

Welcome

US 29 Mobility and Reliability Study

South 4 Corners Civic Association

1700 April Lane | Silver Spring

February 13, 2019

Agenda

Welcome and Intros

Presentation

- Study overview
- Alternatives under consideration – mainline, intersections, bicycle and pedestrian access
- Schedule and next steps

How to Comment

- Comments on plans/maps
- Email/comment cards
- Please provide feedback on priorities, potential alternatives, and concerns

Purpose of the US 29 Mobility and Reliability Study

To identify improvement(s) on US 29 to complement the investment in Bus Rapid Transit (BRT) and improve transit, carpool, or overall corridor travel time and reliability performance, as well as pedestrian and bicycle access from Tech Road to the Silver Spring Transit Center.

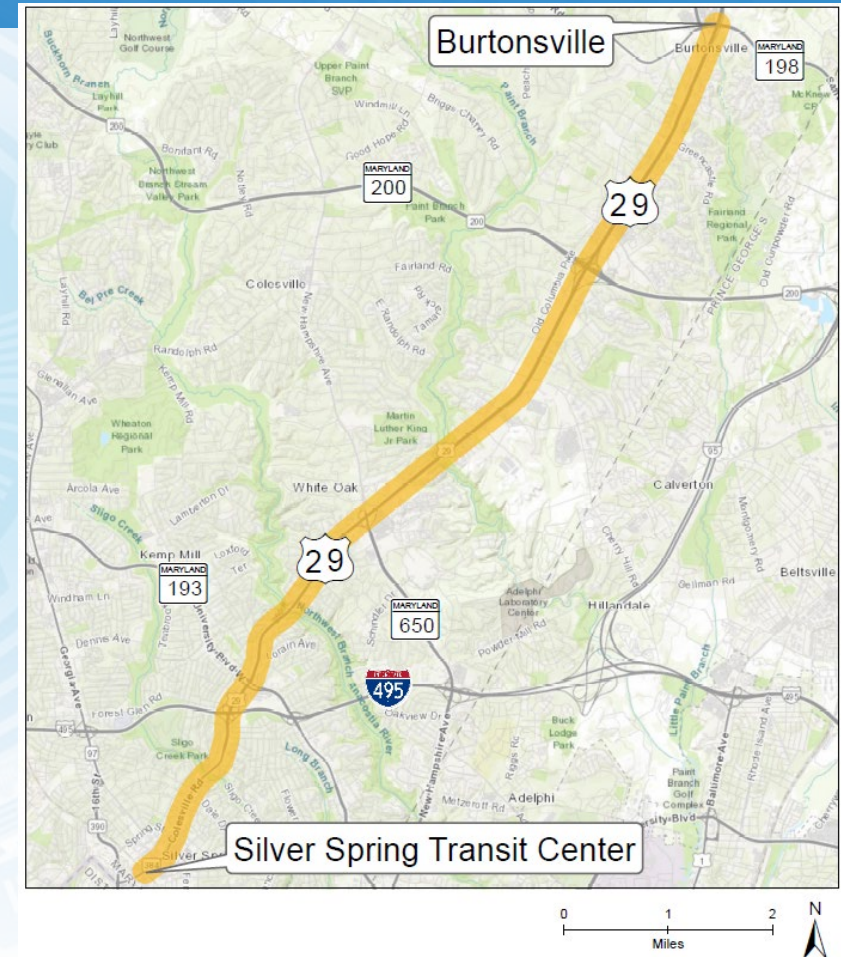
Approved modal and land use plans in the corridor recommend the implementation of new pedestrian and bicycle infrastructure and BRT. These elements will be included in the ultimate mobility recommendations developed for this study.









Scope of Work and Goals

Examine concepts benefitting multiple modes of transportation with independent merit.

- Review options for improving mobility, reliability and safety
- Review previous studies and recommendations
- Analyze concept developed by Corridor Advisory Committee Members Mr. Emerson and Mr. Smoot
- Recommend improvements that can be implemented independently of the US 29 TIGER Bus Rapid Transit (BRT) Project

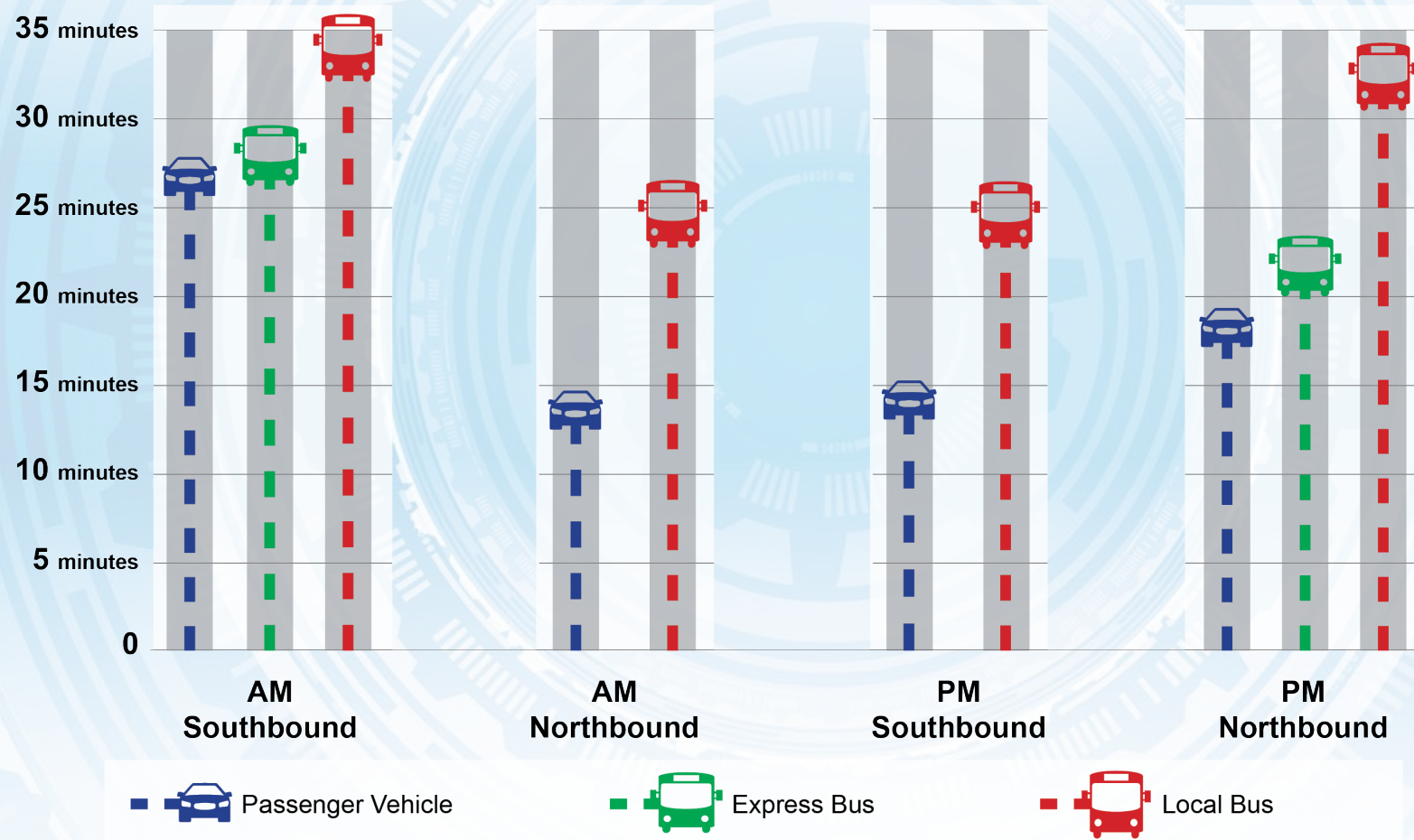


Study Corridor Overview – Traffic Volumes

					
Pedestrians	Bikes	Bus Passengers	Automobiles	Car Poolers	Trucks
Daily					
1,500-2,000	25-75	7,000-8,000	65,000-70,000	N/A	1,000-1,500
Peak Hour					
100-150	0-10	800-1000	5,000-6,000	N/A	25-125
Peak Hour (Directional)					
N/A	N/A	700-800	3,000-4,000	600	10-75

Study Corridor Overview

Existing Travel Time by Mode



Limits – Tech Road to Georgia Avenue
Sources – INRIX, WMATA and Ride ON AVL and field measured GPS

Study Measures of Performance

- Intersection/Segment Level of Service and Delay
- Person throughput
- Travel time by mode
- Impact to neighborhoods/traffic management



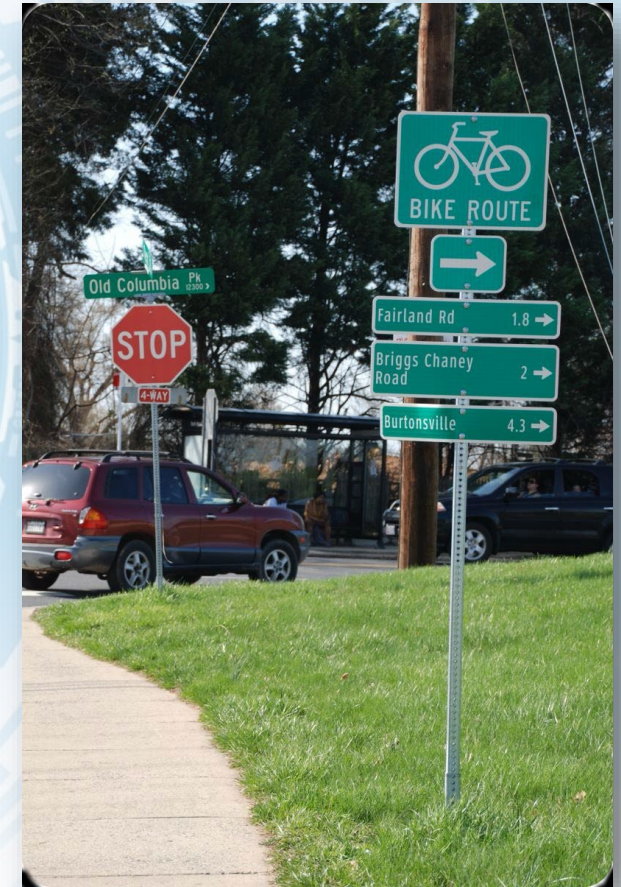
Stakeholder Participation

- Public Outreach
 - Corridor Advisory Committees
 - Open House - November 2018
 - Workshop - Spring 2019
- Reviews by Agencies at Key Decision Points
 - M-NCPPC, WMATA, MDOT SHA, MDOT MTA



Design Challenges

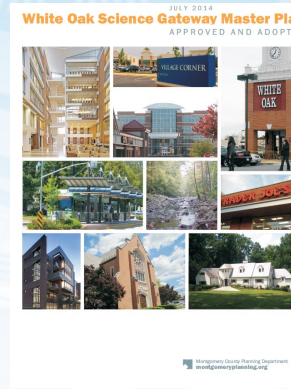
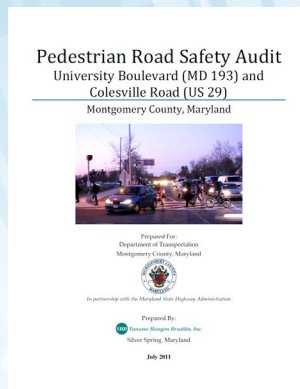
- Permitting
- Utilities
- Traffic Diversions
- Right of Way
 - Width, type, landscaping and presence of Median
 - Width of Sidewalk and ADA Accessibility
 - Sidewalk Buffers and Landscaping
 - Streetscape Lighting and Amenities
 - Utilities
- Need for retaining walls
- Impact to bridge structures
- Stormwater requirements and facilities design
- Master planned bicycle facilities
- Number and width of travel lanes
- Location and width of dedicated bus lane(s)
- Parking and loading
- Bus station design
- Intersection traffic controls
- Construction costs



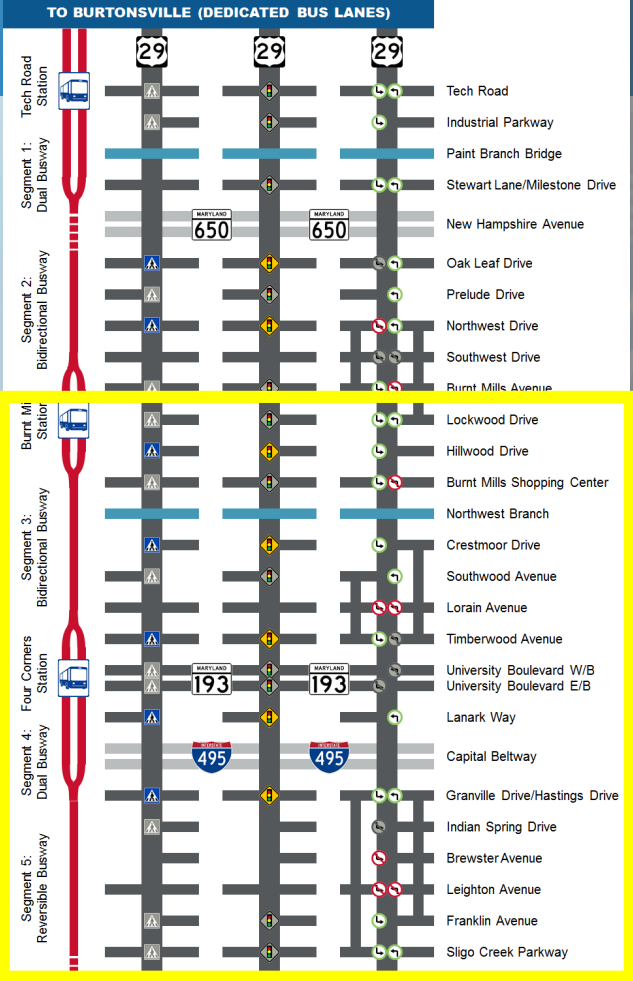
Review of Previous Studies and Recommendations

Team Reviewed 36+ Previous Studies from the 1990's to 2018:

- US 29 BRT Studies conducted by MCDOT and MDOT SHA and MDOT MTA
- US 29 Related Traffic and Transit Studies
- Related Countywide and Regional Transit Studies
- Related Functional and Master Plans



- Segments Crosswalks Traffic Signals Left Turn Access
- New Crosswalk
 - Existing X-walk
 - New Signal
 - Existing Signal
 - New Left Turn Restriction
 - Existing Left Turn Restriction
 - Preserved Left Turn Pocket



has not yet been professionally reviewed, and may be modified. Learn more at betterBRT.growingeastcounty.com

Review of Emerson and Smoot Concept

Team is reviewing the Median Lane concepts developed by Sean Emerson and Sebastian Smoot

- Traffic operations, transit service operations
- Geometric Design
- Right-of-way, utility, environmental impacts
- Provide recommendations on improvements

Traffic Analysis and Alternatives

Current study analyzing:

- Existing Conditions
- 2025 Interim Year (BRT in service)
- 2040 Future Conditions (BRT in service)

No-Build and Build Alternatives to include:

- 2025 Interim Year Recommendations
 - Team to study +/- 10 recommendations
- 2040 Mobility Build Recommendations
 - Team to study +/- 10 recommendations



Mainline Mobility Improvement Recommendations

Corridor-wide recommendations may include:

- BRT lane in median (Emerson/Smoot concept)
- Preferential/Managed lane (carpool/BRT)
- Spot improvement locations
- Hybrid of concepts

Spot improvement location recommendations may include:

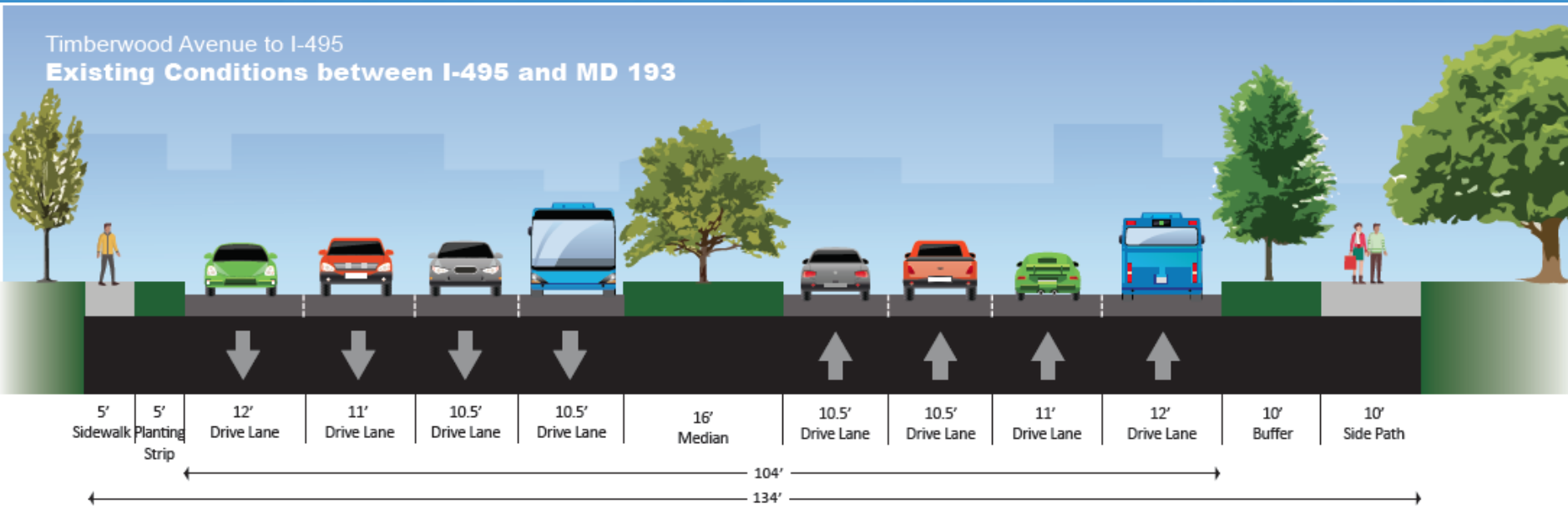
- Industrial Parkway/ Tech Rd
- Stewart Lane
- MD 650
- I-495
- Sligo Creek Pkwy



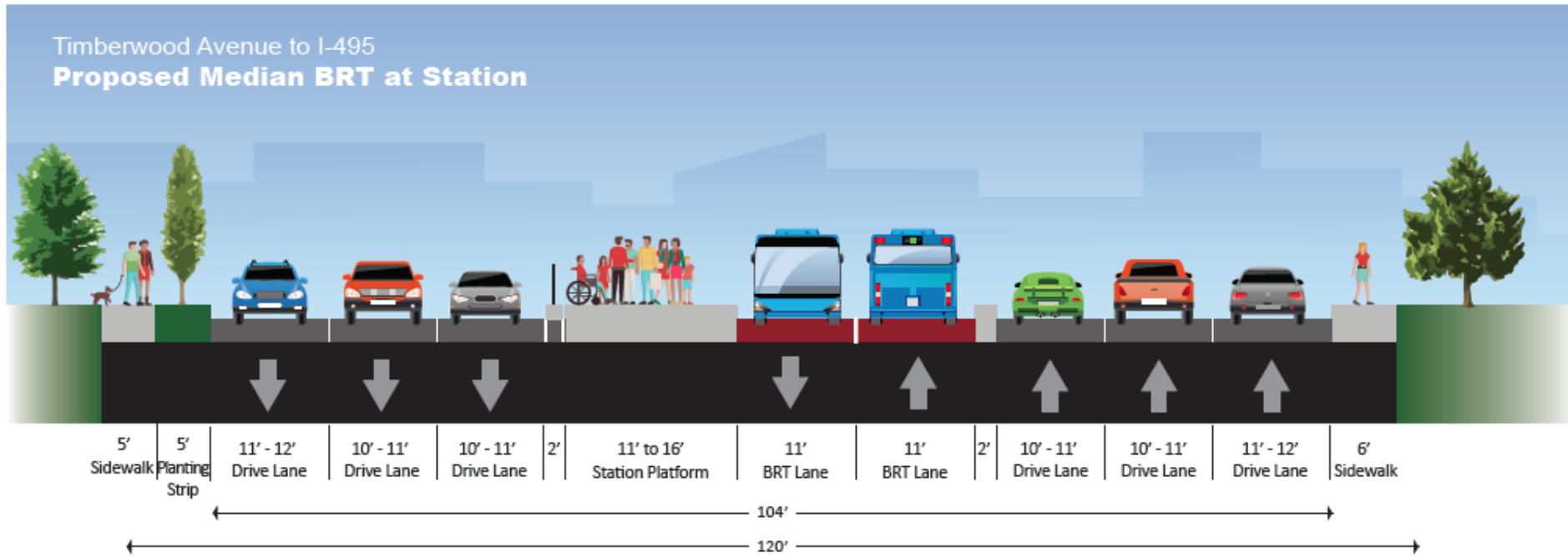
Typical Sections – Timberwood Ave to I-495

DRAFT CONCEPT

Timberwood Avenue to I-495
Existing Conditions between I-495 and MD 193

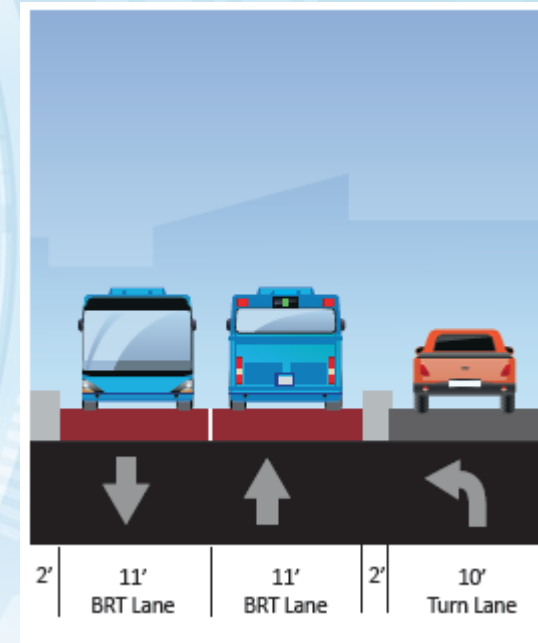
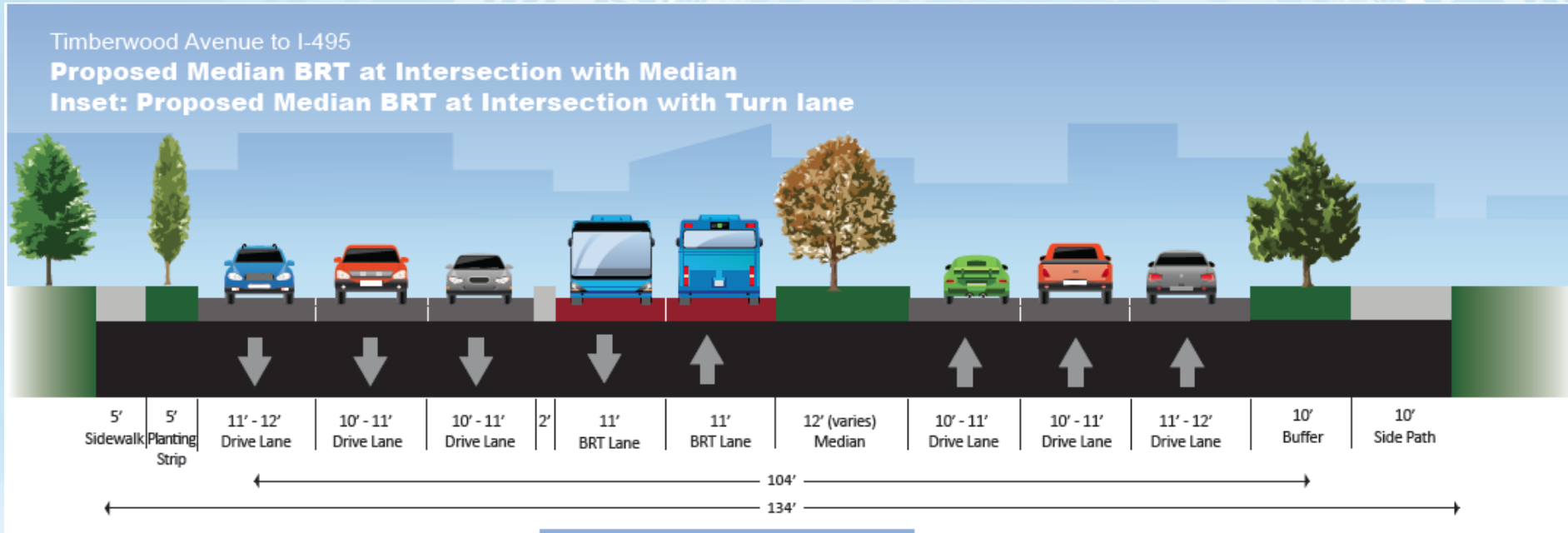


Timberwood Avenue to I-495
Proposed Median BRT at Station



Typical Sections – Timberwood Ave to I-495

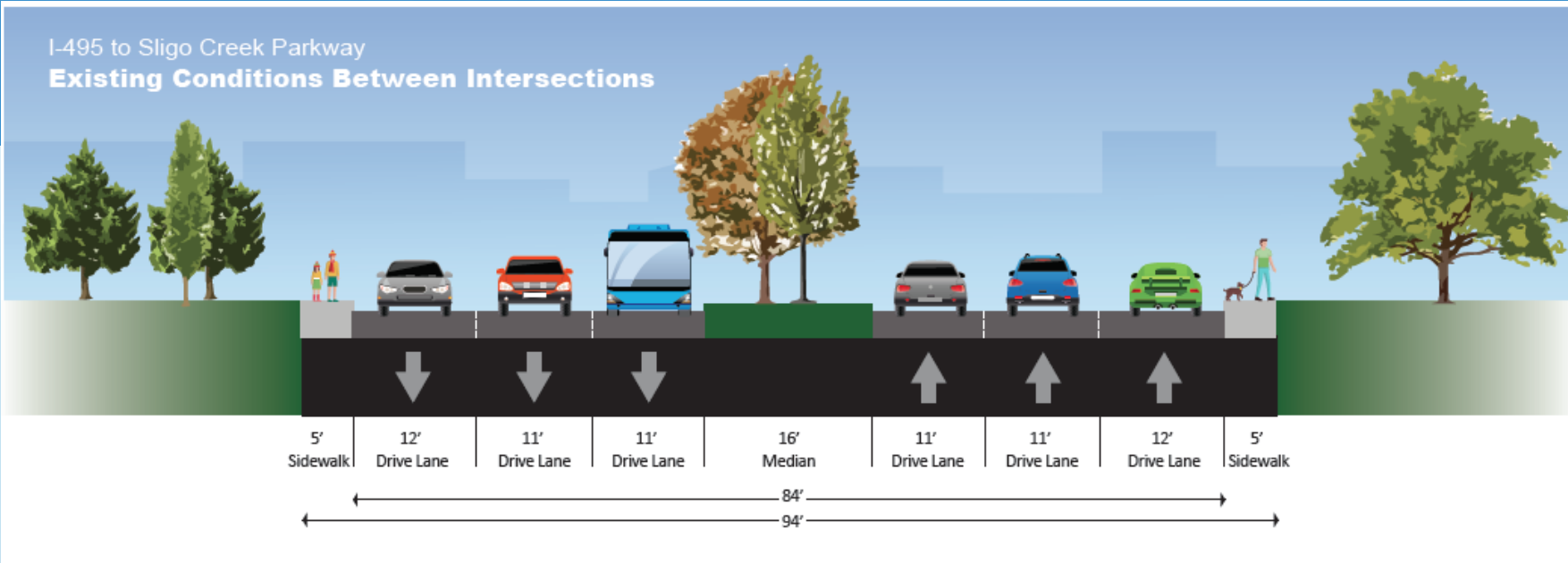
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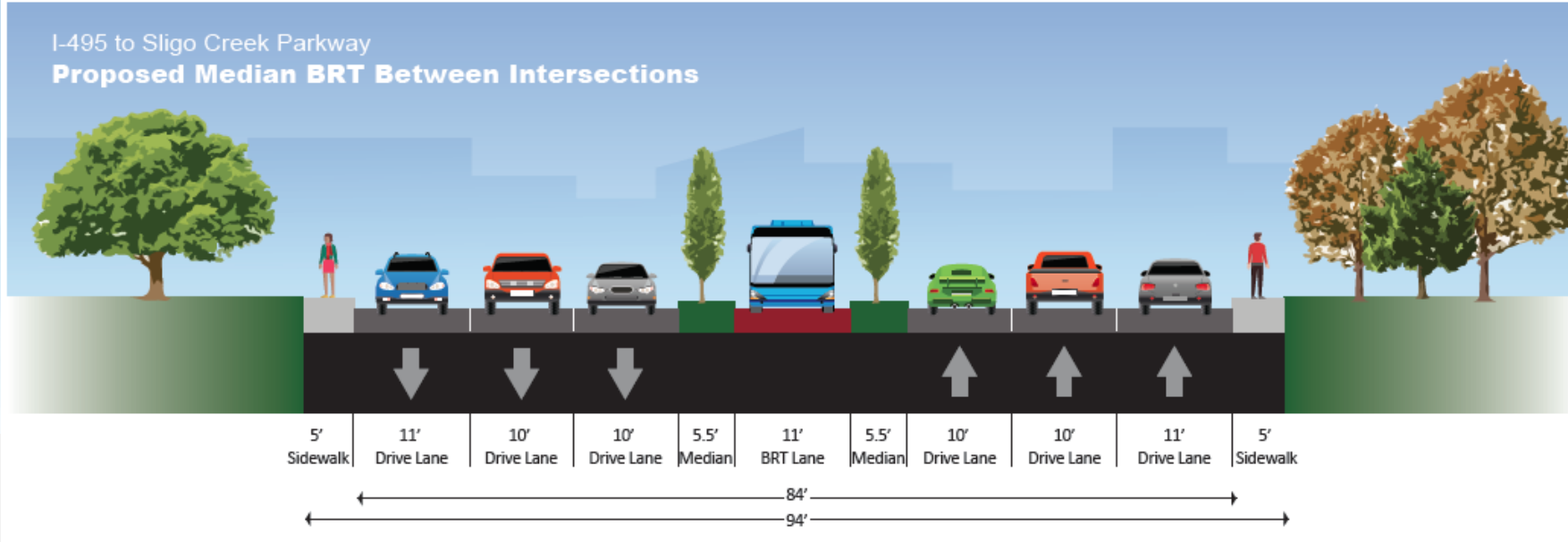
Typical Sections – I-495 to Sligo Creek Parkway

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I-495 to Sligo Creek Parkway
Existing Conditions Between Intersections

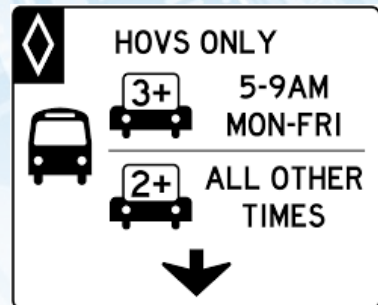


I-495 to Sligo Creek Parkway
Proposed Median BRT Between Intersections



Traffic Controls – Dedicated Bus or Carpool Lanes

Unique signing, marking and signal controls will be considered to delineate priority lane use at different times of the day.



Intersection Improvement Recommendations



Recommendations may include:

- Traffic Signal Operations
- New Signals
- Traffic Control Changes (lane reassignment, turn restrictions)
- Signing
- Pavement Markings
- Minor Geometric Work (additional turn lanes)

Pedestrian and Bicycle Accessibility



Existing and Planned Development Pattern

- Character of surrounding land use (housing, office, retail, etc.)
- Notable major land uses

Key Connections

- Identify locations to provide ped/bike connectivity to/from BRT stations and residential neighborhoods, job centers, shopping, etc.
 - Pedestrian (w/in ½ mile)
 - Bike (out to ~2 miles)

Existing Bike/Ped Infrastructure

- Overview of Current Infrastructure and Connectivity

Barriers to Connectivity

Pedestrian and Bicycle Improvement Recommendations

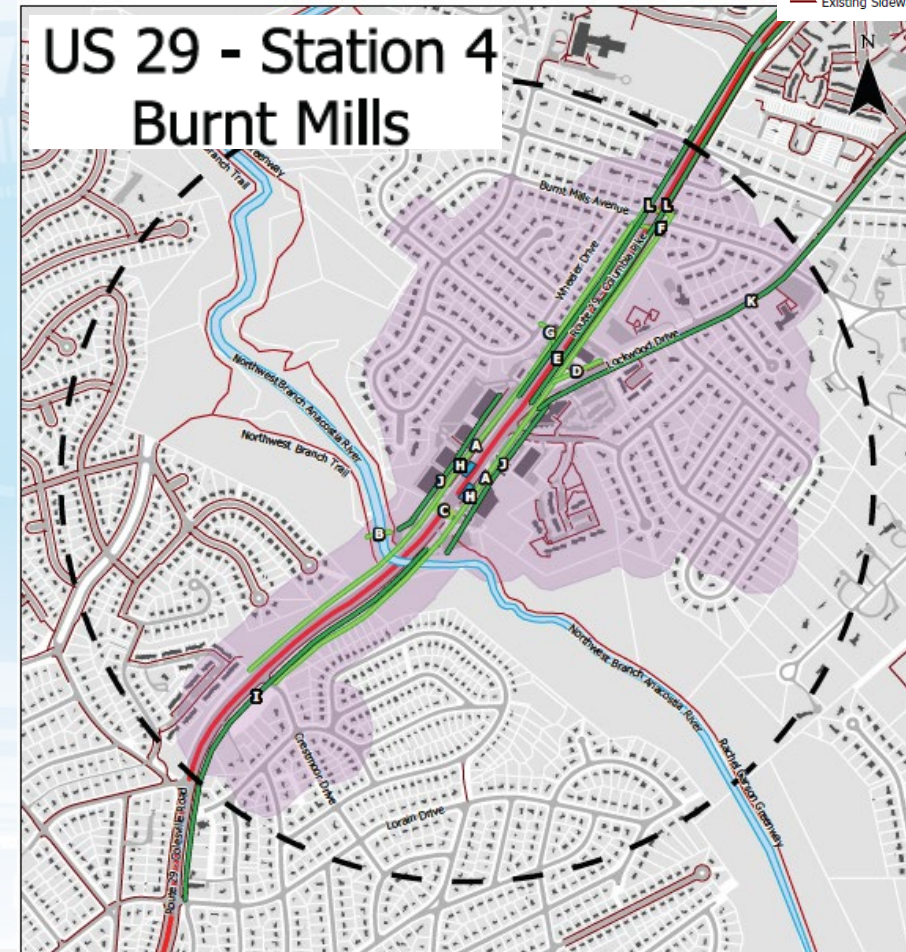
Access Improvements

- Walkshed Analysis
- Improvements from Earlier Planning Documents
- Identify most-needed pedestrian/bicycle access improvements
- Walkshed Analysis with Improvements
- Prioritization



Pedestrian and Bicycle Improvement Recommendations

- Sidewalks – new and widened
- ADA compliance updates
- Bike routes/lanes
- US 29 crossing improvements
- Park and Ride
- Bike parking/shares



Schedule - Where We Are

- Study Kickoff – Spring 2018
- US 29 BRT Corridor Advisory Committee input – May 2018
- Public Open House – Held 11/29/2018
 - Feedback on recommendations retained for operational and geometric feasibilities, analysis, forecasts, modeling
- Agency and Stakeholder review – Winter 2018
 - *MDOT SHA has final review and approval of all design, operations, right-of-way, utility and environmental project elements*
- Mobility and safety analysis on retained recommendations – Winter 2018
- **Public Workshop, Draft Mobility Improvement Package – Spring 2019**
- Conceptual design and cost analysis for mobility improvement recommendations – Summer 2019
- Study Completion – Fall 2019

Design and construction NOT FUNDED at this time.

Next Steps

Facility Planning Phase I

- 2025 Interim and 2040 Mobility Build Alternative concepts, schedule & costs
- Planning Board and County Council's Transportation, Infrastructure, Energy & Environment (T&E) Committee Review
- SHA Feedback

Facility Planning Phase II

- **Pending direction from Council T&E**
- Public input
- Minimize and mitigate noise and environmental
- Detailed scope, schedule & costs

Final Design, Right-of-Way, and Construction – NOT currently funded

Questions

How to Comment

- Comment cards
- Email: john.thomas@montgomerycountymd.gov
- Phone: John "JT" Thomas 240-777-7240