



## TPB REGIONAL PUBLIC TRANSPORTATION SUBCOMMITTEE

Chair: Nick Ruiz, VRE

Tuesday, March 28, 2023  
12:00 – 2:00 P.M.

**VIRTUAL MEETING**  
*Meeting link included in email.*

### AGENDA

- 12:00 P.M.    1. **WELCOME AND INTRODUCTIONS**  
*Nick Ruiz, Regional Public Transportation Subcommittee Chair, VRE*
- 12:10 P.M.    2. **WMATA: REGIONAL PARTNERSHIPS FOR BUS PRIORITY EXPANSION**  
*Anikwenze Ogbue, WMATA*
- 12:35 P.M.    3. **OMNIRIDE: ZERO EMISSIONS FLEET STUDY, OMNIRIDE CONNECT  
MICROTRANSIT, AND OPERATIONS UPDATE**  
*Perrin Palistrant, OmniRide*
- 1:00 P.M.     4. **MARC: BRUNSWICK LINE STUDY AND OPERATIONS UPDATE**  
*Sibtay Haider, MTA*
- 1:25 P.M.     5. **HIGH-CAPACITY TRANSIT (HCT) MAP DEVELOPMENT**  
*Charlene Howard and Tim Canan, TPB Staff*
- 1:50 P.M.     6. **OTHER BUSINESS**
- 2:00 P.M.     7. **ADJOURN**  
*Nick Ruiz, Regional Public Transportation Subcommittee Chair, VRE*

The next regular meeting of the RPTS is scheduled for April 25, 2023 and is in-person at the COG office.

Reasonable accommodations are provided upon request, including alternative formats of meeting materials. Go to [www.mwcof.org/accommodations](http://www.mwcof.org/accommodations) or call (202) 962-3300 | (202) 962-3213 (TDD) for more information.

# **Regional Partnerships for Bus Priority Expansion: Tactical Bus Lanes Demonstration Project**

TPB Regional Public  
Transportation Subcommittee

Bus Priority Program  
March 28, 2023

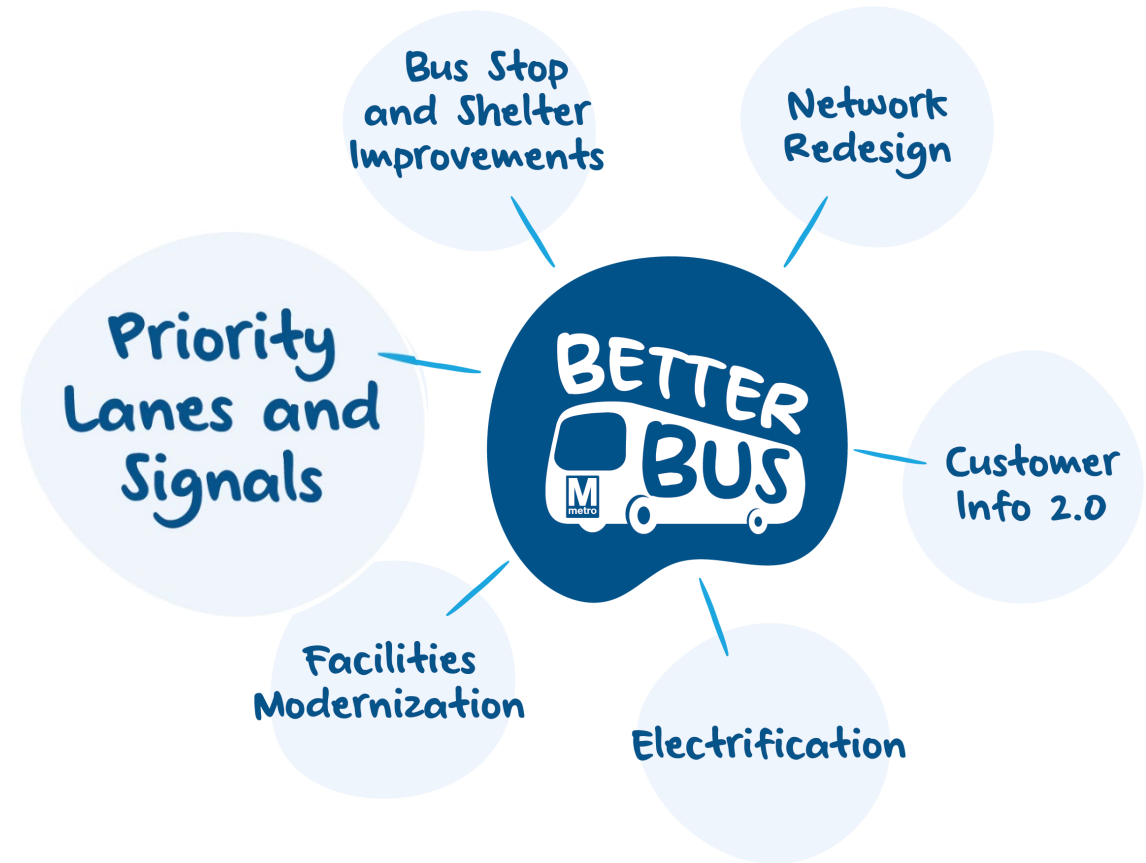


## Better Bus Initiatives



**Purpose:** Transform bus into a fast, frequent, reliable, affordable system that feels unified

**Outcomes:** 26 recommendations + Action Plan




## Meeting Agenda

1. Goals and Objectives
2. Project Details
3. Schedule
4. RAISE Grant Application
5. Conclusion



Metrobus Turning at Wayne Ave and Georgia Ave  
Downtown Silver Spring, MD

## Goals and Objectives



Improve bus service on-time performance and reliability



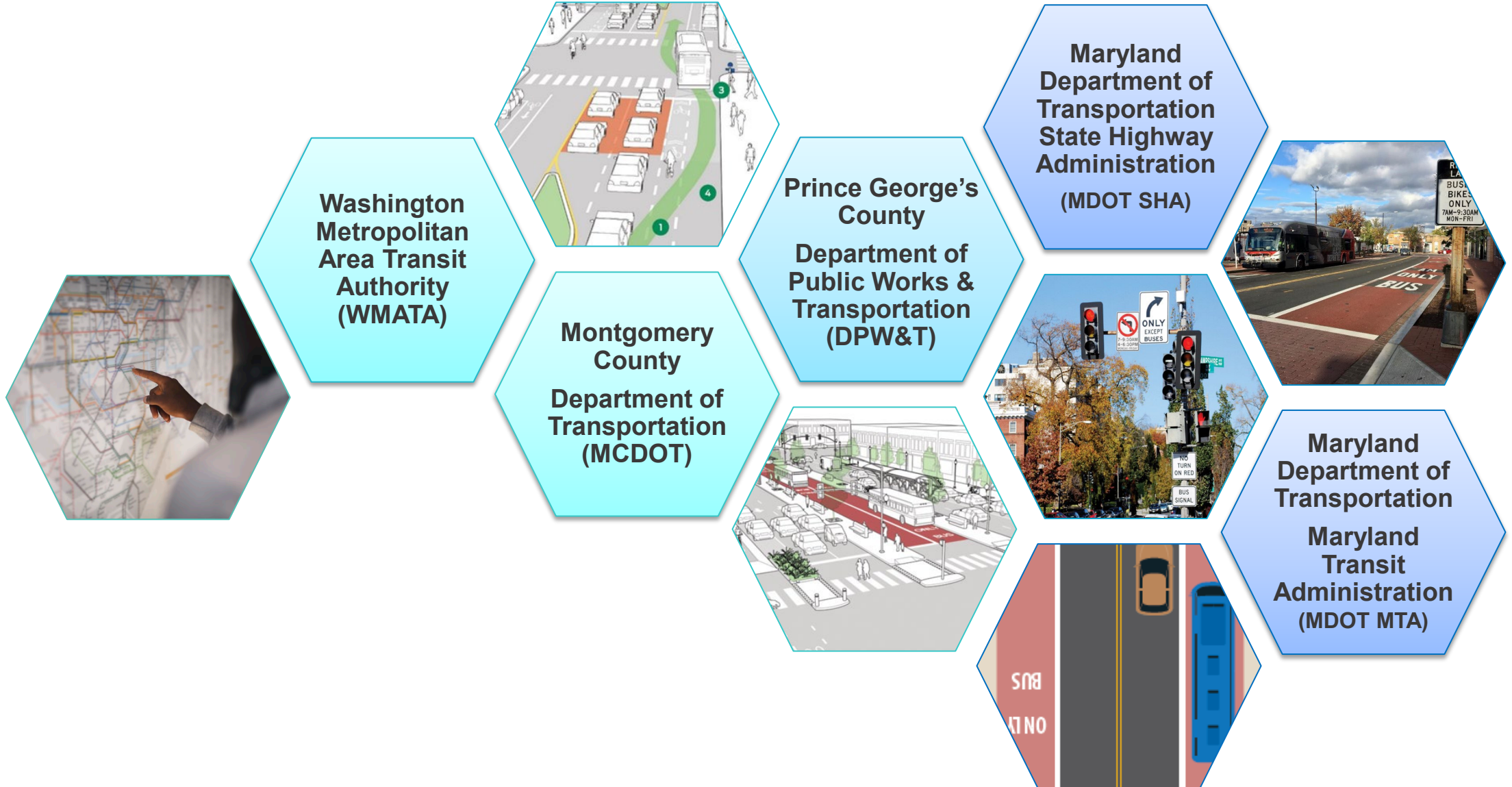
Accelerate implementation of Bus Rapid Transit (BRT) corridors in both counties



Foster a stronger partnership between WMATA and Maryland jurisdictions

Ongoing multi-agency collaboration with MDOT SHA, MCDOT, and DPW&T

# Multi-Agency Collaborative Effort



# Why Tactical Bus Lanes?

- Quick-build bus lanes using only red paint and signs
- Bus riders see benefits faster
- Demonstration projects can be modified and improved easily
- Supports Metro's Better Bus and Sustainability Initiatives and each county's respective Climate Action Plan



Bus lanes on Century Boulevard in Germantown, MD



Bus lanes on Wayne Avenue  
Silver Spring, MD

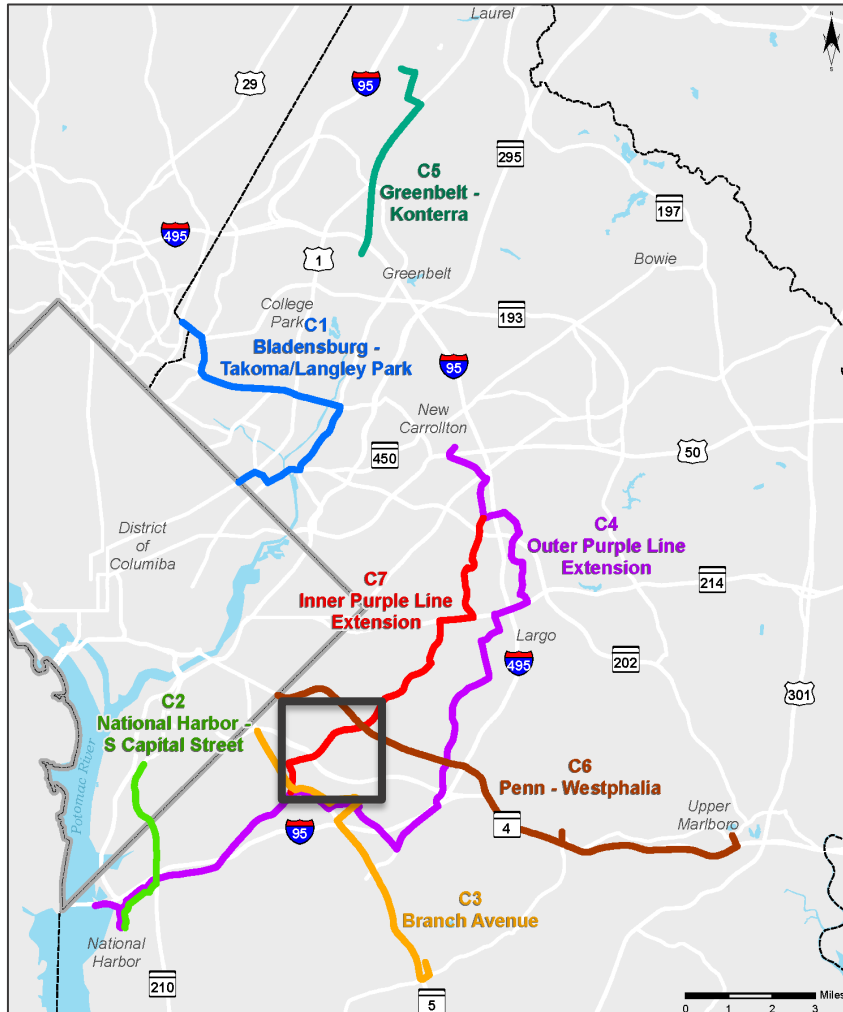
# Bus Lanes in the Region and Maryland

Demonstration projects produce faster implementation and benefits

<b>Bus Lane Project</b>	<b>Length (miles)</b>	<b>Jurisdiction</b>	<b>Implementation Time</b>
<b>H &amp; I Street, NW Pilot</b>	<b>1.6</b>	<b>DC</b>	<b>6 months</b>
<b>14<sup>th</sup> Street NW</b>	<b>0.6</b>	<b>DC</b>	<b>2 years</b>
16 <sup>th</sup> Street NW	2.7	DC	10+ years
<b>Germantown Transit Center</b>	<b>0.3</b>	<b>MD</b>	<b>8 months</b>
<b>York Road Pilot</b>	<b>0.7</b>	<b>MD</b>	<b>6 months</b>
North Avenue Rising	7.0	MD	5 Years



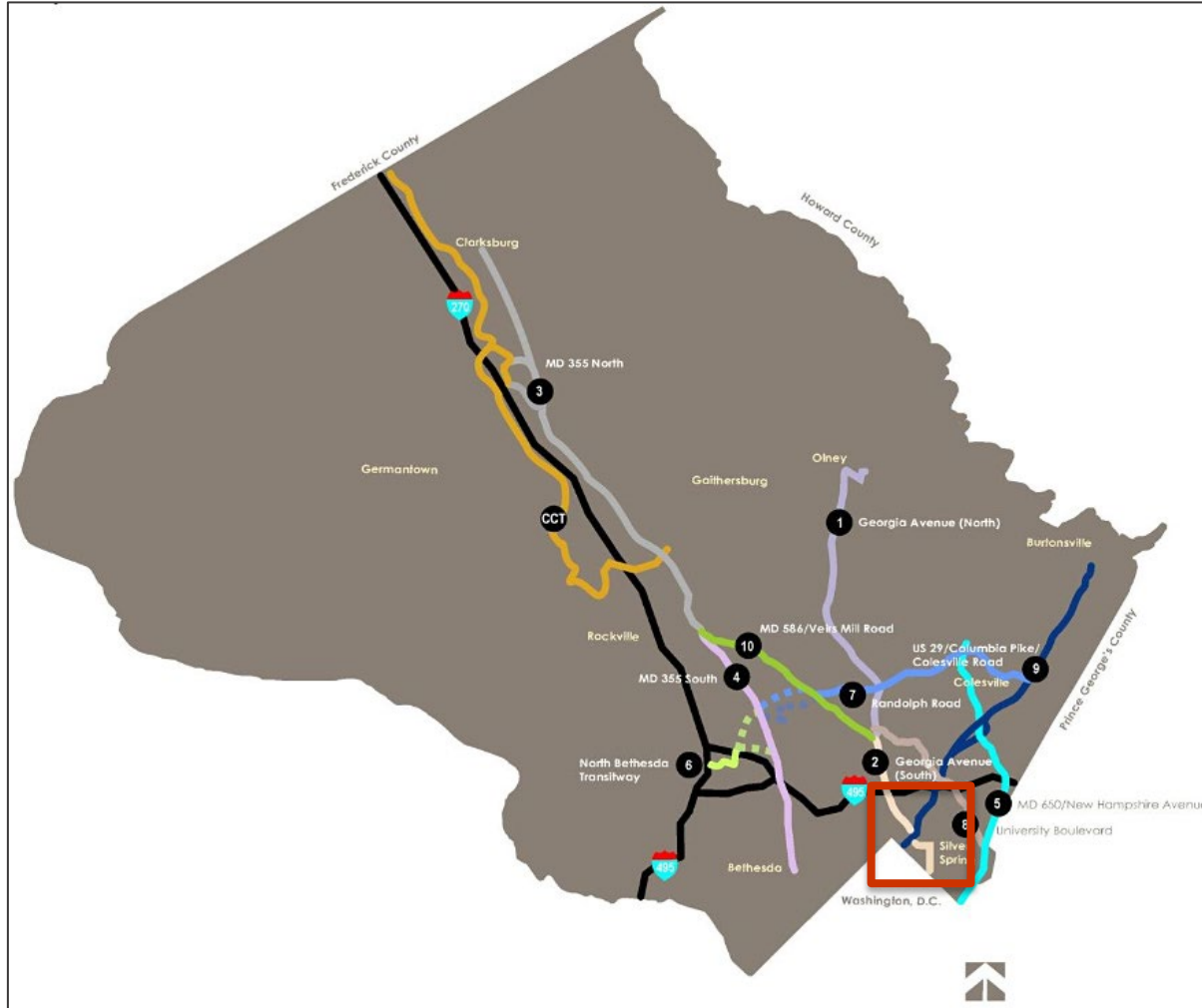
## Proposed Bus Rapid Transit (BRT) Corridors Prince George's County



The proposed Tactical Bus Lane project on Silver Hill Road (MD 458) advances one of the projects identified in the Transitway Systems Planning Study.

Transitway Systems Planning Study (2012)

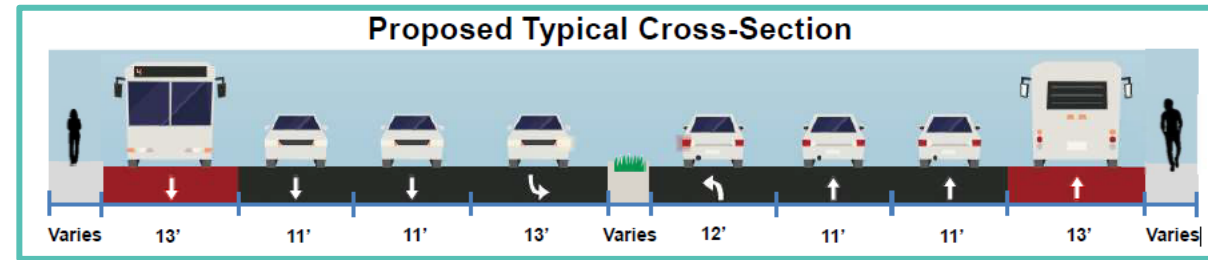
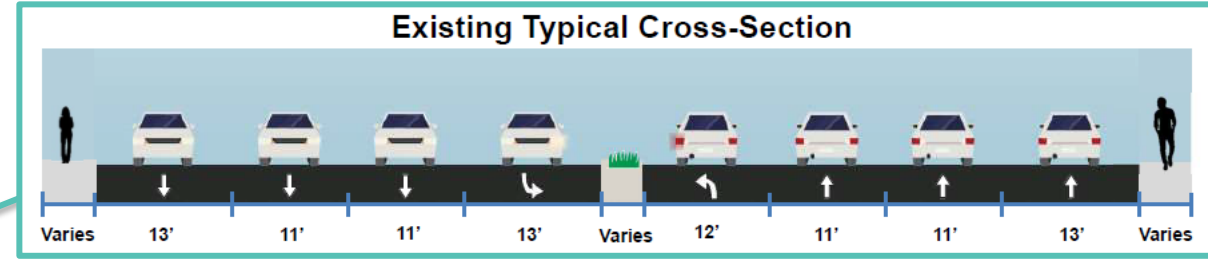
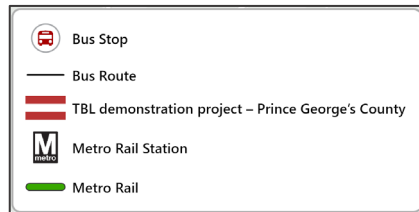
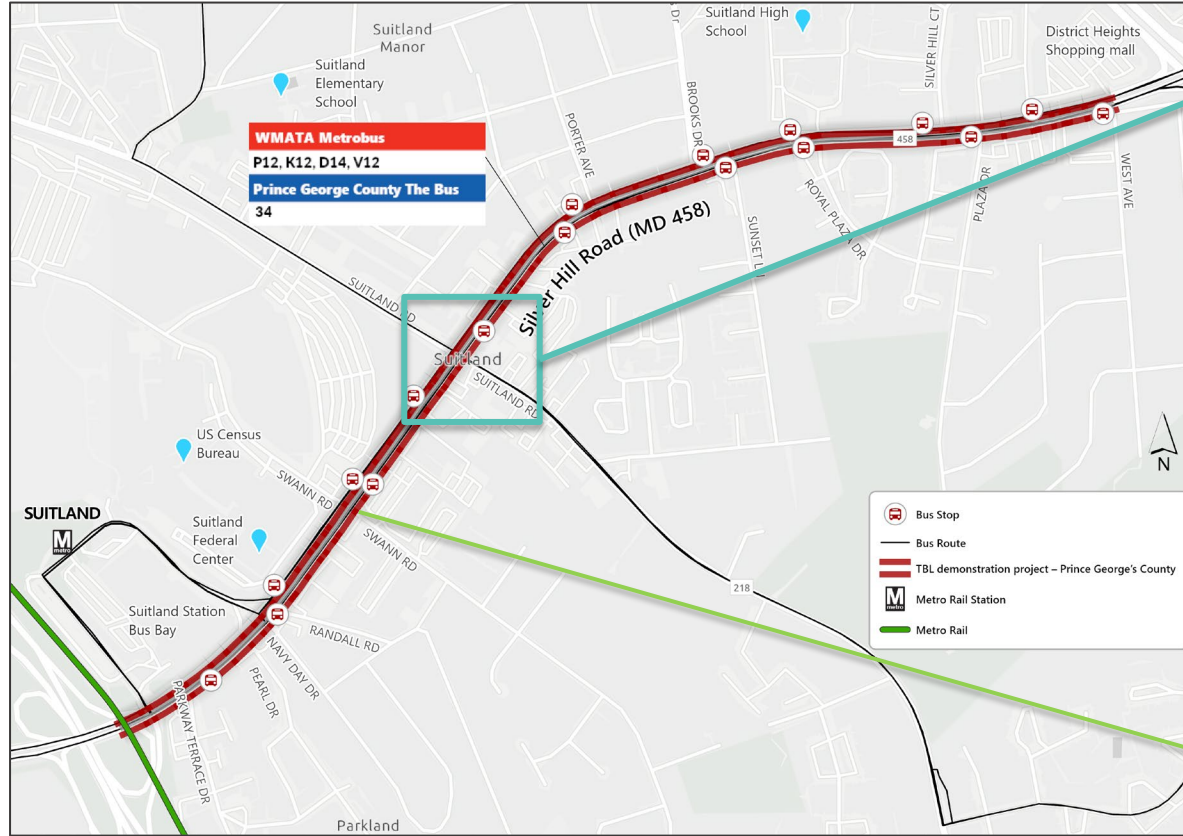
## Proposed Bus Rapid Transit (BRT) Corridors in Montgomery County



The proposed Tactical Bus Lane project on Georgia Avenue (MD 97) advances one of the projects identified in the Countywide Transit Corridors Functional Masterplan.

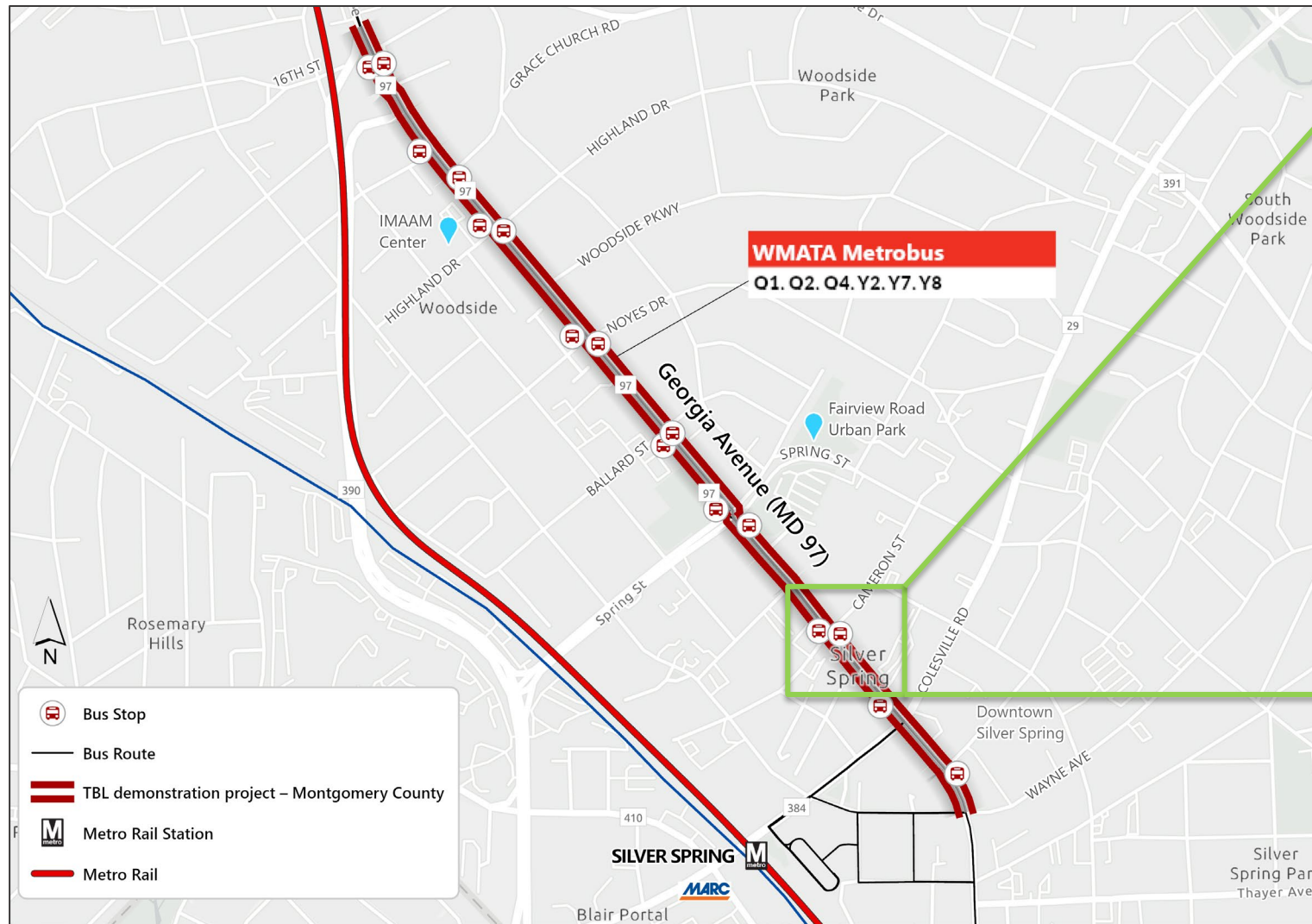
Countywide Transit Corridors Functional Masterplan (2013)

## Silver Hill Road (MD 458)

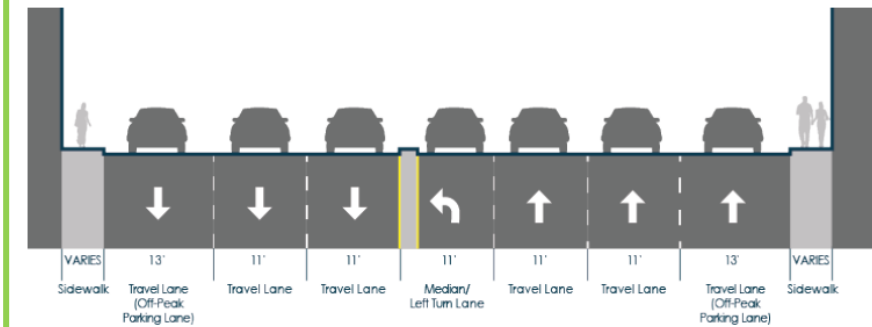


## 2. Project Details

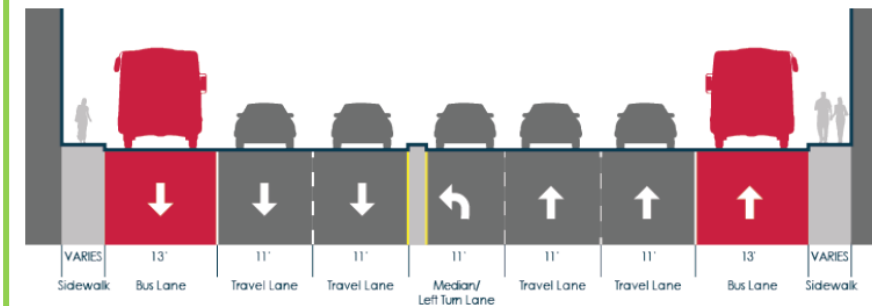
# Georgia Avenue (MD 97)



### Existing Typical Cross-Section



### Proposed Typical Cross-Section (Peak Period)



# Transit and Vehicle Data

## Silver Hill Road (MD 458)

Metrobus Routes	The Bus Routes	Combined Average Daily Weekday Ridership (Oct 2019)	Buses Per Hour (Jan 2022)	Metrobus Speeds (Oct 2019)	Average Vehicles Per Weekday (2019)	Number of Travel Lanes	Curb Lane Condition
D12, K12, P12, V12	34	12,246	12	7-18 mph	35,610	6	No parking anytime; Lane shared with bicyclists

- High ridership corridor multifamily residential, employment, retail, and entertainment destinations
- Important regional connection to the Metrorail Green Line
- Large organizations and federal employers, such as the US Census Bureau

# Transit and Vehicle Data

## Georgia Avenue (MD 97)

Metrobus Routes	Ride On Routes	Combined Average Daily Weekday Ridership (Oct 2019)	Buses Per Hour (Jan 2022)	Metrobus Speeds (Oct 2019)	Average Vehicles Per Weekday (2019)	Number of Travel Lanes	Curb Lane Condition
Q1, Q2, Q4, Y2, YZ, Y8, F4	12, 13, 14, 16, 17, 20	16,112	12	5-9 mph	38,150	6	No Parking North of Spring St / Off Peak Parking Downtown

- High ridership corridor with multifamily residential, employment, retail, and entertainment destinations in Downtown Silver Spring
- Important regional connection to the Metrorail Red Line, Ride On, FLASH, and MARC Brunswick Line at Silver Spring Transit Center

# Performance Evaluation

Evaluate bus reliability, speed, and traffic before and after installation

Increased speeds  
for slowest buses



Improved **reliability** for bus riders

Increased median  
bus speeds



Reduces overall travel times for bus riders

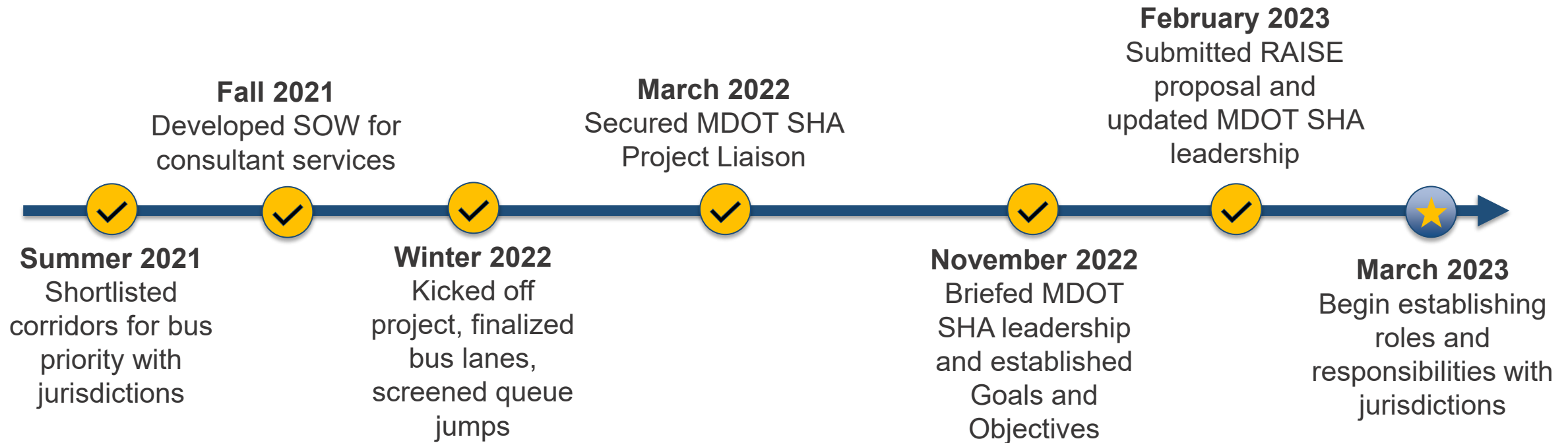
Traffic Analysis



- Allows mitigation for potential concerns before installation
- Provides a baseline for evaluation and future modifications

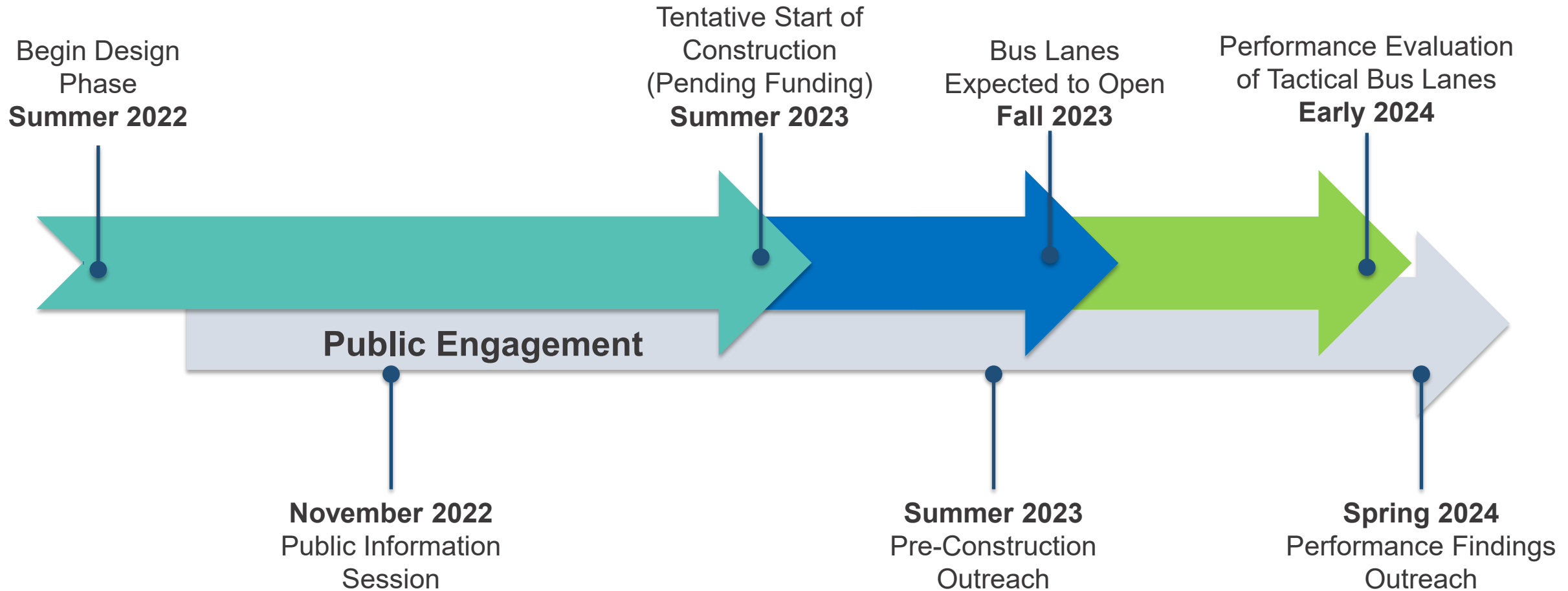
# Project Initiation and Progress

## Overview of Key Coordination Activities





# Project Schedule



# Project Elements in Tactical Bus Lanes and RAISE Projects

## Tactical Bus Lanes

**Project Construction Cost: \$5 million**  
**(Currently Unfunded)**

- Red paint for bus lanes
- Striping and Bus Only text
- Signage for times of operation, no parking, etc.
- Queue jumps and bus preferential treatments

## RAISE: \$19.8 million

**Project Cost: \$5 million WMATA & MDOT**

- Red paint for bus lanes
- Striping and Bus Only text
- Signage for times of operation, no parking, etc.
- Queue jumps and bus preferential treatments

**Project Cost: \$14.8 million USDOT**

- NEPA Review (likely Categorical Exclusion)
- Refinement of design to add amenities
- Milling and repaving
- Transit Signal Priority
- New Bus Shelters
- ADA Ramps and High Visibility Crosswalks

*WMATA is funding \$1.1 million for planning and design for the Tactical Bus Lanes project*

*WMATA and MDOT are both contributing \$2.5 million each toward the local match for the RAISE project*

## Merit Criteria



### Economic Competitiveness & Opportunity

- Total time travel savings of 137,913 Person-hours along both corridors
- \$1 million in discounted travel time savings



### State of Good Repair

- Concurrent maintenance schedule by full roadway re-pavement



### Innovation

- Dedicated bus lanes, transit signal priority, and queue jumps for improved safety and reliability



### Partnership & Collaboration

- Pioneering co-sponsorship and partnership of WMATA with MDOT



### Mobility & Community Connectivity

- \$0.3 million of discounted active transportation benefit



### Quality of Life

- 23 bus shelters constructed
- 33 crosswalks created



### Safety

- 433 crash incidents reduced
- NPV crash savings of \$34.6 million



### Environmental Sustainability

- 17 metric tons of CO2 emissions reduced
- Fuel Consumption down by 16,224 gallons



**Anikwenze Ogbue, PE**  
**Project Manager, Bus Priority**  
**[aogbue@wmata.com](mailto:aogbue@wmata.com)**  
**[BusPriority@wmata.com](mailto:BusPriority@wmata.com)**

**Bus Lanes Project Website:**  
**<https://wmata.com/initiatives/strategic-plans/Bus-Lanes/>**



**OMNIRIDE**

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➤ **OmniRide Update March 2023**

# What is Microtransit?

- A service model that sits between traditional fixed-route transit and taxi's
- Technology enables flexibly created routes and on-demand scheduling
- Ad-hoc pickup and drop-off points, within a few minutes walk of multiple customers
- Generally limited service zones
- Vehicles variety
- Vendors include Transloc, DemandTrans, Via, Transdev, RideCo



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# Advantages

- Fills gaps and extends reach of transit – serving locations or times of day with lower demand
- Complements fixed route transit by providing first/last mile service
- Addresses jurisdictional equity, connects more communities to the regional network
- Improves customer experience; introduces new riders to transit
- Data represents user needs - can adjust service to better meet demand



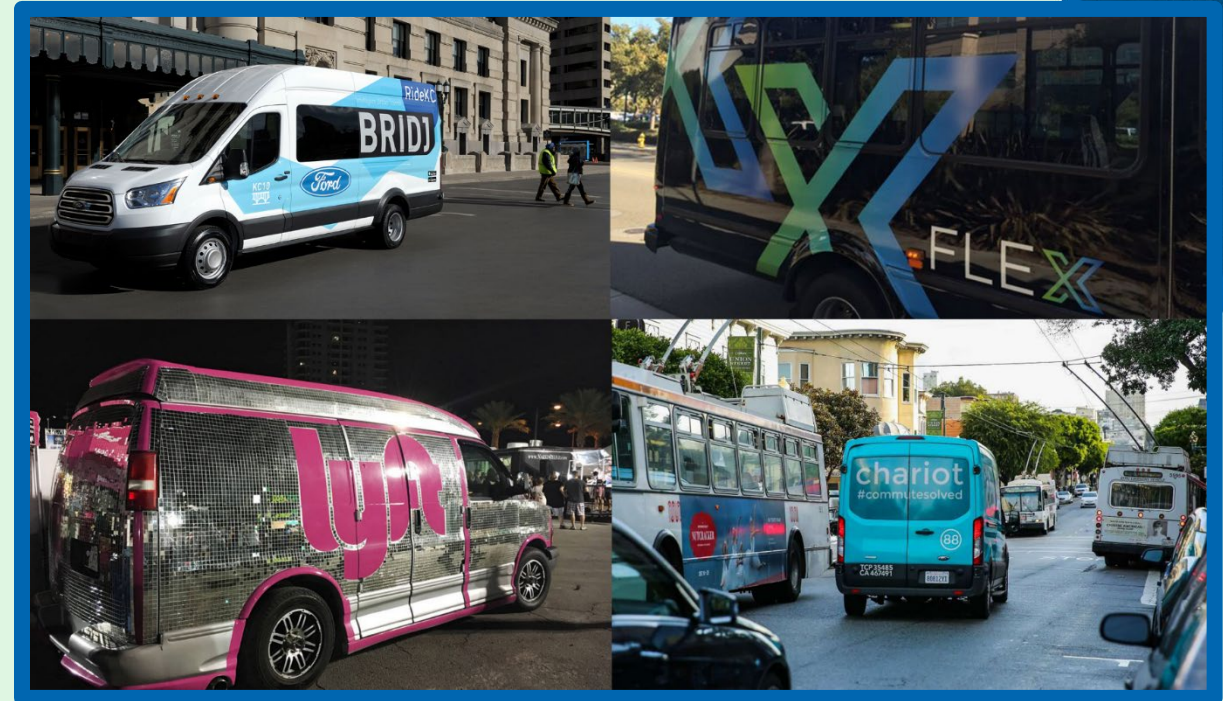
# Proposed Solution

## Microtransit / On-demand Transit



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- Service Enhancement
- Better headways
- Efficiency
- Improved perception of right size vehicle for service. Initially paratransit vehicle, later cutaway
- Allows greater frequency





# Corner-to-Corner Service



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Transportation service that directs passengers to a nearby pickup point and drops them off at a point close to their destination.

Vehicles are routed using a proprietary algorithm that determines the most efficient path to the requested pickup and drop off locations, with the ability to optimize for multiple parameters (eg. Traffic, new passengers, construction).





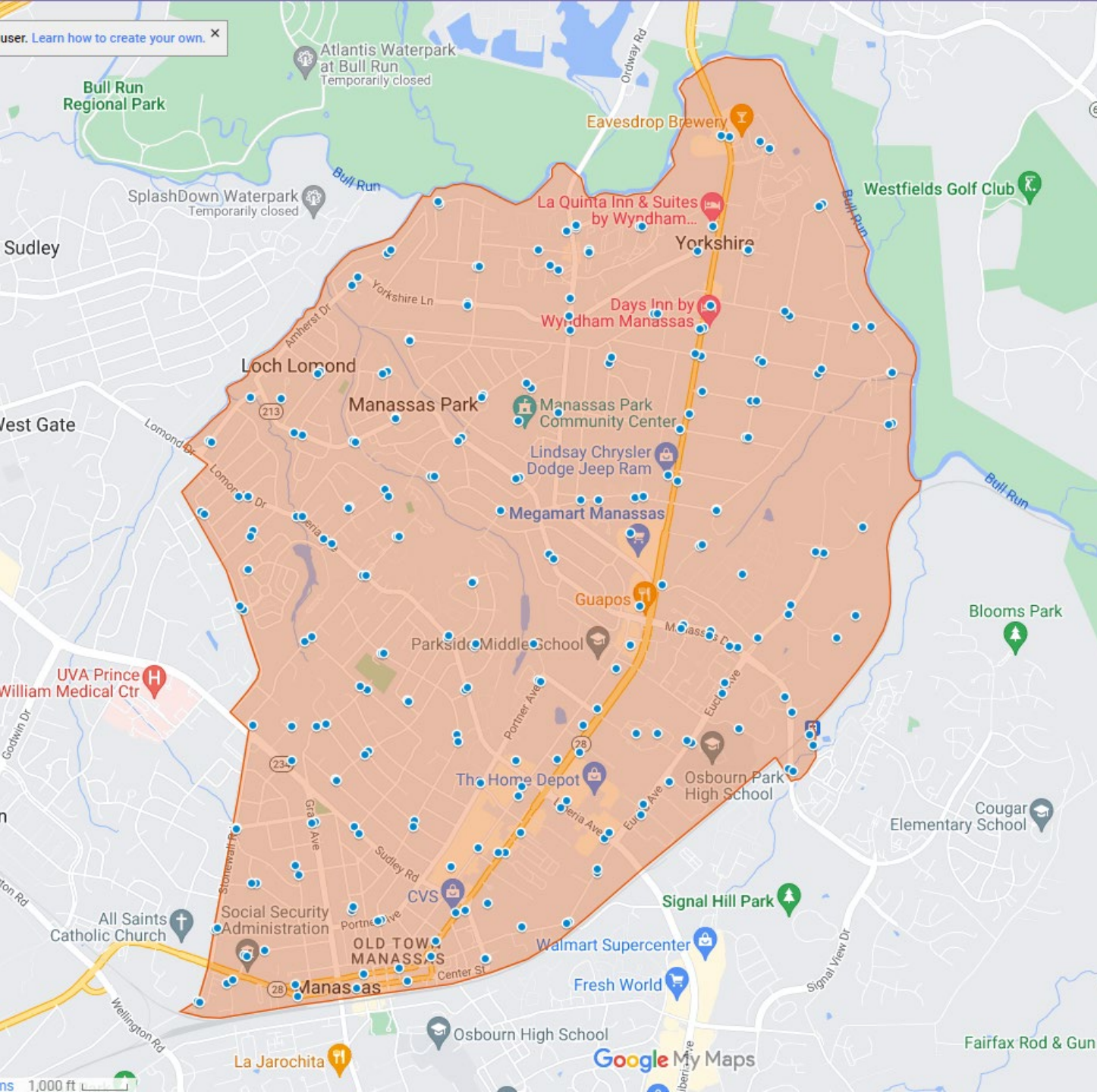
# OMNIRIDE CONNECT



# What is



- Began operation in December 2022 replacing under-utilized Route 68
- On-demand rideshare service, offering trips within a defined service area
- Allows passengers to request trips on demand, rather than hours or days beforehand
- Short local trips and uses small vehicles
- Safe, reliable and convenient option to connect to OmniRide Local bus routes
- Allows for Electronic Payment
- Provides for the ability for users to manage personal information, payment method, ride history, request rides and provide feedback on the service
- Provides real-time information related to vehicle location before and during the trip



# Manassas Park Microtransit Zone

- This map depicts all approved microtransit stops within the polygon
- All stops are within  $\frac{1}{4}$  mile walking distance from each other



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# Scheduling a Trip

## BOOK ON THE APP

- Download OmniRide Mobility App to Smart Phone or Tablet

## BOOK ON A WEB BROWSER

- <https://book.omniride.rideco.com/login>

## BOOK WITH A PERSON

- Call Customer Service Agents, Monday through Sunday, 8:30 am – 4:30 pm



**OmniRide Mobility**

RideCo Inc

Uninstall

Open

# Available Space Types

- Our Braun Minivans can handle:
- 6 ambulatory
- 4 ambulatory, 1 wheelchair
- 3 ambulatory, 2 wheelchair
- 2 bikes per bike rack
  - 2 out of 4 vans have bike racks

How many riders?

General	–	1	+
Passenger or large object			
General with Bike	–	0	+
Passenger seat plus a bike rack			
Accessible	–	0	+
Wheelchair or scooter			
Accessible Companion	–	0	+
Accessible passenger companion			
Accessible PCA	–	0	+
Trained personal care attendant			
Passenger + Service Animal	–	0	+
Passenger with guide dog or miniature horse			
Passenger + Mobility Aid	–	0	+
Passenger with life support equipment or mobility device			

CANCEL OK

# Benefits of Using App

## Real-time walking directions

- The app is designed to direct you to walk to the correct side of the street to be picked up.

## Live vehicle tracking

- See where the van is on the map when operator is on their way to pick up passenger

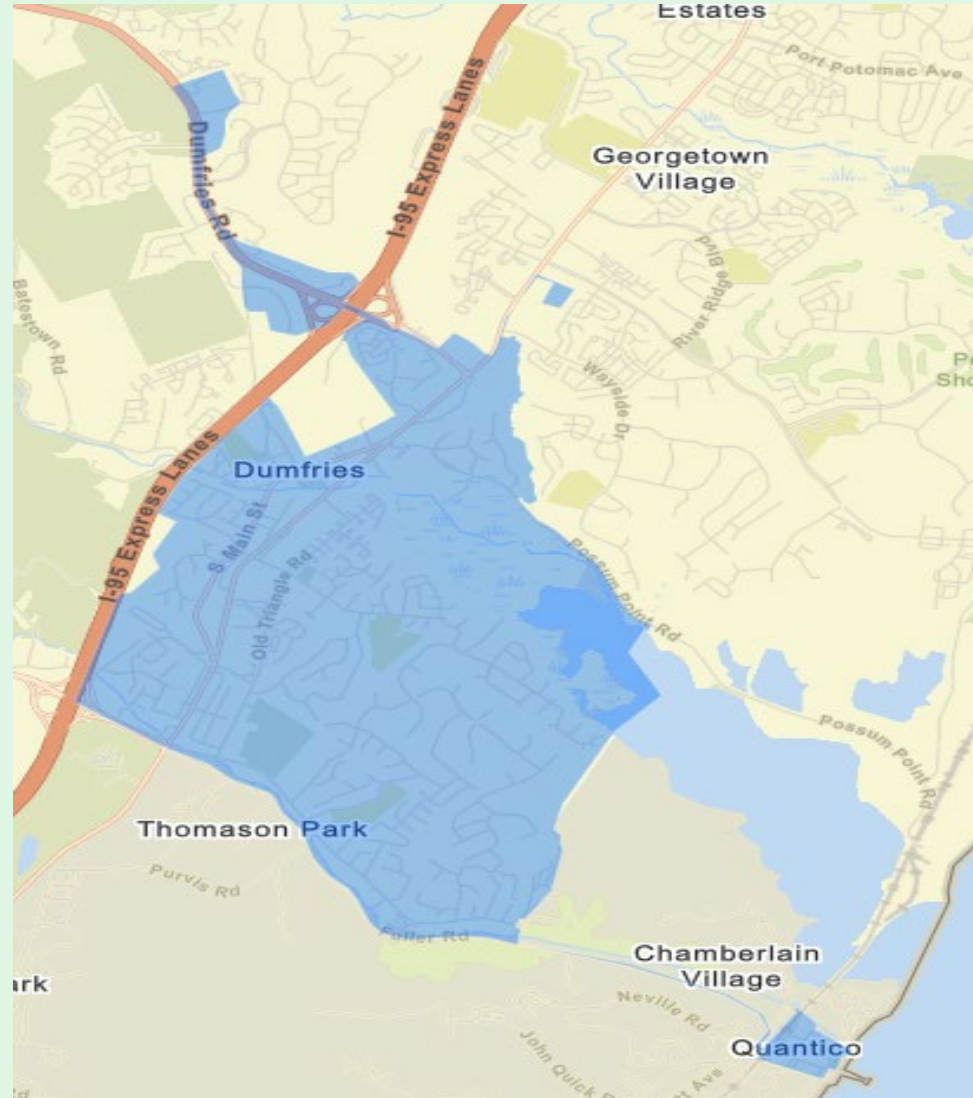
## Real-time arrival notifications

- OmniRide is on the way to pick you up!
- OmniRide has arrived! Please board the vehicle.



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# Proposed coverage Zone



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# Prince William Yellow Cab Role

- Will be our private partner for trips onto Quantico
- To end use will appear the same but will be in Yellow Cab vehicles
- App will be the same



# Service Information



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- Monday – Friday, 6:00 am until 10:30 pm
- No fares currently
- When fares return to local fixed route, each OmniRide Connect trip will cost \$2.00
- Only Same Day trips permitted within OmniRide Connect Zone
- Wait time for service is intended to be no more than 15 minutes from time of reservation to time of pickup
- Would run from existing Potomac Ave stop. Changes be made
- Late spring 2023 estimated start



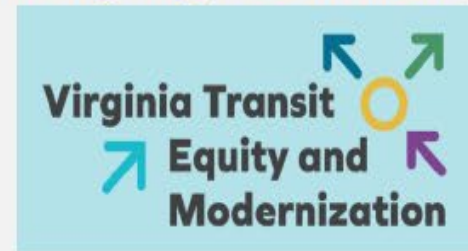


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# Zero Emissions Update

# Study Purpose

- ❖ **Develop** a ZEB transition implementation plan that provides for continuous and reliable OmniRide service.
- ❖ **Reduce** the total lifecycle emissions of OmniRide operations.
- ❖ **Identify** a ZEB technology or set of technologies that advance(s) environmental justice in the communities in which OmniRide operates.
- ❖ **Select** a ZEB technology or set of technologies that is cost-effective for OmniRide operations.
- ❖ **Create** a ZEB transition implementation plan that is scalable for full-fleet transition, and flexible given rapidly changing technology.



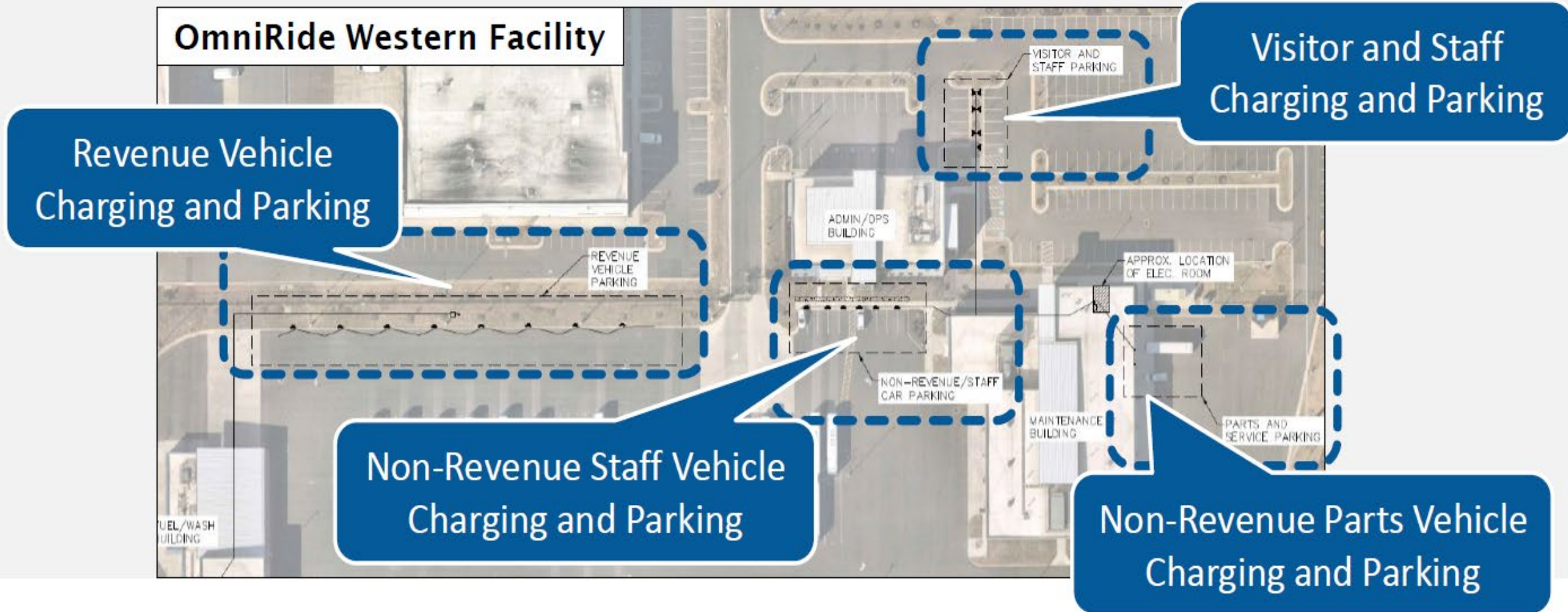
# Study Process



# Recommendation 1

## Deploy battery electric paratransit vans and staff vehicles

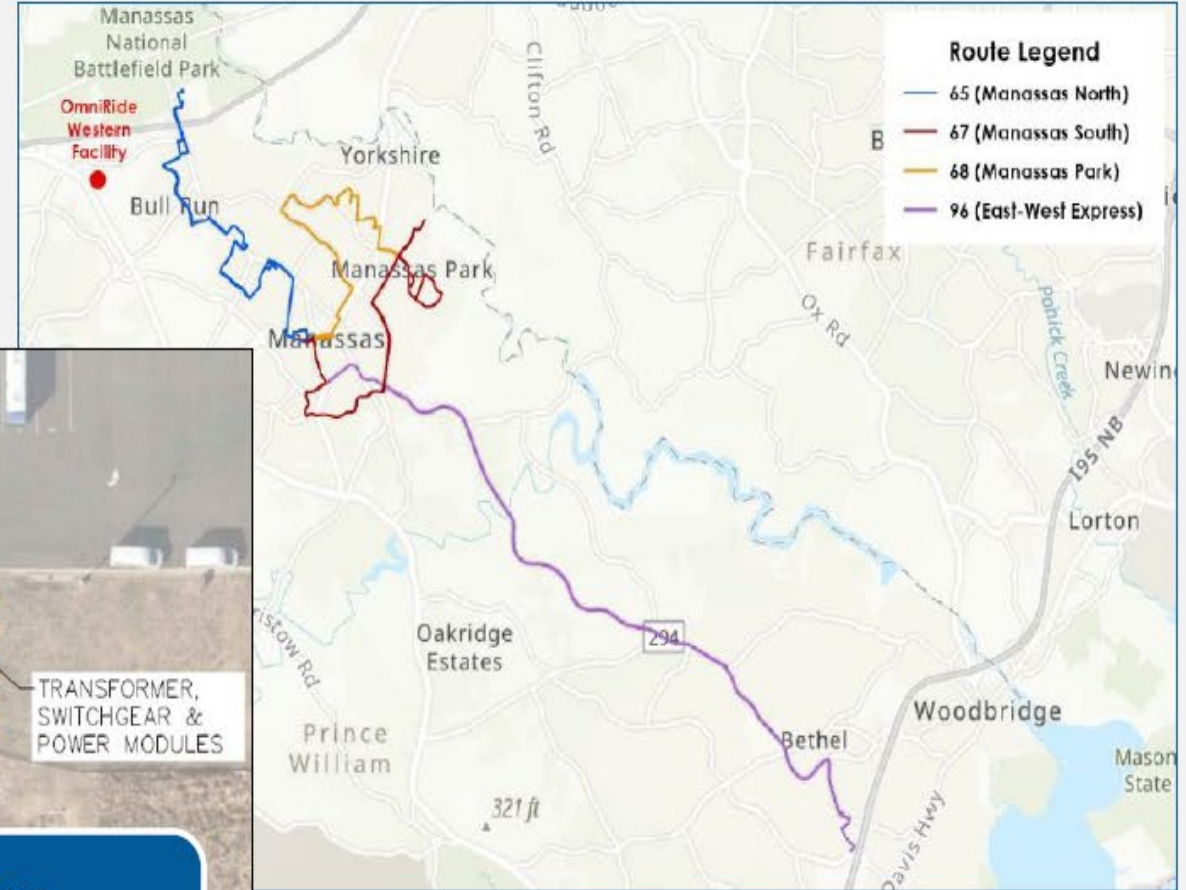
- Immediate-term opportunity to deploy EV technology at a small scale.
- Serve as an introduction for OmniRide staff to EV equipment and operations.



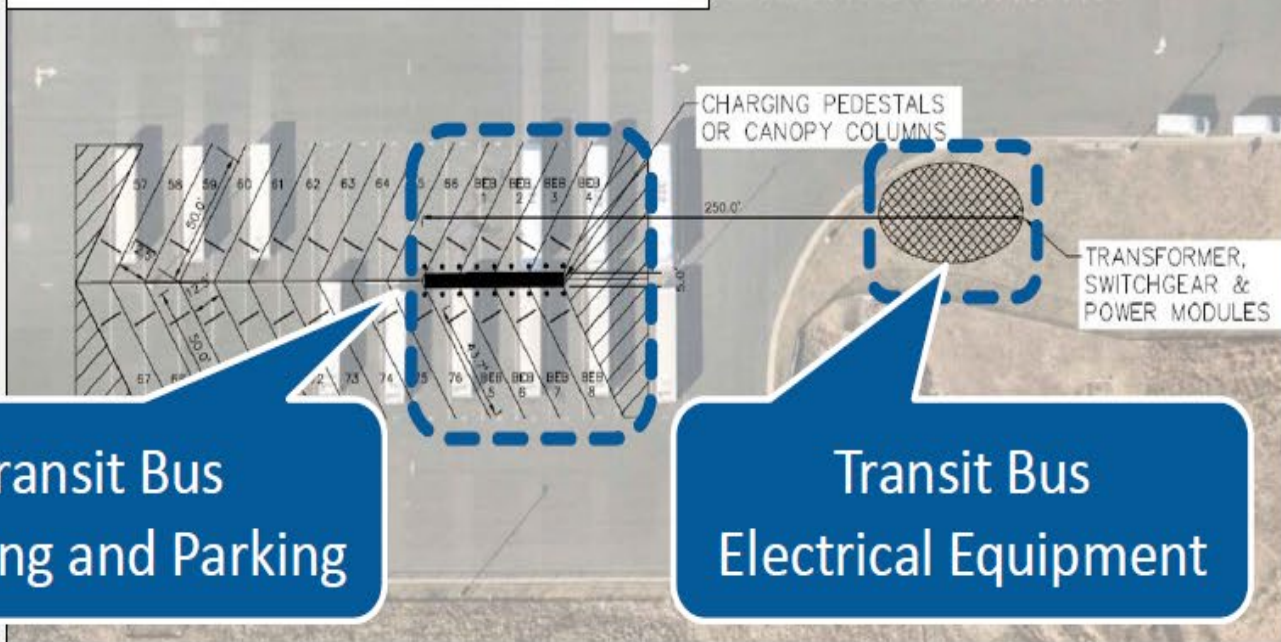
# Recommendation 2

Short-term adoption of BEBs on select OmniRide local routes and east-west express

- Purchase 6-8 BEBs, equipment and restripe parking.
- Monitor for approximately 2 years.



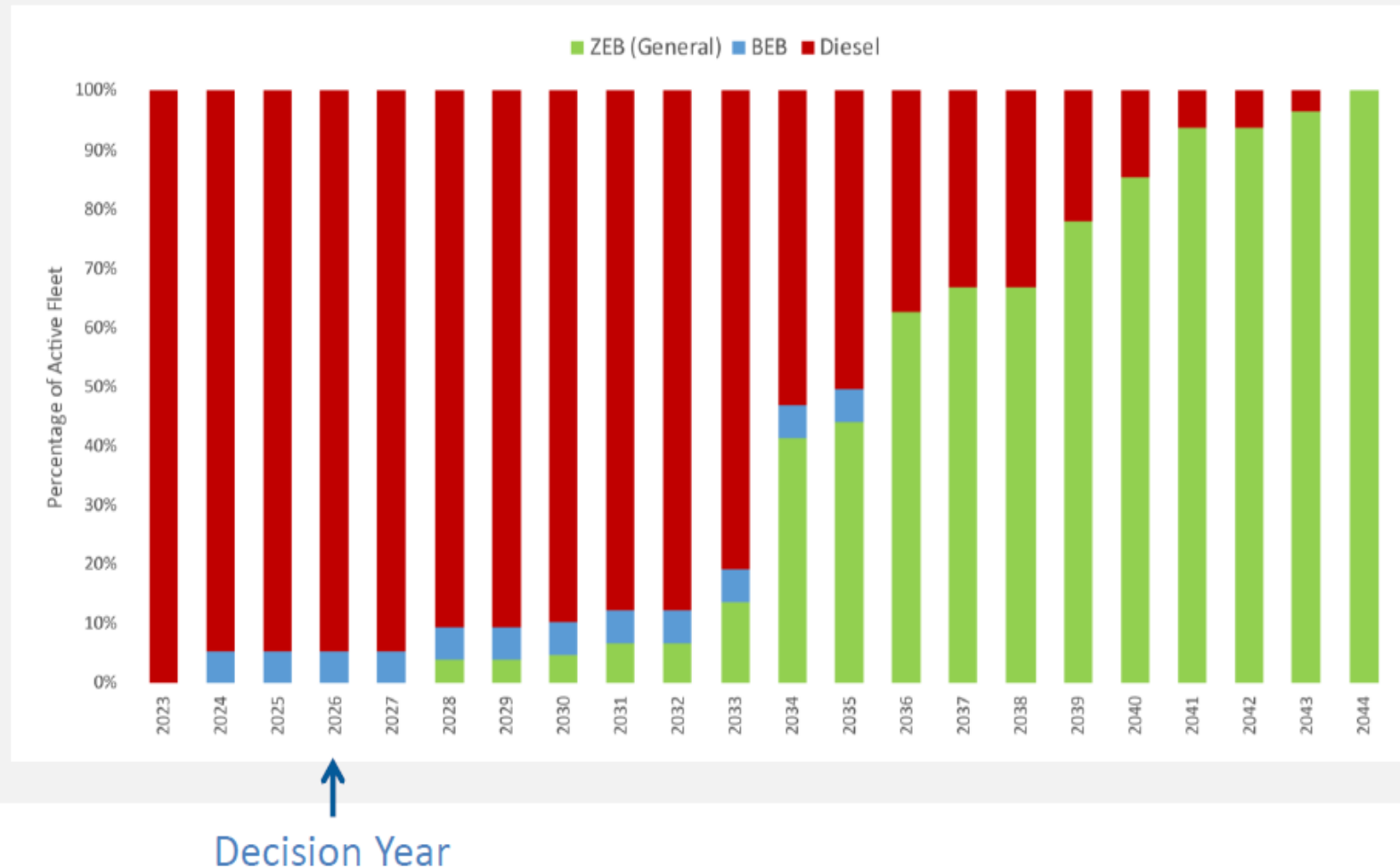
## OmniRide Western Facility



# Recommendation 3

Re-evaluate the state of the market to determine a preferred ZEB for long-term implementation

- Monitor the performance of BEBs during the monitoring period.
- After 2 years (approx. 2026), reassess the state of the market.
- Select a preferred ZEB technology to adopt in the long-term.
- Scale-up infrastructure.





# Capital Costs for Rolling Stock

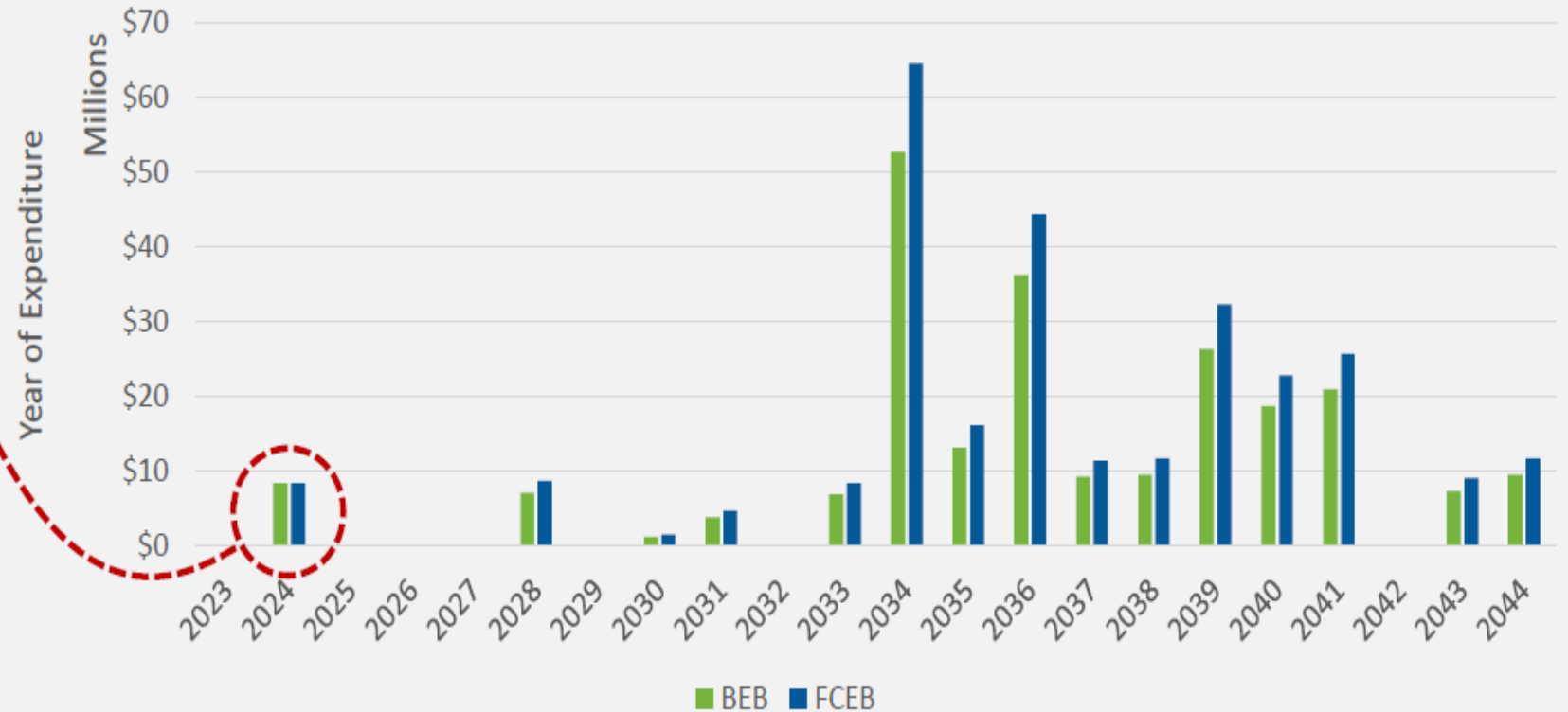
Potential capital costs for full-fleet transition

## Near Term

Item	Count	Cost
Battery Buses	8	\$8,472,000
Paratransit Van	8	\$1,504,000
<b>Total</b>	<b>16</b>	<b>\$9,976,000</b>

## Long Term

Bus Fleet Replacement



# Capital Costs for Facilities

Potential capital costs for full-fleet transition

## Near Term

Cost Estimate Section	Cost
Exterior Improvements	\$ 66,000
Electrical Components	\$ 1,917,000
Construction	\$ 1,106,000
Architecture / Engineering	\$ 664,000
<b>Near-Term Project Total (Rounded)</b>	<b>\$ 3,753,000</b>

## Long Term

Facility	BEB	FCEB
<b>Western Facility</b>	\$ 12,300,000	\$ 6,900,000
<b>Woodbridge Facility</b>	\$ 28,800,000	\$ 13,800,000

# Programmatic Cost Changes

Potential programmatic impacts resulting from a 100% transition

Technology Type	Cost of Fuel Per Mile	Cost of Scheduled Maintenance Per Mile	Cost of Unscheduled Maintenance Per Mile
Fuel Cell Electric Bus (FCEB)	\$ 1.69	\$ 0.14	\$ 0.30
Battery Electric Bus (BEB)	\$ 0.41	\$ 0.41	\$ 0.32

- Electric power varies in cost throughout the day
- Overnight charging is usually the least costly
- Charge management solutions (software) can help to manage charging demand and therefore reduce cost

# Funding Sources

Near- and long-term opportunities for grants or other sources

- DRPT

- Capital Assistance (MERIT) - Fleet Maintenance, Small Expansion, and Fleet Replacement (February 1, 2023, varying levels of match from 50% to 68%)
- Demonstration Grant for microtransit and shared charging infrastructure
- SMART SCALE- apply in 2024 on basis of local accessibility and environmental quality; if expansion, could apply for congestion mitigation

- NVTC

- Commuter Choice

- NVTA

- FTA

- Bus and Bus Facilities Competitive
- Low- or No-Emissions Vehicle Program
- Congestion Mitigation and Air Quality (CMAQ) Improvement Program

- Partnerships (Local and Private)

# What else?



- ▶ Eastern Local Bus Restructure-Spring 2024
- ▶ Proposed Commuter Bus expansion Stafford/Spotsylvania-2024
- ▶ Continued refinement of commuter service based on demand (currently 60% pre pandemic)
- ▶ Mobile fare payment pilot underway



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# Thank You! Any Questions?

Perrin Palistrant, Director of Operations and Operations Planning  
[ppalistrant@omniride.com](mailto:ppalistrant@omniride.com)

# MARC Brunswick Line Expansion Study Technical Report

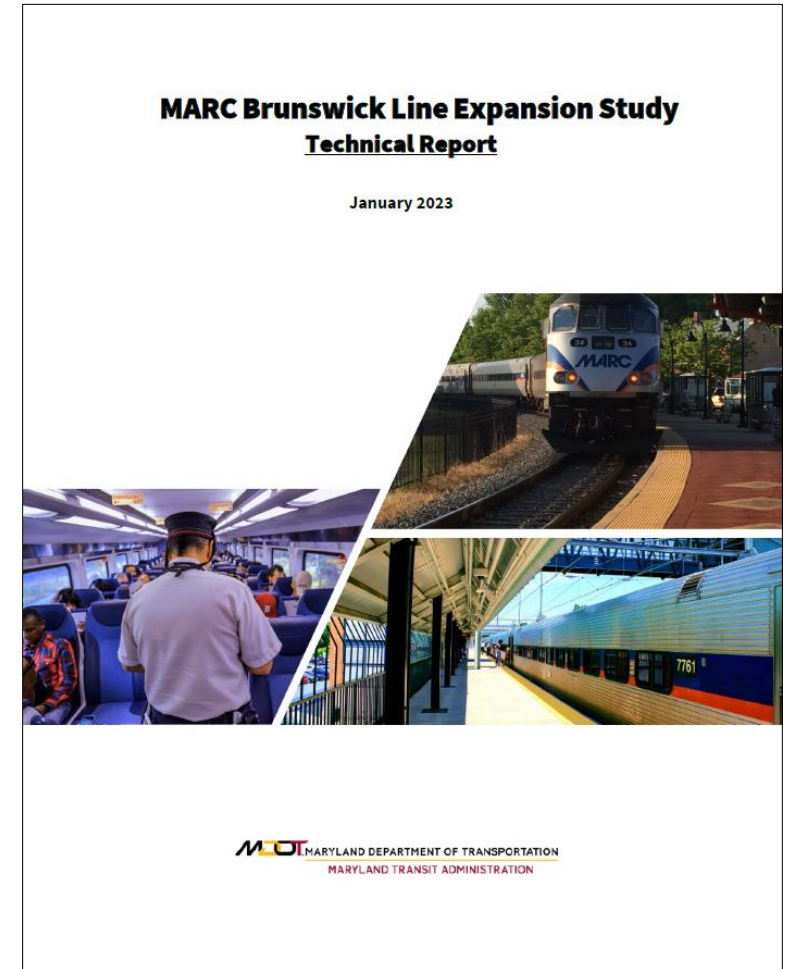
Public Meeting  
March 8, 2023



MARYLAND TRANSIT  
ADMINISTRATION

# Presentation Overview

- Existing Conditions
- Potential Markets for Increased Ridership
- Purpose of the Brunswick Line Study Technical Report
- Corridor Constraints
- Potential Operating Scenarios and Projects
- Western Maryland Alternatives





# MARC Commuter Rail Service

## MARC Commuter Rail Lines:

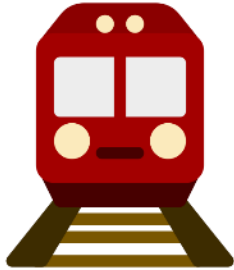
- Brunswick Line
- Camden Line
- Penn Line



# Commuter Rail Service in the Brunswick Corridor



**Weekday  
peak hour  
service**



**18  
Daily  
trains**



**19  
Stations**



**Avg. Weekday  
boardings**  
**7,000 (Oct 2019)**  
**2,300 (Nov 2022)**



**CSX access  
agreement**

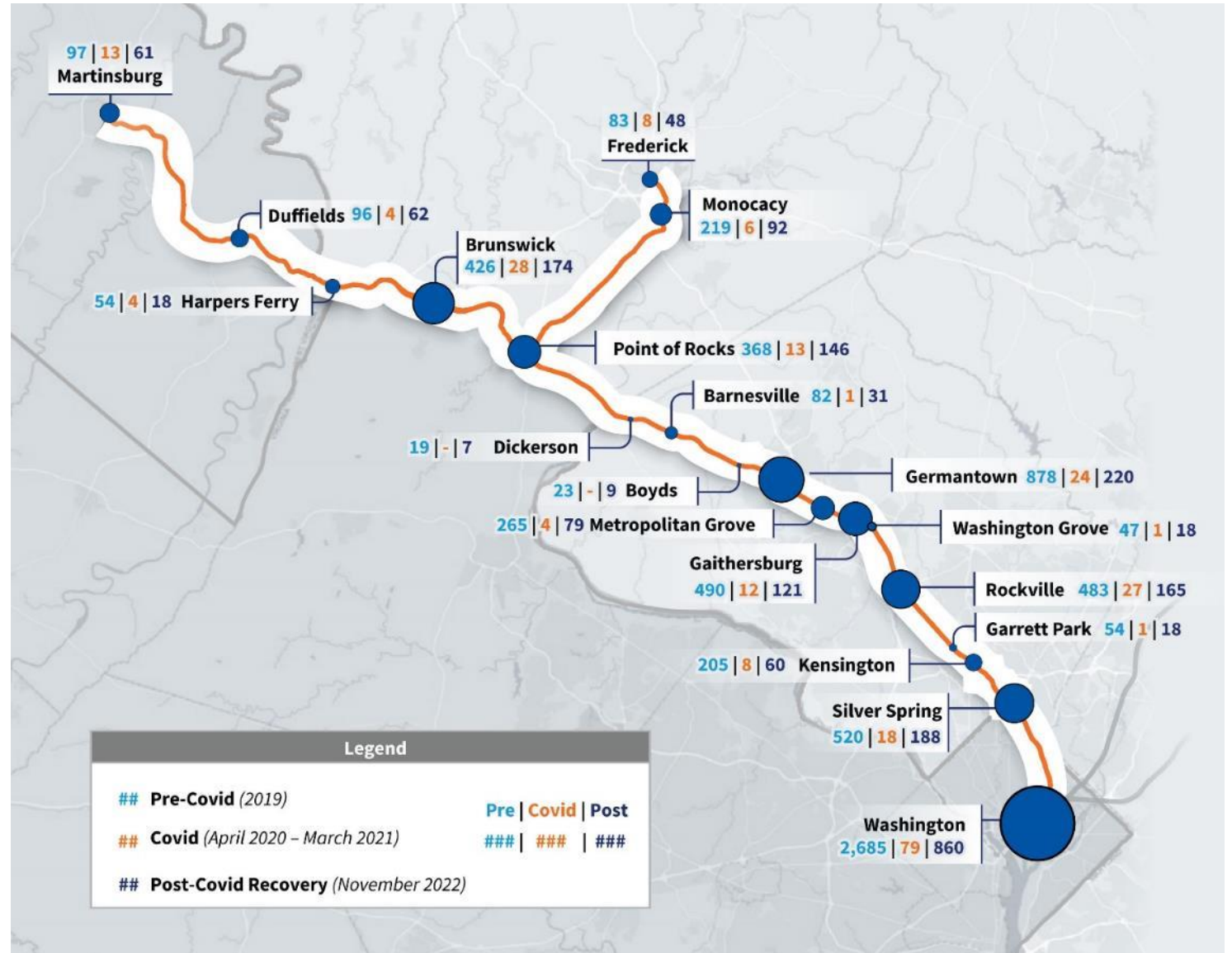
# Origins and Destinations

## Major Trips Origins:

- Brunswick
- Point of Rocks
- Germantown

## Major Trip Destinations:

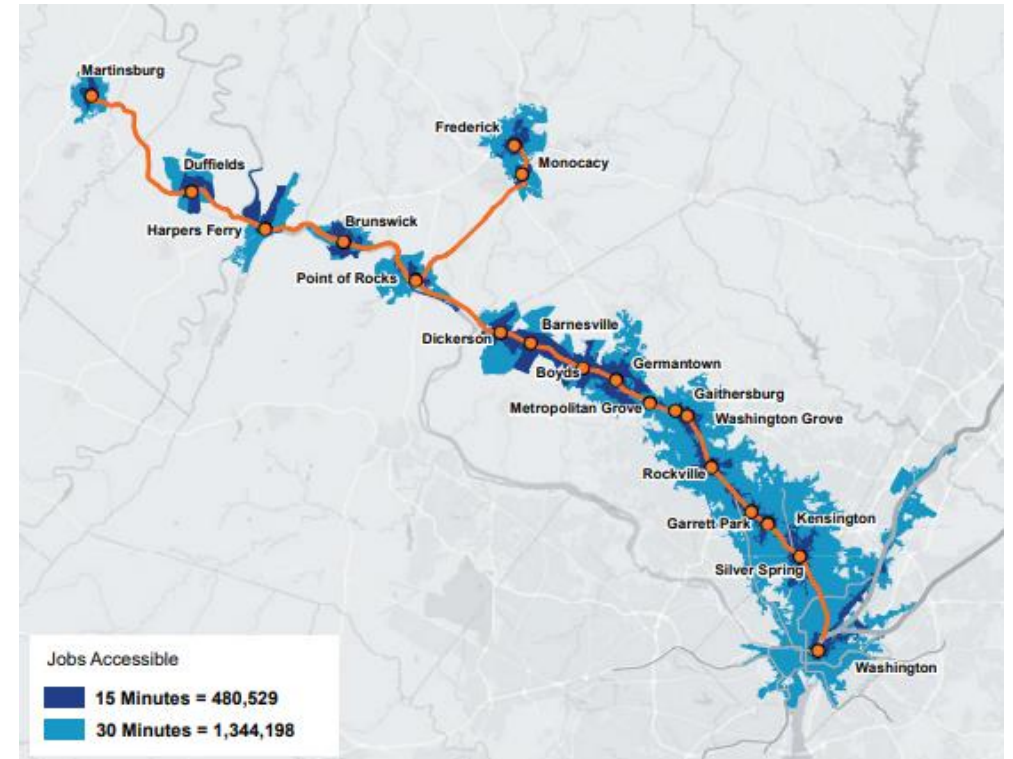
- D.C. (Union Station)
- Rockville
- Silver Spring



# Corridor Trip Patterns

The primary **trip pattern is to jobs near D.C.** in the morning and returning in the evening.

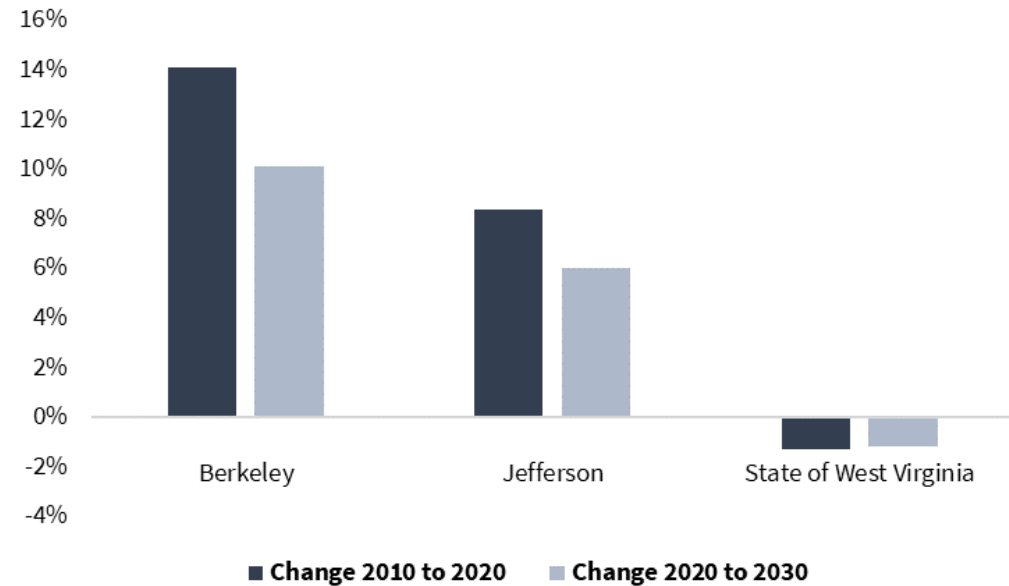
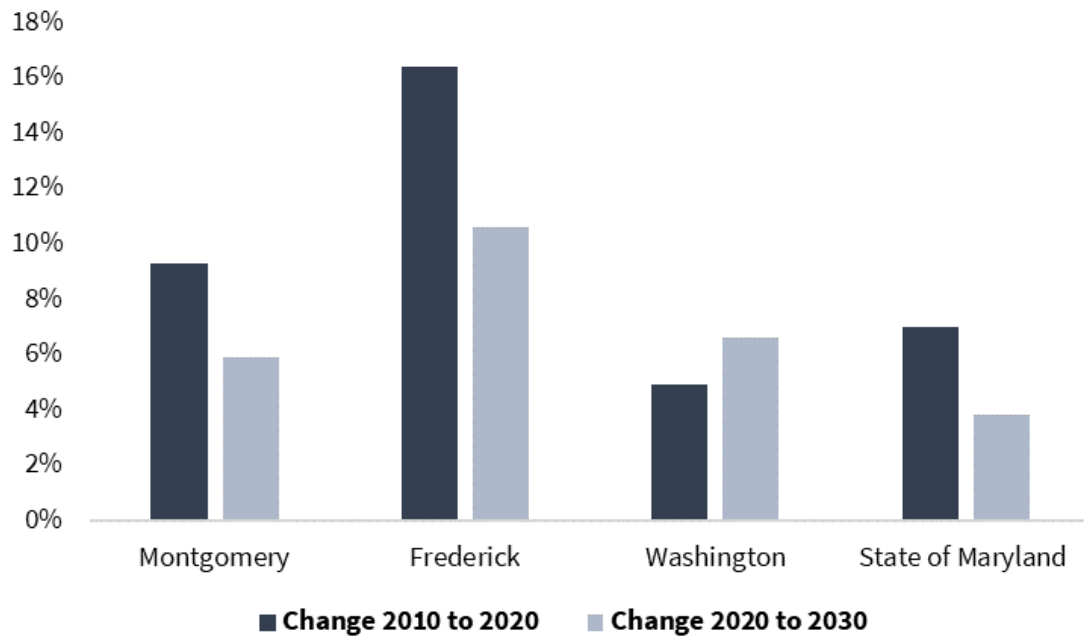
Origin Zone		To Silver Spring (Zone 2)		To Washington, DC (Zone 8)	
Zone #	Name	# Workers	% of Workers	# Workers	% of Workers
7	Cumberland	104	0.46%	118	0.52%
6	Hancock	53	1.17%	84	1.85%
5	Hagerstown	1,141	1.86%	1,896	3.09%
4	Brunswick	467	3.38%	714	5.17%
3	Frederick	3,579	3.66%	5,575	5.70%
1	Montgomery County	44,966	12.09%	102,888	27.67%



Home-to-Work trip analysis conducted using US Census' Longitudinal Employer-Household Dynamics (LEHD) program data

# Corridor Population Growth

- Maryland and West Virginia counties served by the Brunswick line are **growing faster** than most counties in those states.
- Population growth increases the **demand for rail** services.



# What Does this Mean for the Brunswick Line?

- **Potential Service Enhancements**
  - Additional rush hour service
  - Reverse peak direction trains during rush hours each weekday
  - Additional midday service
  - Weekday late night service
  - Weekend service
- **Operating speed improvements with infrastructure enhancements for trains serving Frederick**
- **Capacity Improvements (Kensington to Point of Rocks)**
- **Service to Western Maryland (Hancock and/or Cumberland)**

# Constraints

## Natural and Physical Constraints\*

- Facilities
- Environmental Resources
- Track Elements
- Other
- Total of 258 potential constrains, with at least 16 likely significant constrains

Resource	Total	Significant Constraints
Facilities	177	8 Germantown station; Point of Rocks station; Public road (Blair Road and impacted homes); Purple Line; Metro Red Line adjacent to CSX; Metro Trail impact; four story residential bldg; High-rise office (National Weather Service)
Environmental Resources	24	5 Historic bridges; park impacts; historic Silver Spring RR Station; historic Kensington Station;
Track Elements	50	2 Lack of space between C&O Canal National Park and cliffs requiring new tunnels (2 locations)
Other	7	1 Narrow property acquisition to widen ROW that includes a park
<b>Total</b>	<b>258</b>	<b>16</b>

\* Based on high level review of information pulled from public records . Constraints apply if the whole corridor were widened for a third track.

# Constraints - Historic

## Historic Resources

- MARC operates within the original B&O Railroad Old Main Line (1831) and Metropolitan Branch (1873).
- As such, some of the bridges and buildings along the corridor are or may be historic structures.
- State and Federal rules and laws may protect some of these historic resources.

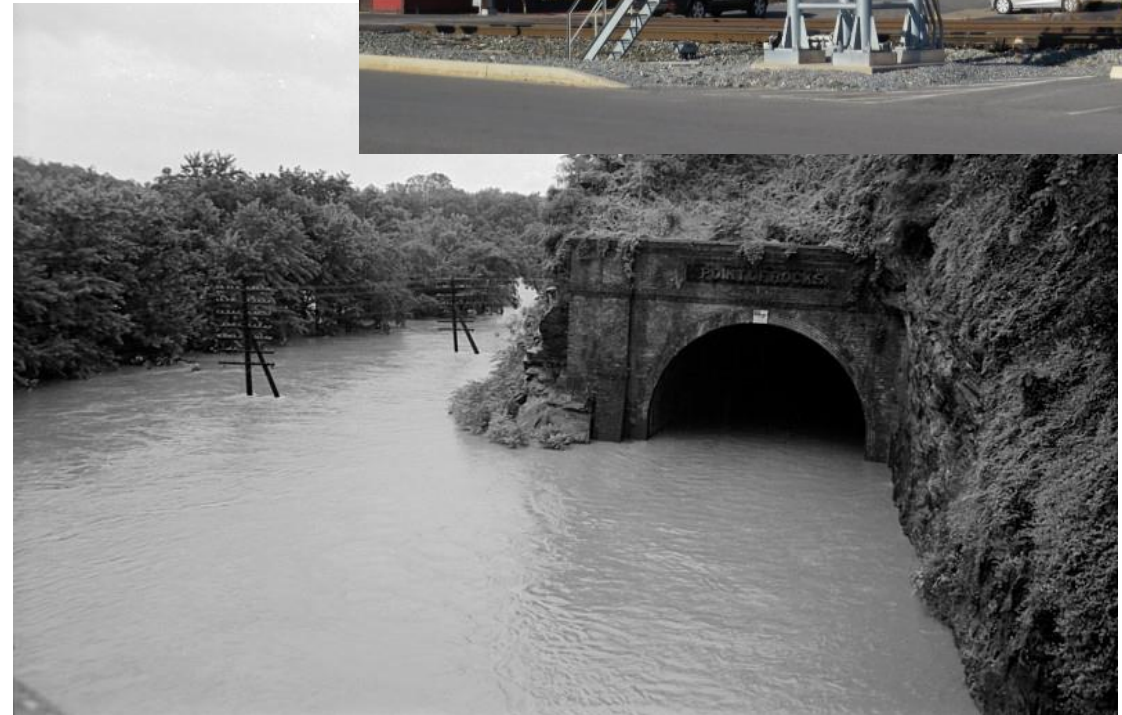




# Constraints - Flooding

## Flooding

- The Brunswick Line is within the Potomac River floodplain for approximately 19 miles.
- Past flooding has impacted operations and put infrastructure at risk.
- The track itself sits below the level of major flooding events.



# Constraints - ROW

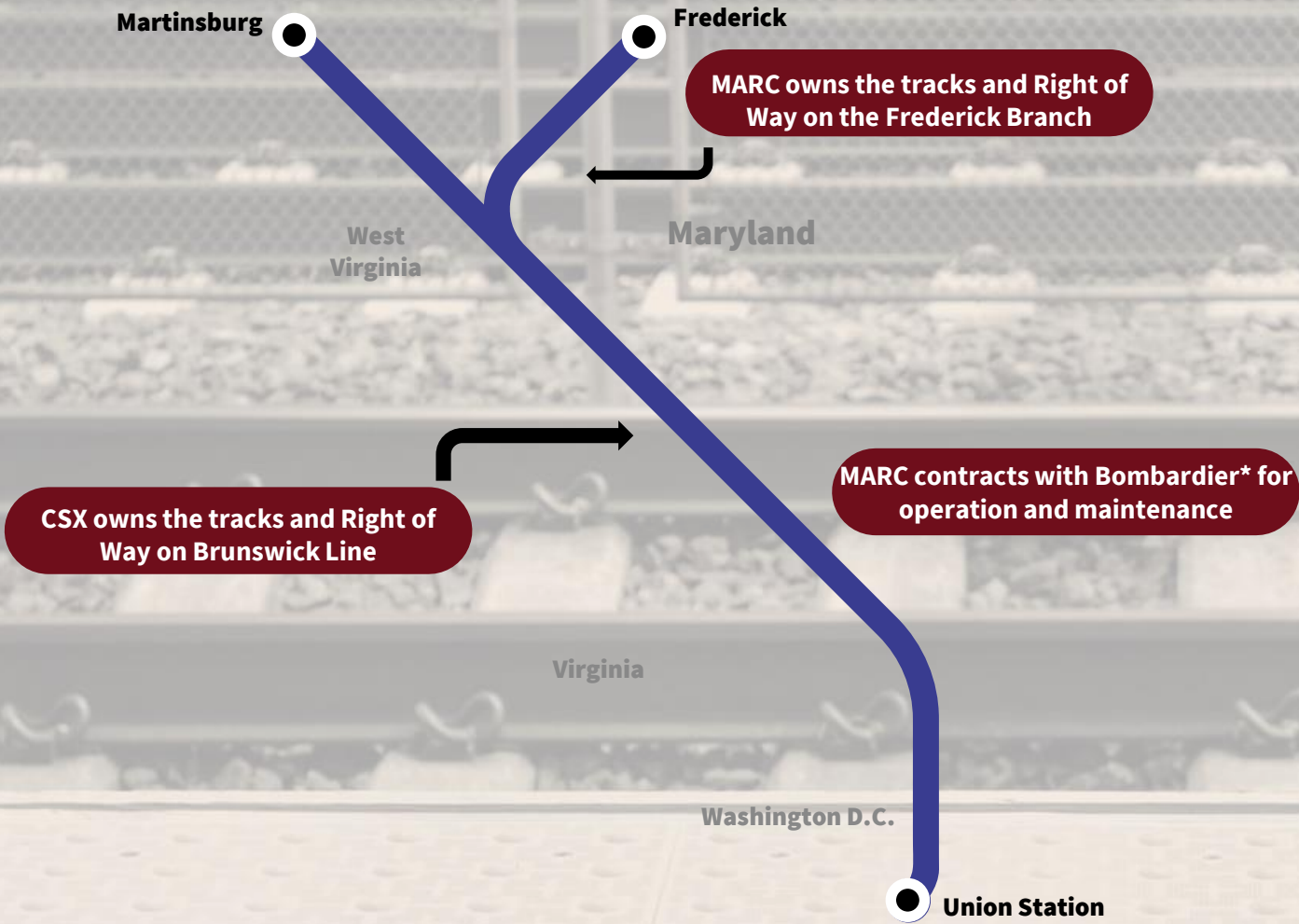
## Available Rights of Way

Space for additional track is limited due to Metrorail Red Line, Purple Line and adjacent developed uses.



Image source: Wikimedia Commons free media depository ([www.commonswikimedia.org](http://www.commonswikimedia.org))

# Constraints - Ownership and Operations



## Structure

- The Brunswick Line operates by agreement on tracks owned by CSX.
- CSX controls scheduling, track conditions, and maintenance.
- Service changes must be coordinated with and approved by CSX.

\*now wholly owned by Alstom

# Operating Scenarios

- Weekend and new peak hour service are expected to have the highest ridership impact.
- Service beyond typical commute times expands the markets served and regional benefits.

		AM   PM Peak Service Enhancements Rush Hours		Service Enhancements Weekend (AM   Midday   PM)			Service Enhancements Midday		
Daily Trains	Trains per Period	1 to DC (AM) 1 from DC (PM)	2 to DC (AM) 2 from DC (PM)	3 to DC (AM) 3 from DC (PM)	5 to DC (AM) 5 from DC (PM)	8 to DC (AM) 8 from DC (PM)	1 to DC 2 from DC	3 to DC 3 from DC	5 to DC 5 from DC
	Total Daily Trains	+2	+4	+6	+10	+16	+3	+6	+10
Ridership Potential for Additional Trips		High		High			Medium		
Headway		20-25 min.	15-20 min.	TBD	TBD	TBD	60 min.	60 min.	60 min.

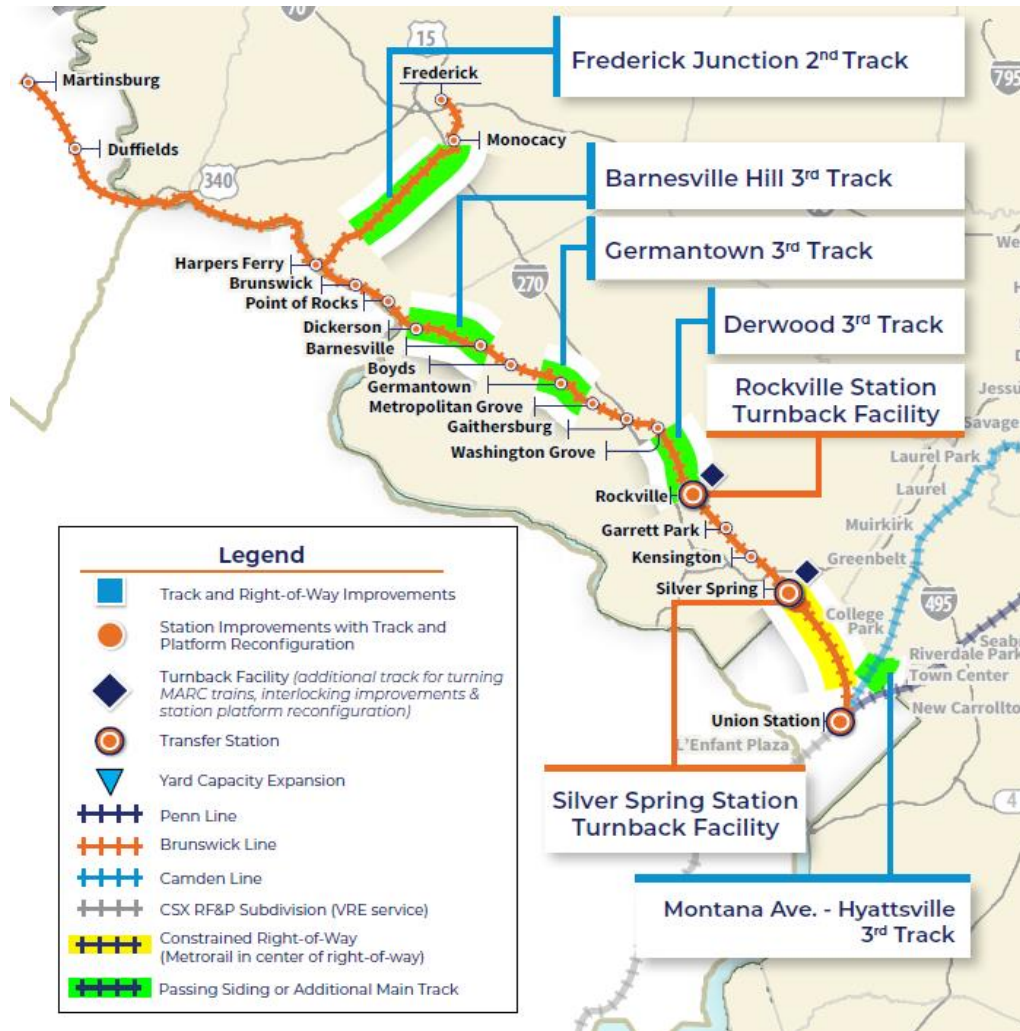
  

		Service Enhancements Weekday Late Night (After 8 PM)		AM   PM Peak Service Enhancements Reverse Direction			
Daily Trains	Trains per Period	1 from DC (PM)	2 from DC (PM)	1 from DC (AM) 1 to DC (PM)	2 from DC (AM) 2 to DC (PM)	3 from DC (AM) 4 to DC (PM)	3 from DC (AM) 5 to DC (PM)
	Total Daily Trains	+1	+2	+2	+4	+7	+8
Ridership Potential for Additional Trips		Low		Low			
Headway		N/A	N/A	20-25 min.	20-25 min.	20-25 min.	20-25 min.

Low = less than 5% increase    Medium = 5 to 10% increase    High = greater than 10% increase

# Corridor Potential Projects

Projects as described are high level, have not undergone engineering review, and are subject to CSX review and approval. These projects were identified to avoid the most constrained areas while supporting service goals.



Potential Capital Investment*	Description	Expected Costs
<b>Barnesville Hill Third Track</b>	4.5 miles of track between Barnesville and Boyds	\$
<b>Frederick Junction Second Track</b>	8.1 miles of mainline track on the Frederick Spur and 2.2 miles between Point of Rocks and Frederick to increase maximum operating speed	\$\$
<b>Derwood Third Track</b>	2.3 miles of additional track between Rockville and Washington Grove	\$
<b>Silver Spring/Rockville Turnback Facility</b>	New Station track, interlocking and platform at Silver Spring or Rockville to terminate additional train frequencies.	\$\$\$
<b>Capital Subdivision Siding</b>	2.8 miles of siding track on the capital subdivision	\$\$
<b>Germantown Third Track</b>	1.9 miles of additional mainline track between Washington Grove and Germantown	\$

\$ = \$50M to \$100M

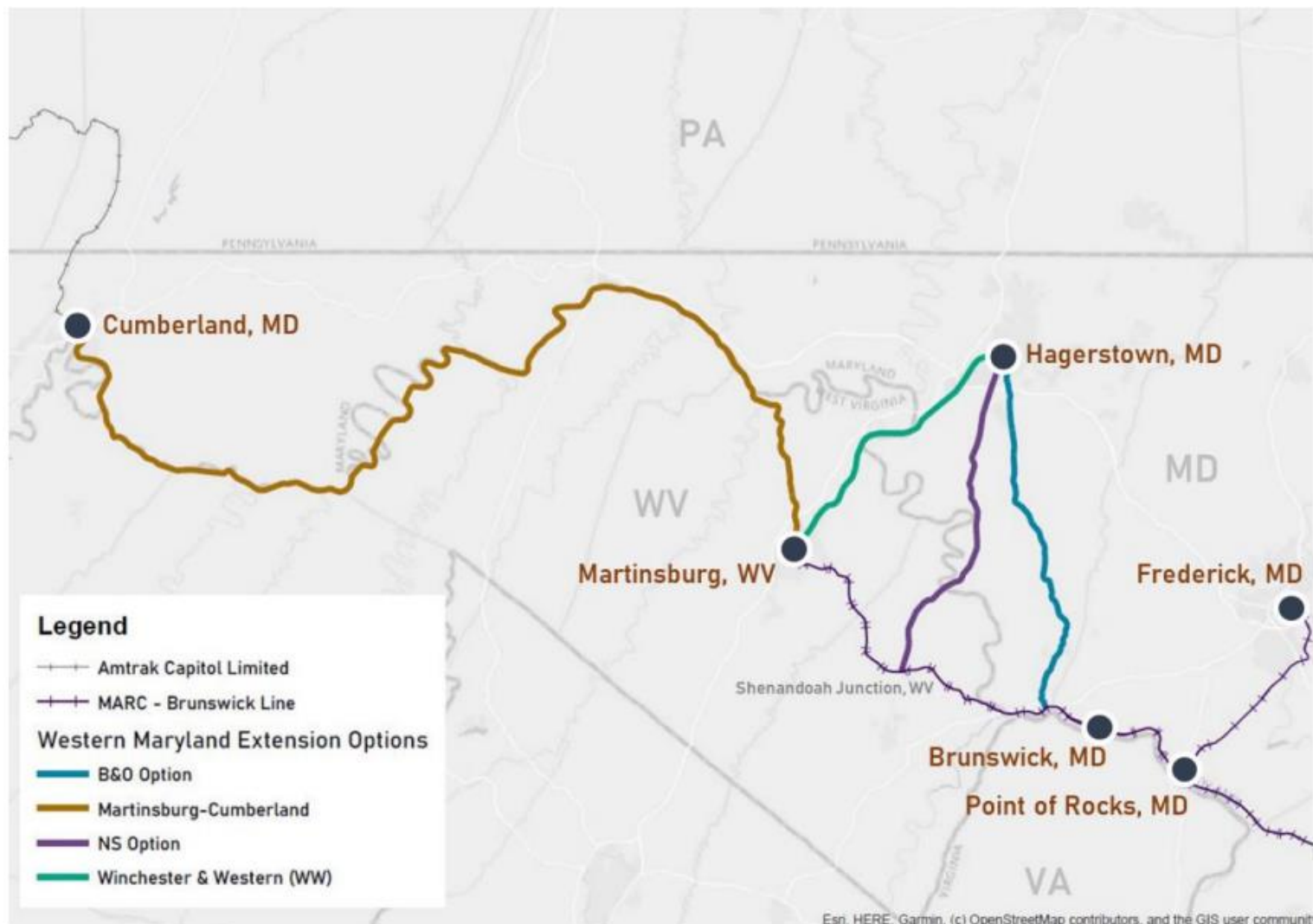
\$\$ = \$100M to 300M

\$\$\$ = \$300M to \$500M

# Western Maryland Alternatives

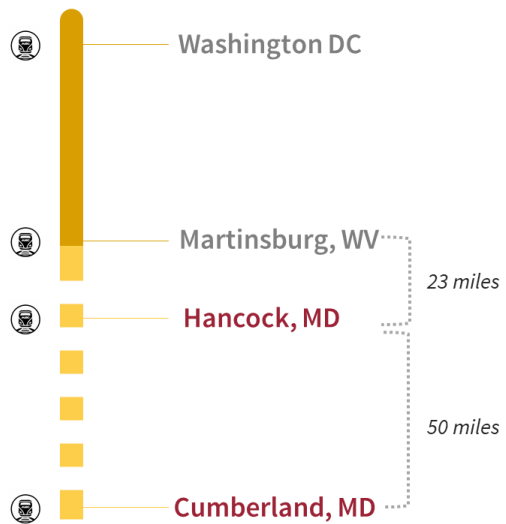
## Options:

- 1- CSX to Cumberland
- 2 - W&W to Hagerstown
- 3 - NS to Hagerstown
- 4 - B&O to Hagerstown



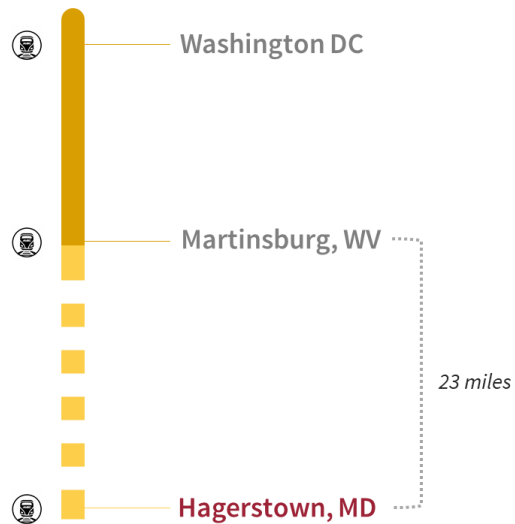
# Western Maryland Potential Alignments

1



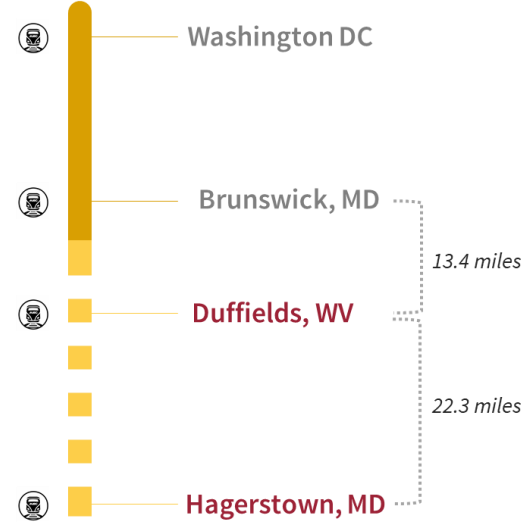
Line: CSX Transportation

2



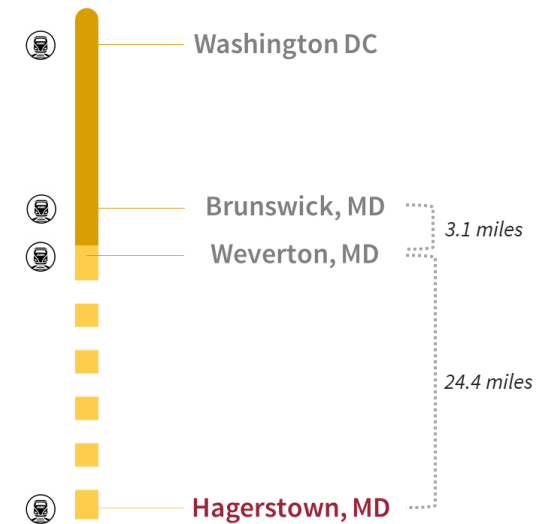
Line: Winchester & Western Railroad

3



Line: CSX and Norfolk Southern Railway

4



Line: CSX and Former B&O Right of Way



**Most Challenging**

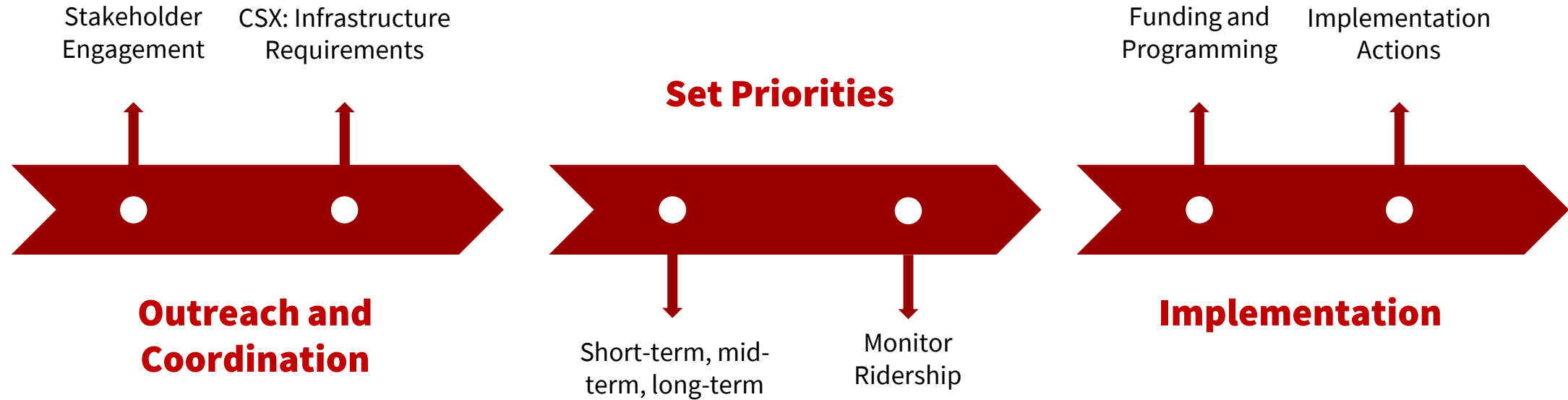
# Western Maryland Alternatives

Alternative	Constraints and Requirements Identified*
<p>1a and 1b - Martinsburg, WV to Hancock and Cumberland – CSX Corridor</p>	<ol style="list-style-type: none"> <li>1. Operating agreements with CSX and West Virginia</li> <li>2. Except for overnight train storage, Hancock station, and ROW infrastructure, limited construction required</li> <li>3. Hancock, WV to Union Station travel time - 2 hours and 37 minutes with 12 stops</li> <li>4. Cumberland, MD to Union Station travel time - 3 hours and 44 minutes with 13 stops</li> </ol>
<p>2 - Martinsburg, WV to Hagerstown – Winchester &amp; Western Short Line</p>	<ol style="list-style-type: none"> <li>1. Operating agreements with Winchester &amp; Western Railroad, Norfolk Southern, West Virginia</li> <li>2. Station Right of Way in Hagerstown</li> <li>3. Construction of rail connections between host railroads</li> <li>4. Tracks upgrades, Positive Train Control (PTC), grade crossing, layover facility</li> <li>5. Hagerstown to Union Station, via Martinsburg, WV, travel time - 2 hours and 50 minutes with 13 stops.</li> </ol>
<p>3 - Duffields to Hagerstown – Norfolk Southern Mainline</p>	<ol style="list-style-type: none"> <li>1. Operating agreement with Norfolk Southern for 23 miles of the corridor</li> <li>2. Congested freight route</li> <li>3. Separate bridges and tracks</li> <li>4. Operating agreement with West Virginia, station Right of Way in Hagerstown</li> <li>5. Construction of new rail connection tracks, PTC, signals, layover facility</li> <li>6. Hagerstown to Union Station, via Duffields, WV travel time - 2 hours and 43 minutes with 12 stops.</li> </ol>
<p>4 - Weverton to Hagerstown – former B&amp;O right-of-way</p>	<ol style="list-style-type: none"> <li>1. Challenging Right of Way acquisition</li> <li>2. National Park Service property</li> <li>3. 18.2 acres of Maryland Correctional Institution</li> <li>4. Construction of 19 miles of tracks</li> <li>5. Upgrade of existing tracks, construction of bridges, PTC, signals, layover facility</li> <li>6. Hagerstown to Union Station, through Brunswick, travel time - 2 hours and 30 minutes with 11 stops.</li> </ol>

\*Each alternative also assumes that expanded storage and operations at Brunswick yard would be required.



# Next Steps



- **Draft Technical Report released to the public in January 2023**
  - **Feedback being accepted for 90 days**

## Feedback Opportunities

- MDOT MTA looking for feedback on:
  - Concerns and preferences related to different service scenarios.
  - Opportunities to strengthen demand through access improvements, etc.
  - MARC service options for Western Maryland.
- Please take the survey and leave comments via the project web page!

[mta.maryland.gov/marc-brunswick-study](https://mta.maryland.gov/marc-brunswick-study)

# Discussion

# HIGH-CAPACITY TRANSIT (HCT) MAP DEVELOPMENT UPDATE

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Charlene Howard  
Tim Canan  
TPB Staff

TPB Regional Public Transportation Subcommittee  
March 28, 2023



# Table of Contents

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- HCT Definition
  - What does TPB/COG mean by HCT?
    - HCT as a regional planning tool
    - HCT per the travel demand model
- BRT-focus
  - BRT definition in Visualize 2045
  - Who has BRT and where is it?
  - What is the current situation with our data?
  - What needs to change?
- Next Steps



# What is High-Capacity Transit (HCT)?

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*“HCTs comprise several modes of public transportation, including Metrorail, commuter rail, light rail, streetcar, and bus rapid transit (BRT). Optimizing the areas around HCTs by providing a mix of residential and commercial uses, among other land use strategies, can help the region work toward its shared and interconnected goals in housing, climate, transportation, and equity.”*

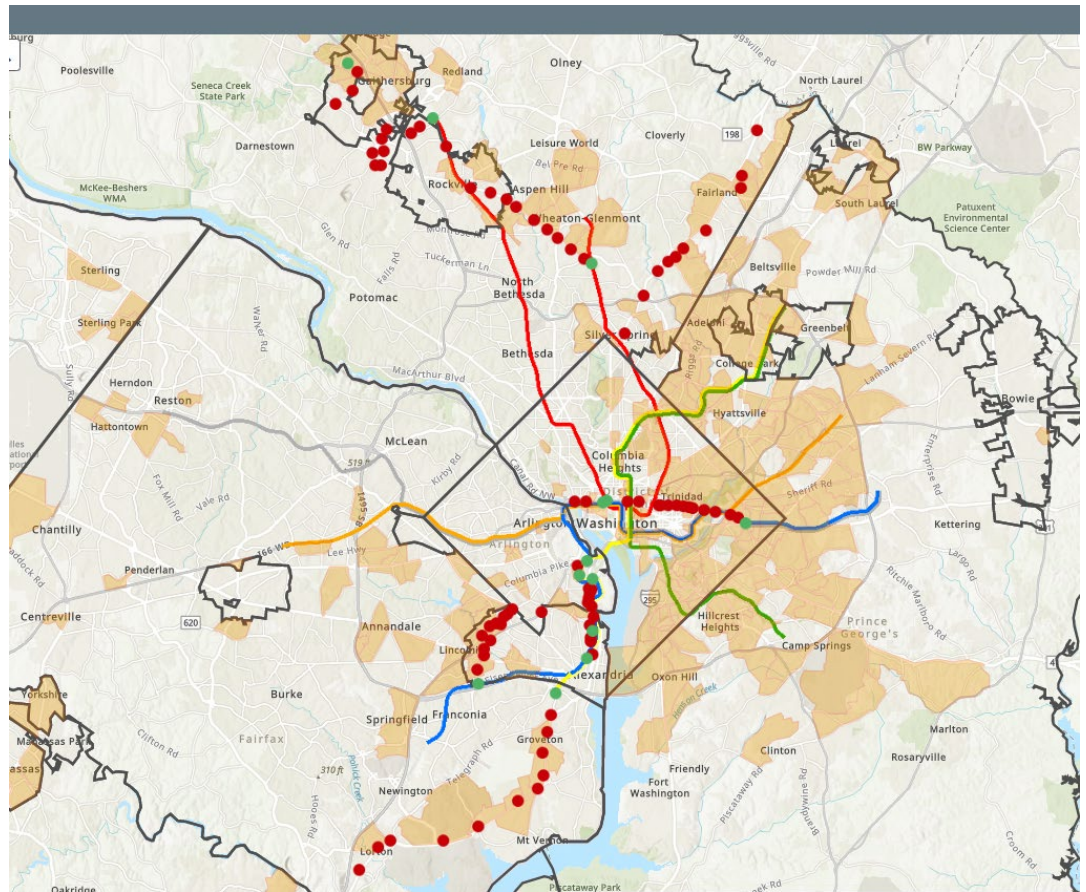
- What does TPB/COG mean by HCT?
  - HCT as a regional planning tool
    - <https://hct-eea-mwcog.hub.arcgis.com/pages/hct-main>
    - Existing HCT and service slated to be operational by 2030
  - HCT per the Travel Demand Model
    - All future service by 2045 that is coded in the network



# BRT as HCT

*The HCT and Model datasets are essentially the same....except for...you guessed it.....Bus Rapid Transit (BRT)!*

*“Bus rapid transit, or BRT, is an enhanced, high-frequency service that makes use of transitways and brings together other enhancements that can move more people faster and more reliably than traditional bus services.”*



# BRT in the TPB region

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## Jurisdictions with BRT currently or in the future)

- Arlington County
  - Metroway
- City of Alexandria
  - Metroway
  - West End Transitway (2030)
- Fairfax County
  - US 1 BRT (2030)
- Montgomery County
  - US 29 BRT
  - North Bethesda BRT (2025)
  - Veirs Mill Rd BRT (2025)
  - MD 355 BRT (2030)
  - Corridor Cities Transitway (2035)
  - Randolph Rd BRT (2040)
  - New Hampshire Ave BRT (2045)





# Bringing our BRT up to date

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- The current HCT footprint used by COG/TPB needs to be refreshed; for BRT specifically, we need to do the following:
  - Remove current BRT not operational by 2030 (Corridor Cities Transitway)
  - BRT > 2030 are now operational earlier per the Model; also includes moving dates up for some existing BRT in the HCT
  - Add BRT from the Model dataset to the HCT (2030)
  - Remove BRT in the current HCT data that no longer exist in the Model; this is for years > 2030 so it is not currently in the HCT
- Requires consultation and coordination with COG Planning staff & others for awareness and messaging



# Next Steps

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- Finalize the data
  - Review the information we have currently
  - What are we missing?
  - WYSIWYG unless we hear otherwise
- We will want your data at some point
  - Model data are good but yours is better (stops and routes)
- Review all HCT for consistency and accuracy
- Develop the final product



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National Capital Region  
**Transportation Planning Board**