion of the existing parking lot. This proposed BRT project will not have any impact on the design or construction of the SWM facility.

The proposed Springsong Museum project will rehabilitate and re-use the existing building on the Burnt Mills East Site. The Springsong Museum project is currently in Park Construction Permit Review and was presented to the Planning Board on December 5, 2024. The project received Concept Review Approval by the Parks Department in February of 2025. The proposed BRT improvements will not conflict with any of the site improvements proposed for the Springsong Museum. Coordination between all parties and Parks will continue to ensure that all projects complement each other and improve the park user experience.

The BRT improvements along the eastern side of US-29 will affect the frontage and driveway of the Burnt Mills East Special Park; however, early coordination between MCDOT and Parks through the

Concept Review process has avoided and minimized the impact to the park significantly. The park frontage currently consists of a sidewalk along the curb line and the park entrance from US-29. The sidewalk, although maintained by SHA, is located on park property outside of the existing ROW. The proposed improvements include a wider sidewalk with a grass buffer and an updated park driveway apron, and associated grading. MCDOT has designed narrower lane widths in the portion of the project passing through the Robert B. Morse Complex, holding the existing southbound curb line in place and realigning the travel lanes up to four feet to the west and farther from Burnt Mills East Special Park, avoiding any further encroachment of transportation infrastructure onto parkland. MCDOT will be granted a perpetual easement for the new sidewalk improvements. This area will be refined during final design and will be limited to the area currently maintained as sidewalk in the existing conditions.

Figure 31: Street View Showing Existing Driveway Apron and Sidewalk

Paint Branch Stream Valley Units 4 and 5

The proposed BRT will cross the Paint Branch Stream Valley, where US-29 bisects the Paint Branch Stream Valley Units 4 and 5. MCDOT has stated that all work will occur within the existing transportation ROW. As design progresses, if any impacts to parkland are anticipated, they must be reviewed through the Park Construction Permit process.

Park Construction Permit

MCDOT will be required to obtain a Park Construction Permit from Montgomery Parks prior to commencement of any construction activities on parkland. Plans submitted for Park Construction Permit review must include existing topography, utilities, and identify and locate all trees (with size and species) larger than 6 inches DBH and greater within 25 feet of the proposed LOD on park property. During Park Construction Permit review, Montgomery Parks staff will work with MCDOT to minimize impacts to parkland to the greatest extent possible and avoid all critical resources identified. Mitigation for impacts to M-NCPPC Montgomery Parks trees (with a 6 inch DBH or greater) damaged or removed, shall either be (1) replacement planting on parkland at a rate of one-inch to one-inch diameter and/or (2) a monetary per-inch caliper basis at the rate of $200/diameter inch, to be paid to M-NCPPC Montgomery Parks prior to construction completion.

Right-of-Way

A perpetual easement will be granted for any approved Commission parkland to be added to the MCDOT Road ROW, as appropriate. The Commission must be paid the fair market value of the perpetual easement. The only area approved for perpetual easement is the area described above at Burnt Mills East Special Park. MCDOT and Parks will refine the easement area through final design to ensure the easement area only includes that property that is currently utilized as sidewalk.

SECTION 7 – CONCLUSION

As conditioned, the Mandatory Referral application satisfies the applicable standards of the Md. Land Use Article, Section 20-301, et seq., and the accompanying USMR, and substantially conforms to the recommendations of *Thrive Montgomery 2050*, the 2025 *Master Plan of Highways and Transitways*, the 2018 *Bicycle Master Plan*, the 1996 *Four Corners Master Plan*, the 1997 *White Oak Master Plan*, the 2014 *White Oak Science Gateway Master Plan*, the 2023 *Briggs-Chaney Master Plan*, and the 2025 *University Boulevard Corridor Plan*. Therefore, Staff recommends approval of Mandatory Referral No. MR2026016 with the comments specified at the beginning of this report.

ATTACHMENTS

Attachment A: What is BRT?

Attachment B: Previous Study Tables

Attachment C: US-29 Mobility and Reliability Study 2022 Addendum

Attachment D: Engagement Summaries

Attachment E: Plan Roll Plot

Attachment F: Station Accessibility Maps