








New Hampshire Avenue BRT Planning Study

Corridor Advisory Committee (CAC)

Meeting 3

December 15, 2022

Meeting Expectations

-  We're committed to starting on time and ending on time
-  Meeting facilitator will guide discussion
-  We're creating spaces for all voices to be heard
-  Take advantage of the "raise hand" feature
-  Place microphones on mute when not talking

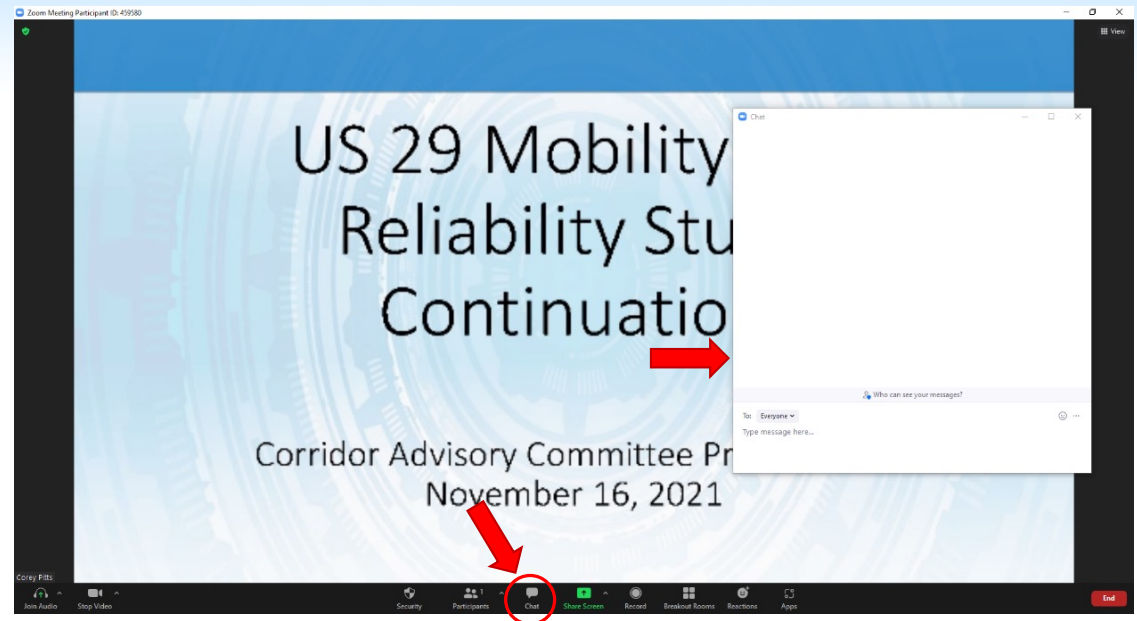
Using Zoom

Ask a question (in text):

- If you have a question during the presentation, please send it via the **chat**.

To send a chat:

- Click “chat” in the bottom menu.
- A new window will appear.
- Type your question and send it.



Using Zoom

Raise your hand:

- If you'd like to speak to ask a question or make a comment, please **raise your hand**.

To raise your hand:

- Click “Reactions” in the bottom menu.
- A new window will appear. Click the “Raise Hand” button at the bottom.
- If you've dialed in by phone, dial *9.



Project Team

Montgomery County Department of Transportation (MCDOT)

- Rick Kiegel
- Corey Pitts
- Joana Conklin



Planning Consultant Team

- Jamie Henson
- John Manzoni
- Tara Hofferth
- Aditya Inamdar
- Nadiya Kutishcheva

Meeting Agenda

1. Welcome
2. Project Recap
3. Station Identification
4. Concept Identification
5. Concept Benefits and Challenges
6. Initial Screening
7. Alternative Recommendations
8. Next Steps



CAC Role & Participants

- Provide input, guidance and oversight in accordance with the Master Plan
- Community involvement throughout project
- Information sharing with community
- Build consensus

Residents



Business Stakeholders



Civic / Citizens Associations



Advocacy Groups

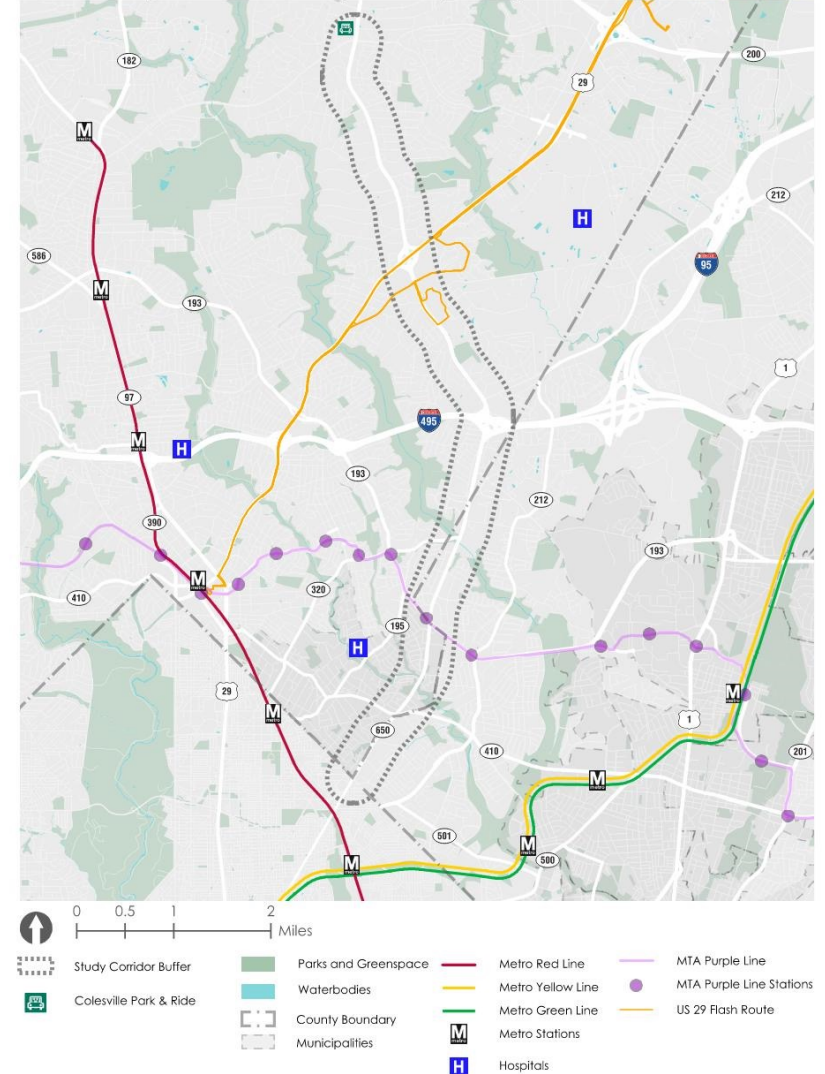


Project Recap

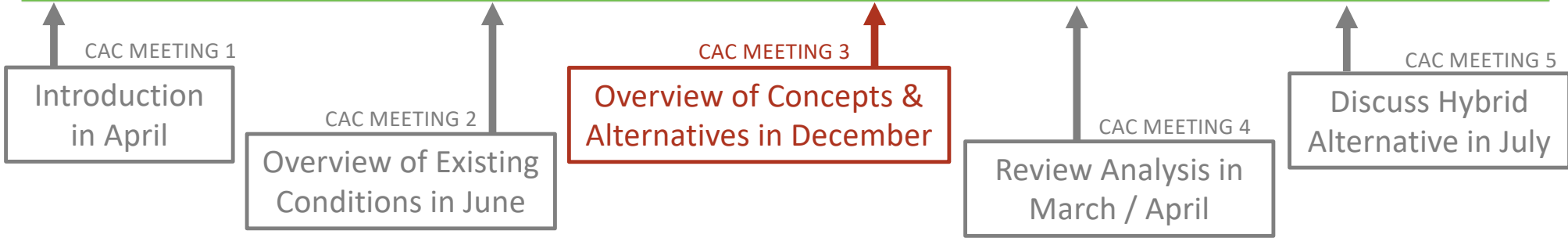
Study Overview

- **Corridor Extents:**
 - **Southern Terminus:** Fort Totten Metrorail Station
 - **Northern Terminus:** Colesville Park and Ride
- **This Study Will...**
 - Define start and end points
 - Identify station locations
 - Develop and evaluate improvements to bus service
 - Address station accessibility

New Hampshire Avenue (MD 650) Study Corridor

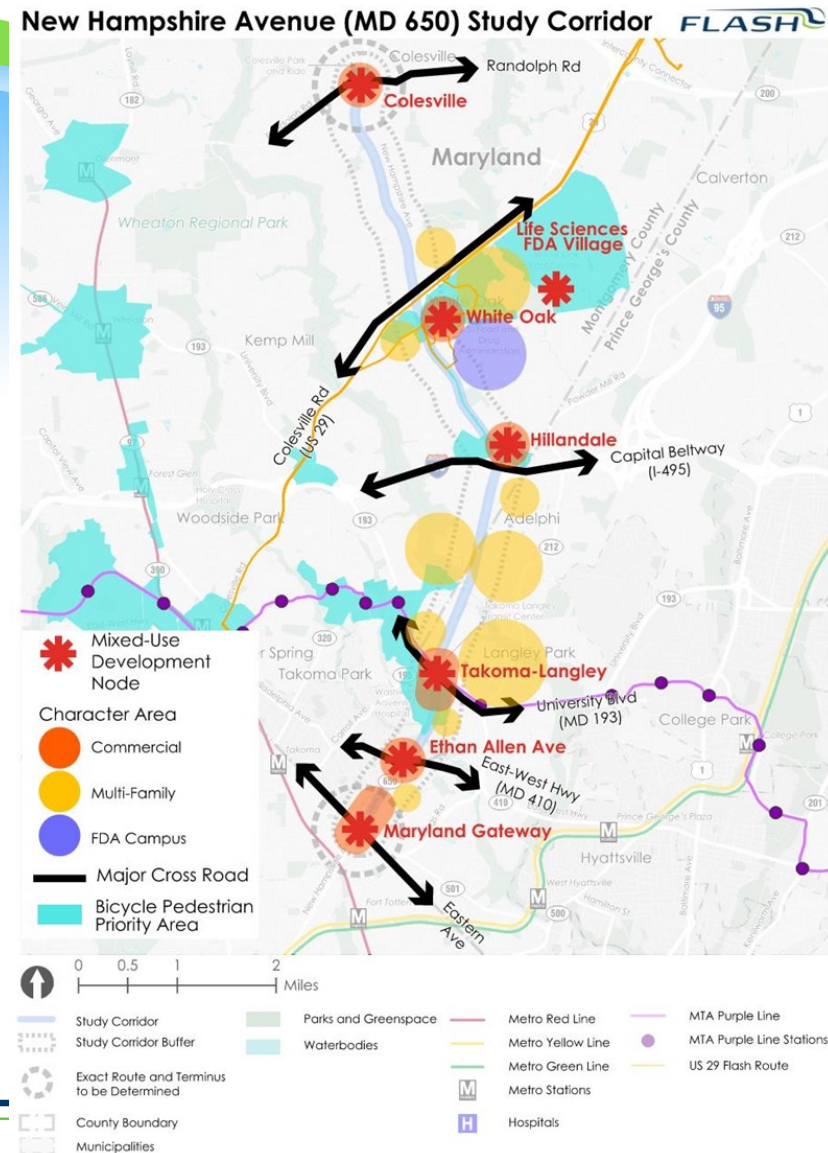


CAC Meeting Schedule



Synthesis of Findings

- High bus ridership in equity communities
- Largely residential land use
- Commercial nodes at major intersections
- Missing and inadequate bike / ped infrastructure
- Frequent and severe crashes on HIN
- Service road patterns vary
- Delay near the Beltway and at major intersections
- Significant bus service on and crossing the corridor
- Four major work destinations for corridor residents
- Existing transit service can be slow and unreliable
- Establish Fort Totten as southern terminus



Concept Identification

Program Guidance

Program & Project Goals & Objectives



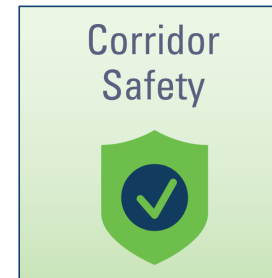
Mobility Choices

Improve access to jobs, activity centers, and community facilities



Sustainable Solutions

Minimize environmental impacts and utilize cost-effective design



Corridor Safety

Improve safety of our streets and the livability and wellness of our communities



Economic Growth

Promote economic development with appealing and functional transit



Quality Service

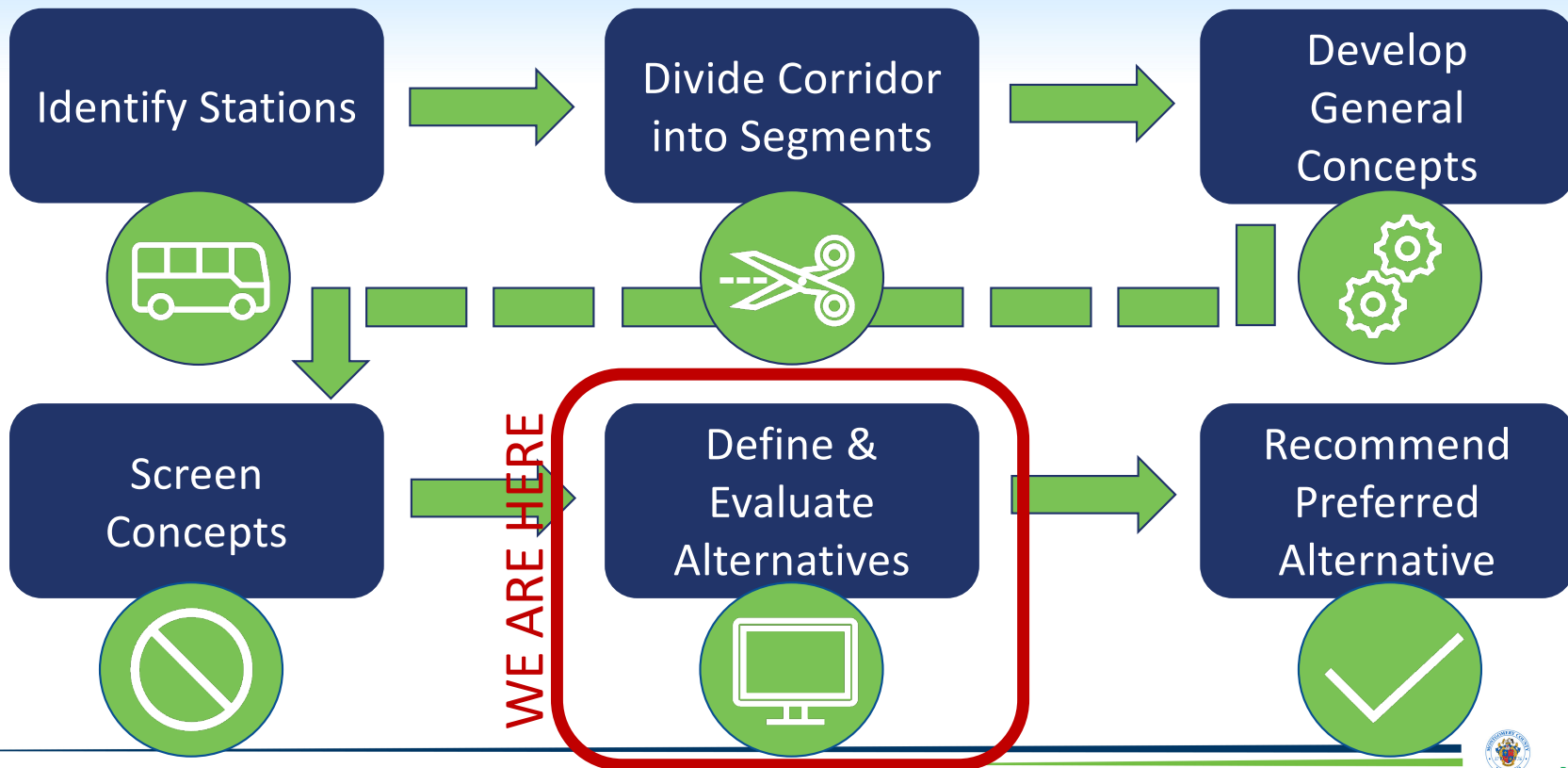
Provide a fast, reliable, efficient, and connected transit service



Community Equity

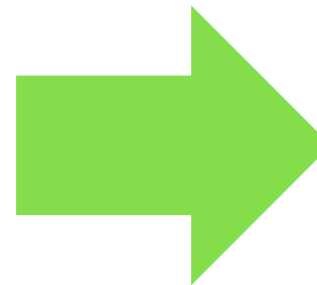
Provide improved and accessible transit service for underserved populations

Approach to Develop Alternatives



Guidance to Identify Concepts

Countywide Transit Corridors Functional Master Plan	Program and project goals and objectives
Previous County BRT efforts	Input from the community
Relevant local plans, studies, and initiatives	Input from County Staff
National best practices	Input from Stakeholders

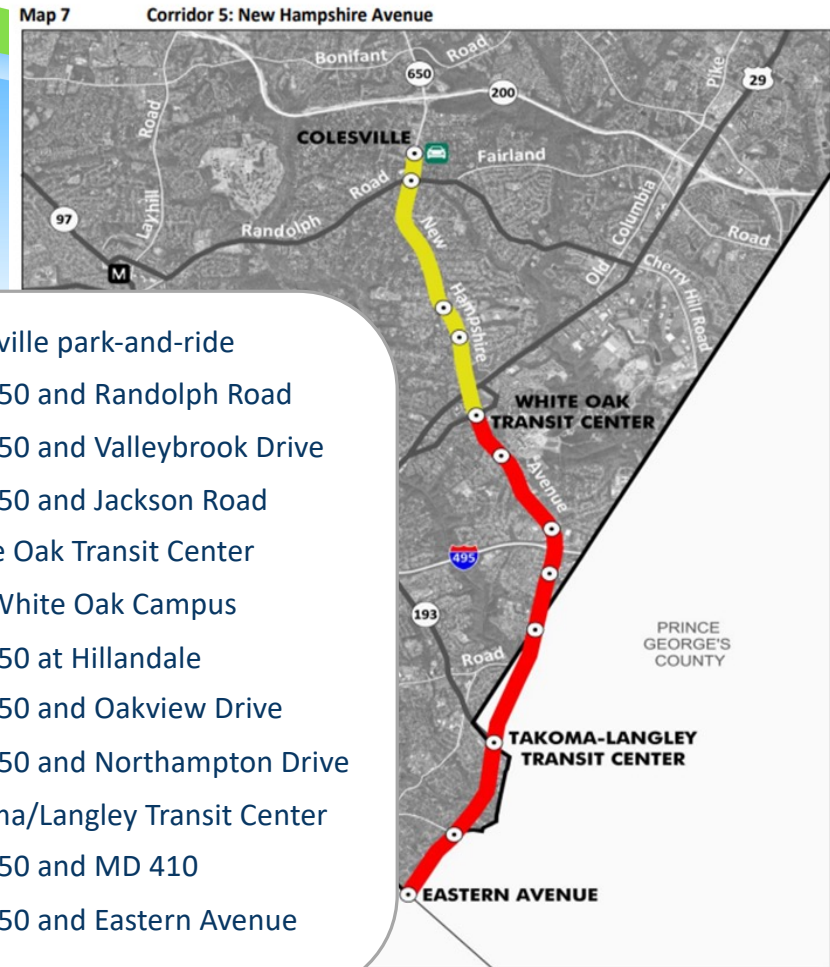


Concepts

Station Identification

Identify Station Locations

- Verify master plan station locations
- Consider additional locations
- Identify specific station locations



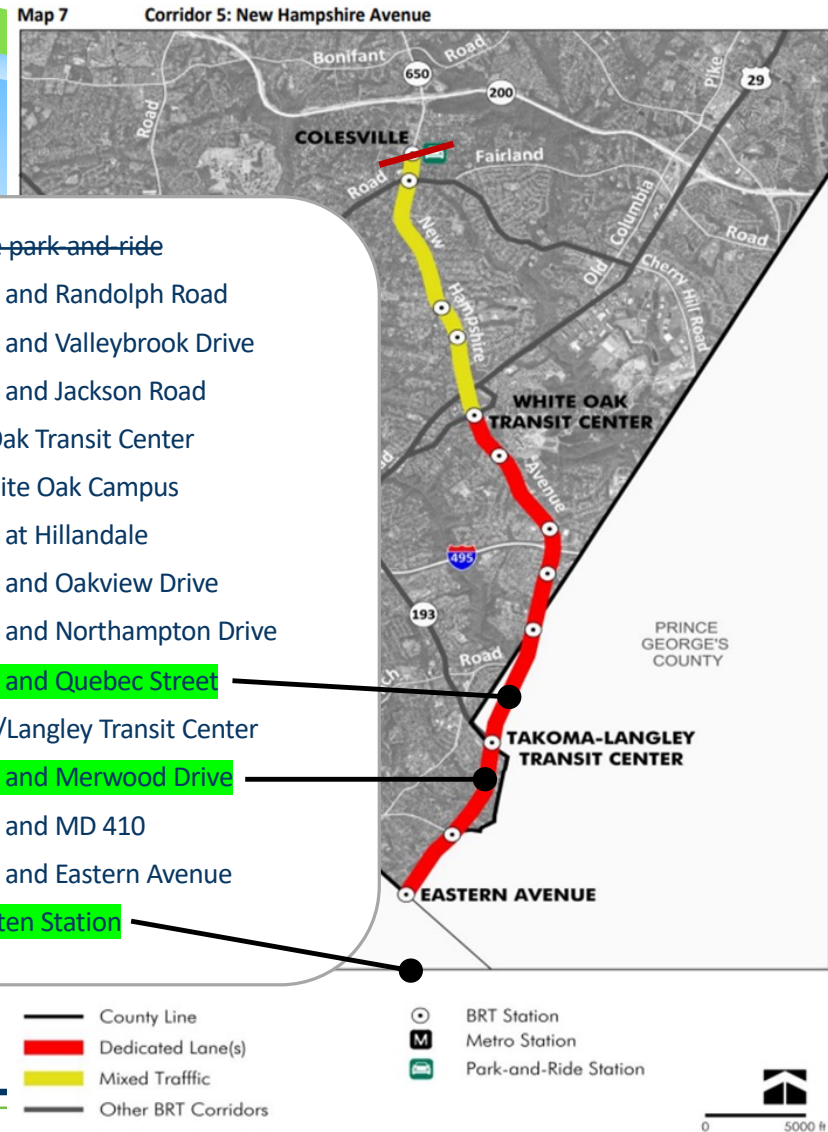
- County Line
- Dedicated Lane(s)
- Mixed Traffic
- Other BRT Corridors

- BRT Station
- M Metro Station
- P&R Park-and-Ride Station






Identify Station Locations

- Eliminate Park and Ride station / combine with Randolph Road station
- Add stops north and south of Takoma Langley
- Terminate service at Fort Totten
- 14 proposed stations



Station Location Analysis




- Randolph Road Park-and-Ride
 - 0.15 miles from Randolph Road
 - Very low ridership
 - Park-and-ride is underutilized
 - Consider using for turn around, but not for a station

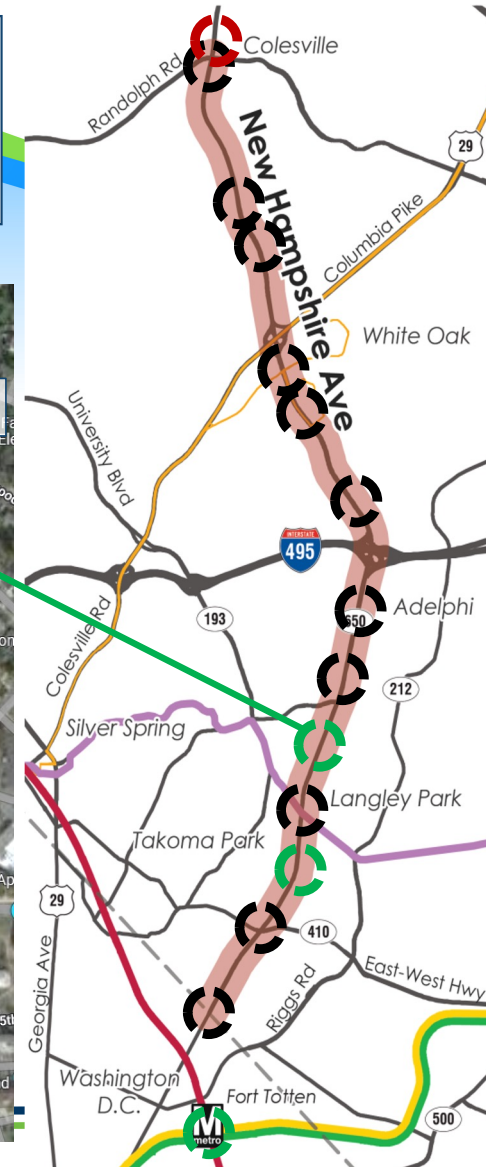
	Master Plan Station
	Potential Added Station
	Potential Eliminated Station



Station Location Analysis




- Quebec Street
 - Access to single and multifamily housing
 - Moderate ridership
 - Equity areas
 - High Injury Network
 - Prince George's County

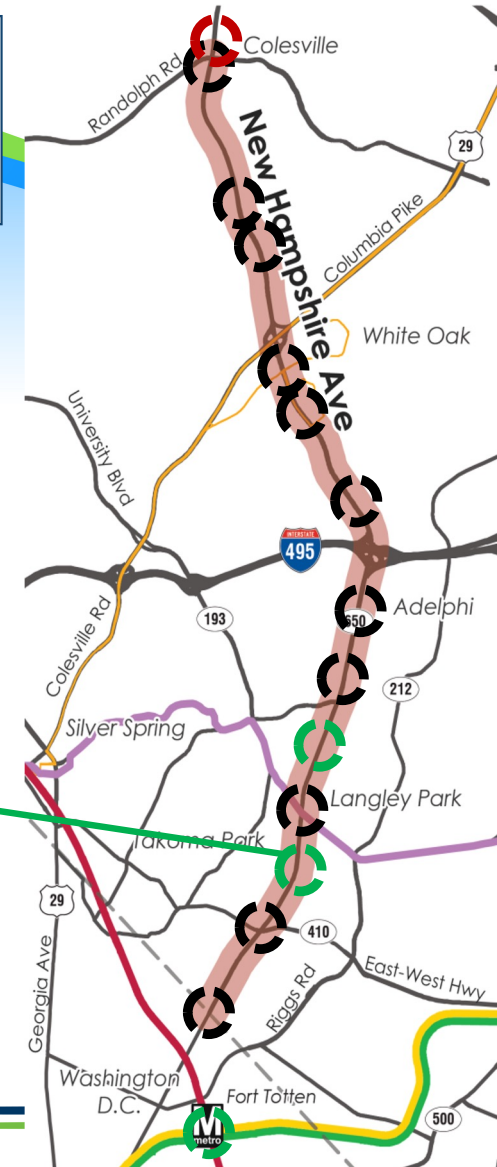
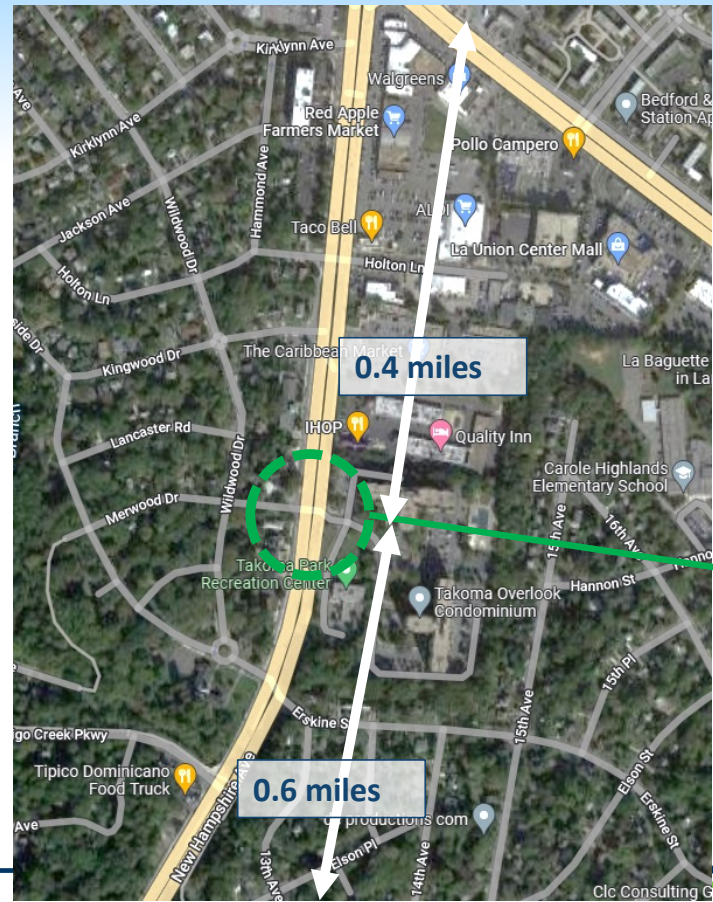
	Master Plan Station
	Potential Added Station
	Potential Eliminated Station



Station Location Analysis




- Merwood Drive
 - Access to Takoma Park Recreation Center
 - Access to Sligo Creek Trail
 - Moderate ridership

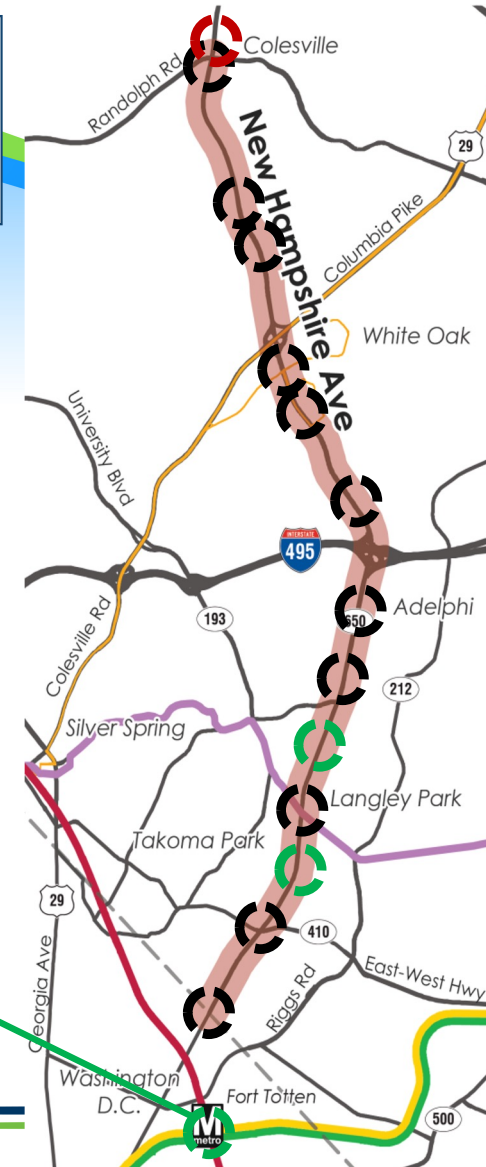
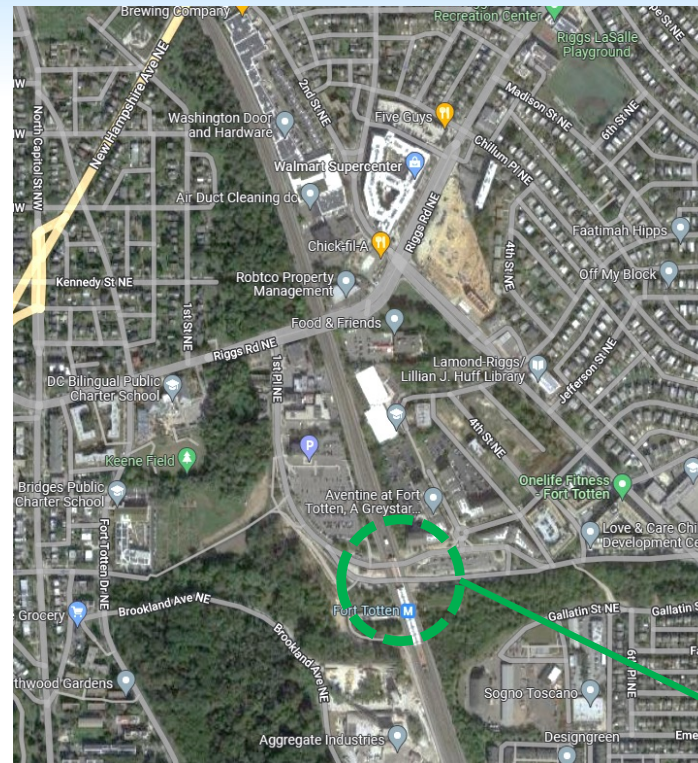
	Master Plan Station
	Potential Added Station
	Potential Eliminated Station



Station Location Analysis

- Fort Totten Station
 - Access to metro
 - Very high ridership
 - Within Equity Area
 - Supported by stakeholders

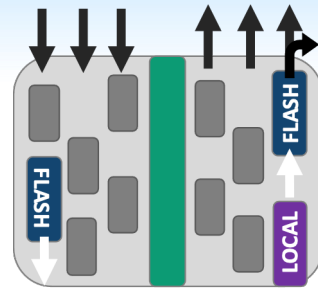
	Master Plan Station
	Potential Added Station
	Potential Eliminated Station



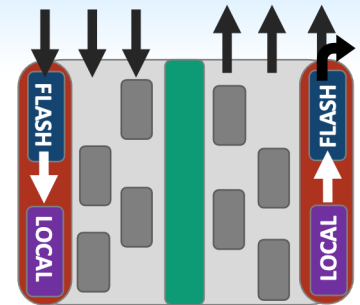
Concept Benefits and Challenges

Four Main Concepts

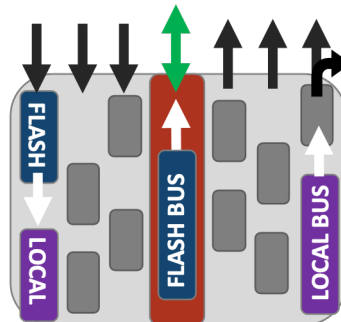
1
Optimize Transit in Mixed Traffic



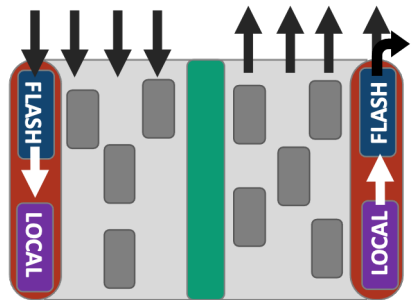
2
Repurpose Lanes



3
Add One Flash Only Lane



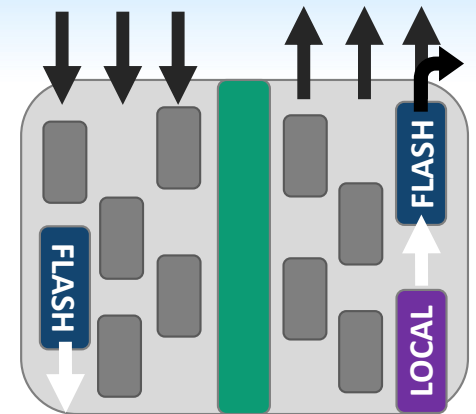
4
Add Two Lanes



Concepts

1. Optimize Transit in Mixed Traffic

- Flash buses share the lanes with all other traffic, but transit signal priority is given to Flash buses



Concepts

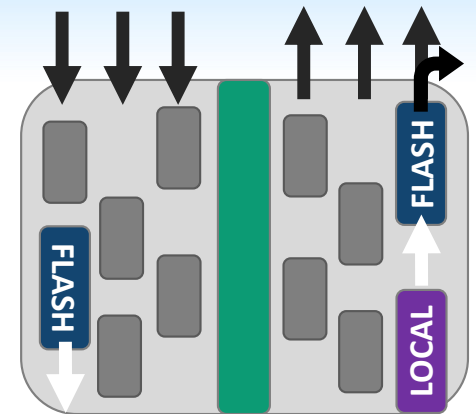
1. Optimize Transit in Mixed Traffic

Benefits:

- Limited footprint impacts
- Some improvement to transit service
- Limited affects on motor vehicle travel

Challenges:

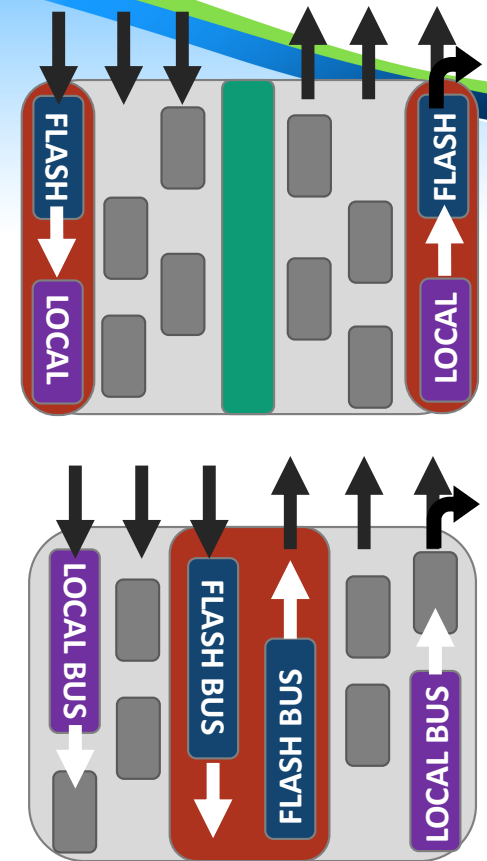
- Limited transit service improvement, including for local buses



Concepts

2. Repurpose Lanes

- One general lane in each direction is designated for buses only
- These might be the curbside lanes or the medians lanes



Concepts

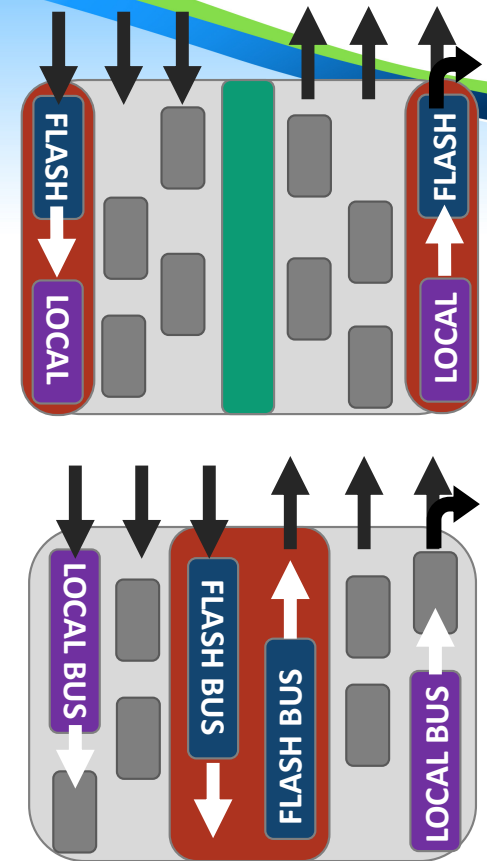
2. Repurpose Lanes

Benefits:

- Limited footprint impacts
- Limited construction costs
- Faster delivery timeline
- Improved transit service, including major improvement for local buses

Challenges:

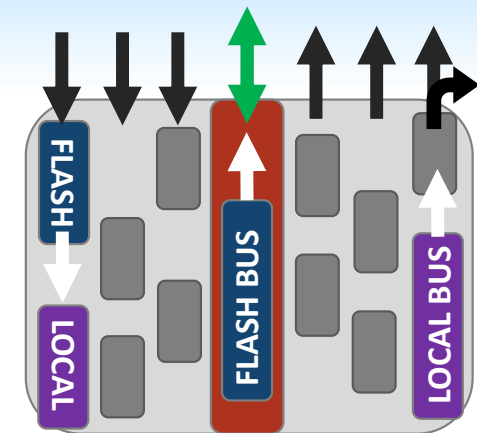
- FLASH buses might be slowed behind local buses and right turning vehicles
- Repurposing lanes reduces motor vehicle capacity



Concepts

3. Add One Flash Only Lane

- One lane is added for exclusive Flash bus use



Concepts

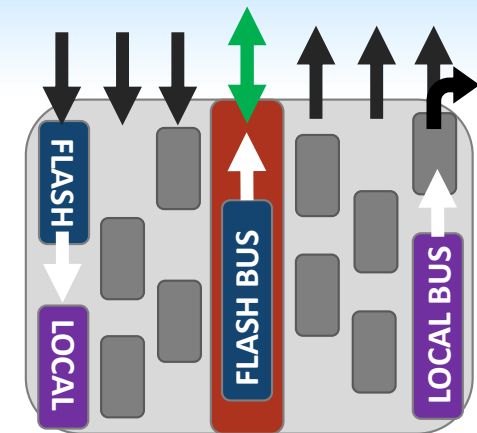
3. Add One Flash Only Lane

Benefits:

- Improves Flash service in one direction
- Fewer impacts on motor vehicle travel

Challenges:

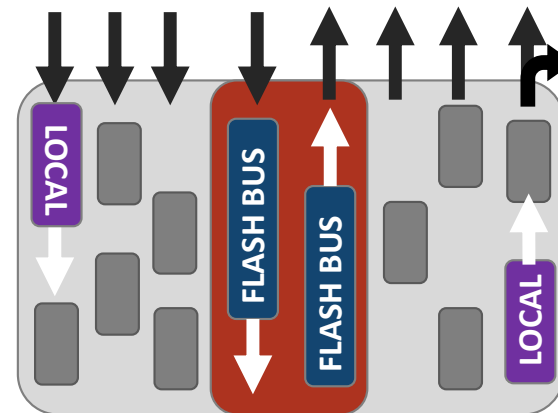
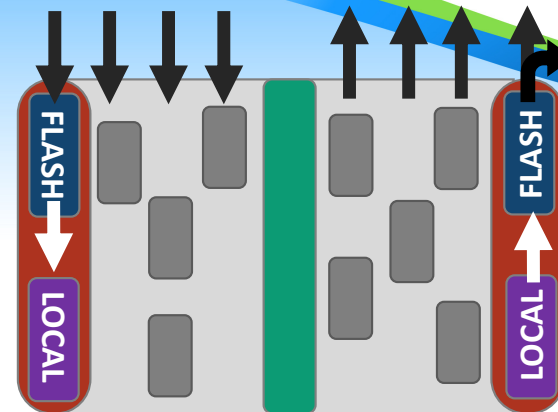
- Difficult for riders to use
- Footprint impacts
- High construction and signal upgrade costs
- Longer implementation
- Minimal peaking activity



Concepts

4. Add Two New Lanes

- Widen the roadway by adding two new lanes (median or curbside)



Concepts

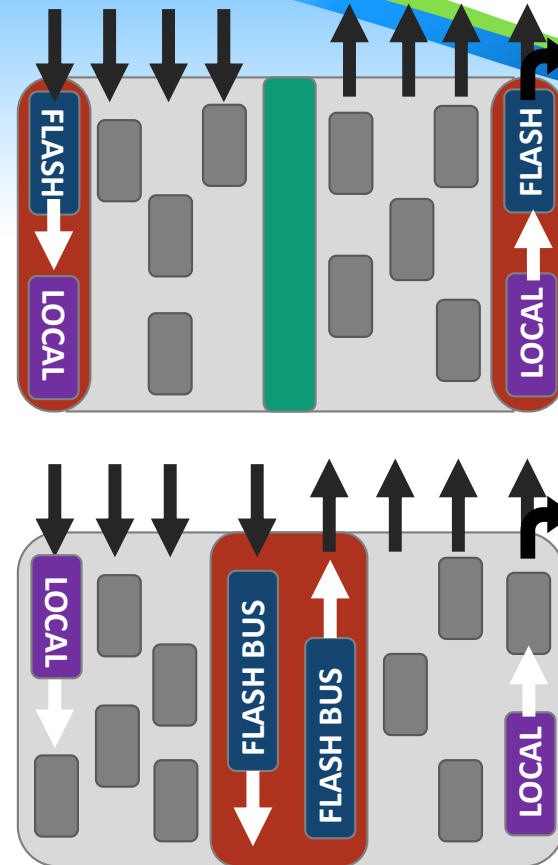
4. Add Two New Lanes

Benefits:

- Improves transit service
- Minimizes motor vehicle delay

Challenges:

- Inconsistent with Master Plan
- Significant footprint impacts
- Major construction costs and long implementation

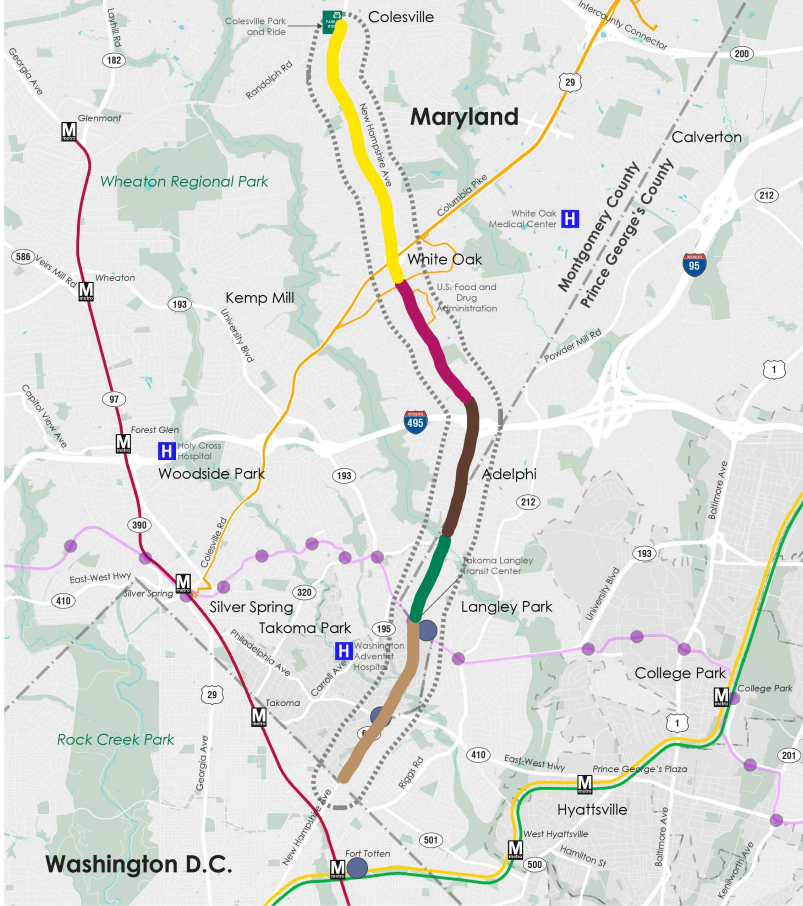


Initial Screening

Screening by Segment

- 1 Eastern Ave to University Blvd
- 2 University Blvd to Piney Branch Rd
- 3 Piney Branch Rd to Powder Mill Rd
- 4 Powder Mill Rd to Lockwood Dr
- 5 Lockwood Dr to Randolph Rd

New Hampshire Avenue (MD 650) Study Corridor FLASH



Study Corridor	Parks and Greenspace	Metro Red Line	MTA Purple Line
Study Corridor Buffer	Waterbodies	Metro Yellow Line	MTA Purple Line Stations
Park & Ride Location		Metro Green Line	US 29 Flash Route
Park & Ride Location		Metro Stations	
County Boundary		Hospitals	
Municipalities			

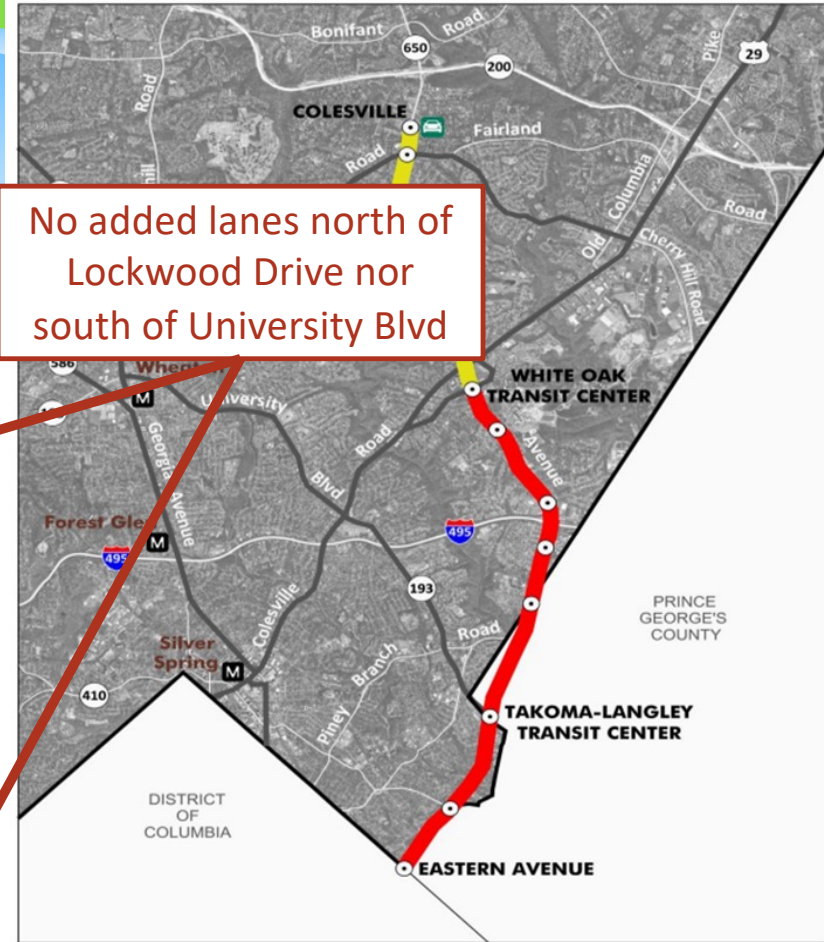
Screening Concepts Out

- Concept unlikely to generate operational gains
- Concept inconsistent with the BRT Master Plan
- Concept fatally flawed

Master Plan

No dedicated lanes north of Lockwood Drive

Map 7 Corridor 5: New Hampshire Avenue



No added lanes north of Lockwood Drive nor south of University Blvd

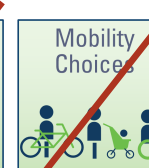
Road	From	To	Dedicated Lane(s)?	R.O.W. *****	Maximum Additional Transit Lanes
New Hampshire Ave	Colesville park-and-ride	Lockwood Dr	No	120	0
New Hampshire Ave	Lockwood Dr	Oaklawn Drive	Yes	130*	1
New Hampshire Ave	Oaklawn Drive	Powder Mill Road		120-130*	1
New Hampshire Ave	Powder Mill Road	I-495		130*	1
New Hampshire Ave	I-495	Northampton Dr		150	1
New Hampshire Ave	Northampton Dr	University Blvd	Yes **		
New Hampshire Ave	University Blvd	East West Highway	Yes***	150	0
New Hampshire Ave	East West Highway	D.C. Line	Yes****	150 in MC	0

- County Line
- Dedicated Lane(s)
- Mixed Traffic
- Other BRT Corridors
- BRT Station
- Metro Station
- Park-and-Ride Station



“Fatal Flaws”

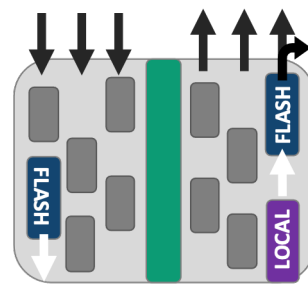
- Significant impacts to properties, especially in equity areas
- Impacts existing local bus service
- Creates operational challenges that affect service reliably
- Challenging for riders to navigate
- Creates significant impacts to traffic operations



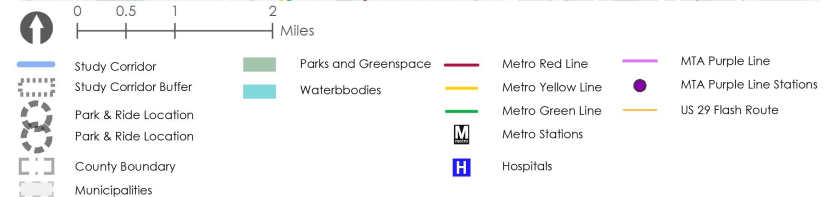
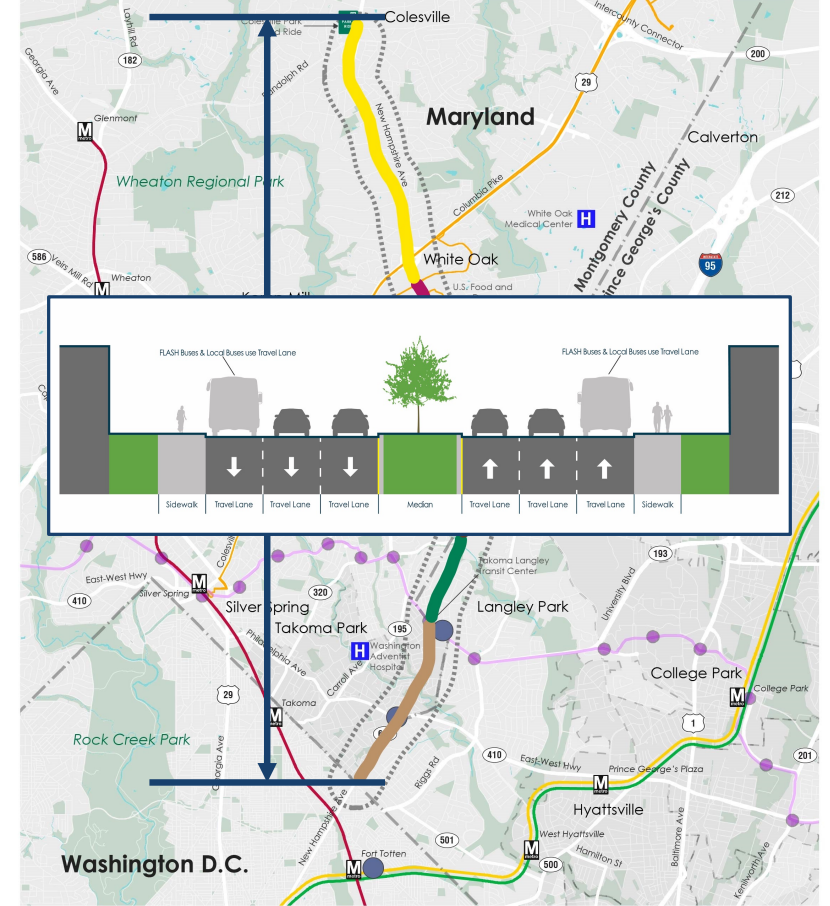
Alternative Recommendations

Alternative 1

- Optimize Transit in Mixed Traffic
- Transportation System Management with TSP
- Along the full corridor

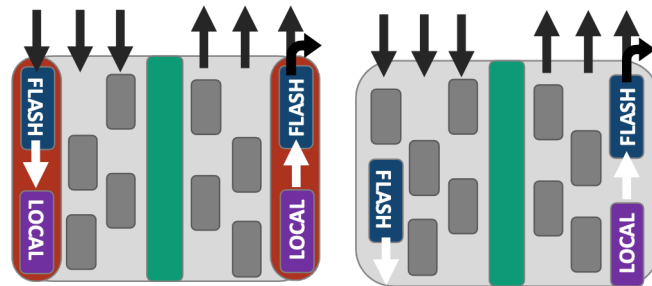


New Hampshire Avenue (MD 650) Study Corridor FLASH

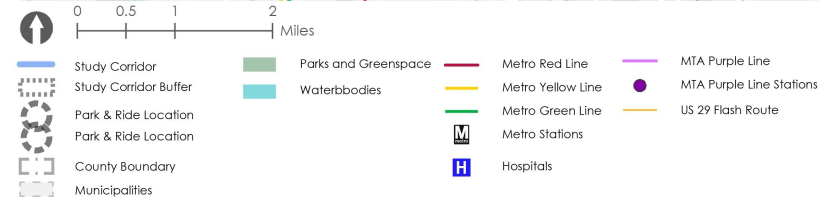
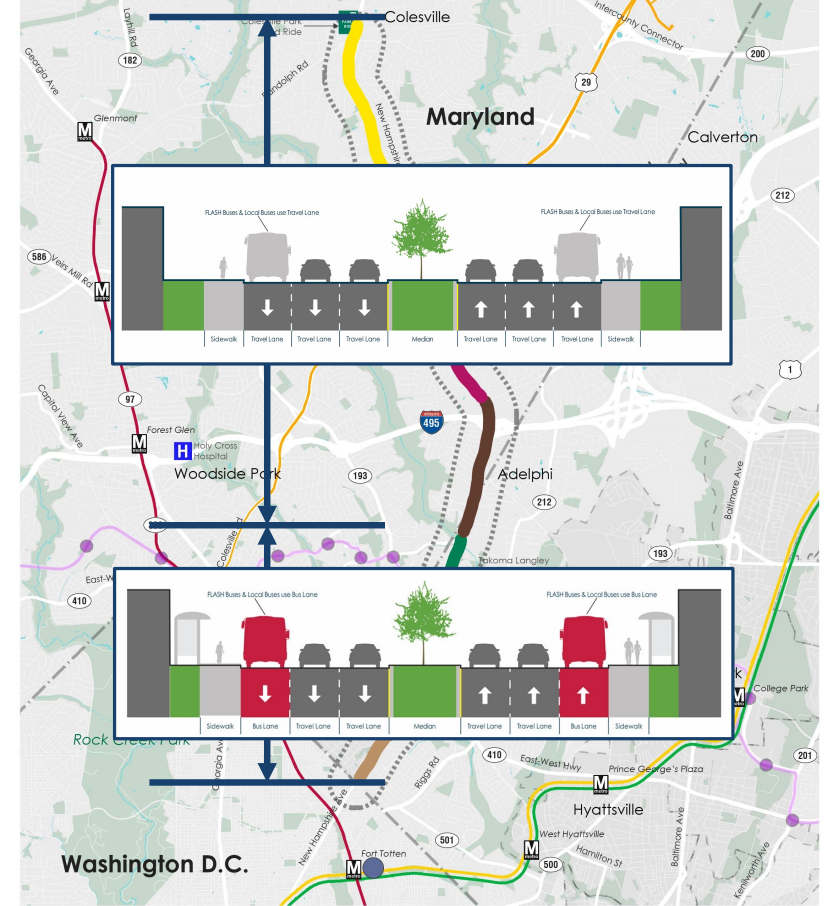


Alternative 2

- Repurpose Curbside Lanes south of Piney Branch Road
- Implement Transportation System Management with TSP north of Piney Branch Road

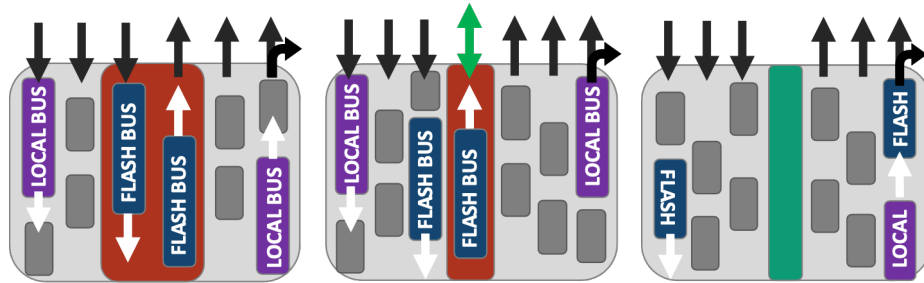


New Hampshire Avenue (MD 650) Study Corridor **FLASH**

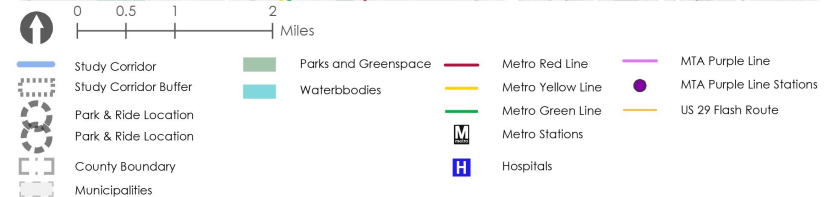
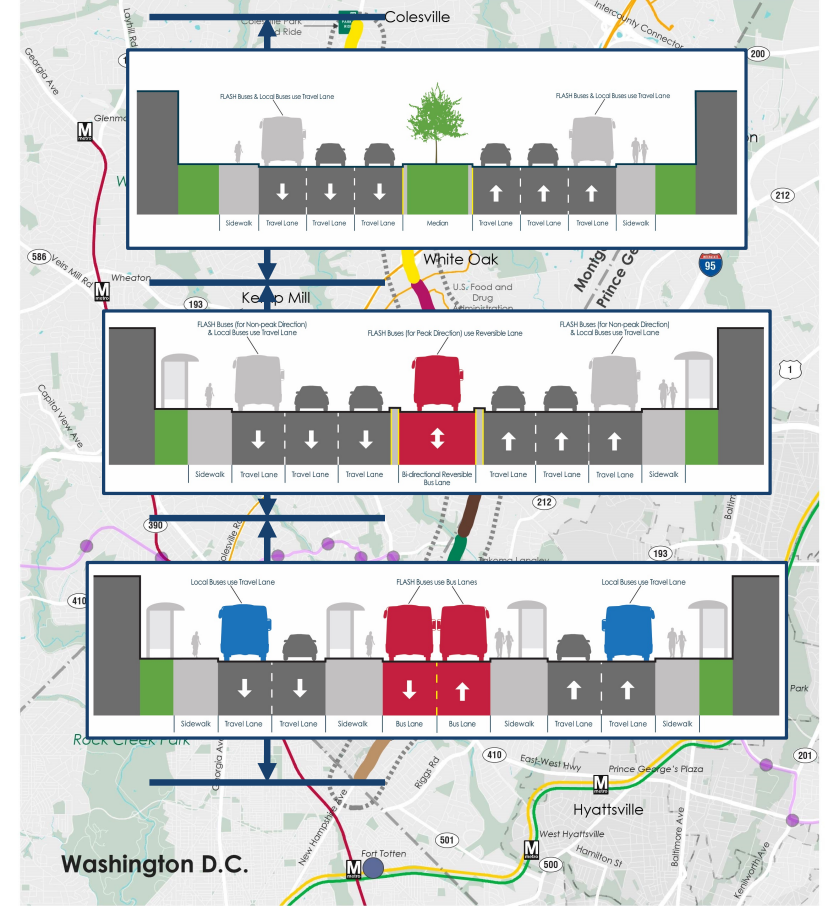


Alternative 3

- Repurpose median lanes south of Piney Branch Road
- Add one center loading Flash, shared bi-direction transit lane between Piney Branch Road and Lockwood Drive
- Implement Transportation System Management with TSP north of Lockwood Drive



New Hampshire Avenue (MD 650) Study Corridor **FLASH**



Next Steps

Next Steps

- Analyzing Alternatives:
 - Traffic Modeling
 - Ridership Forecasting
 - Concept Layouts
 - Cost Estimates
 - Equity, Access, Economic Development, and Land Use Analysis
- Return to CAC March/April 2023
- Developing a Hybrid Alternative



Questions?

Rick Kiegel – BRT Project Manager, MCDOT

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Project Webpage

<https://www.montgomerycountymd.gov/dot-dte/projects/NewHampshireAve/>