

Op Lanes Maryland New American Legion Bridge I-270 to I-70 Traffic Relief Plan

Carderock Springs Citizens Association

April 28, 2022



OP•LANES™
MARYLAND

Options & Opportunities for All

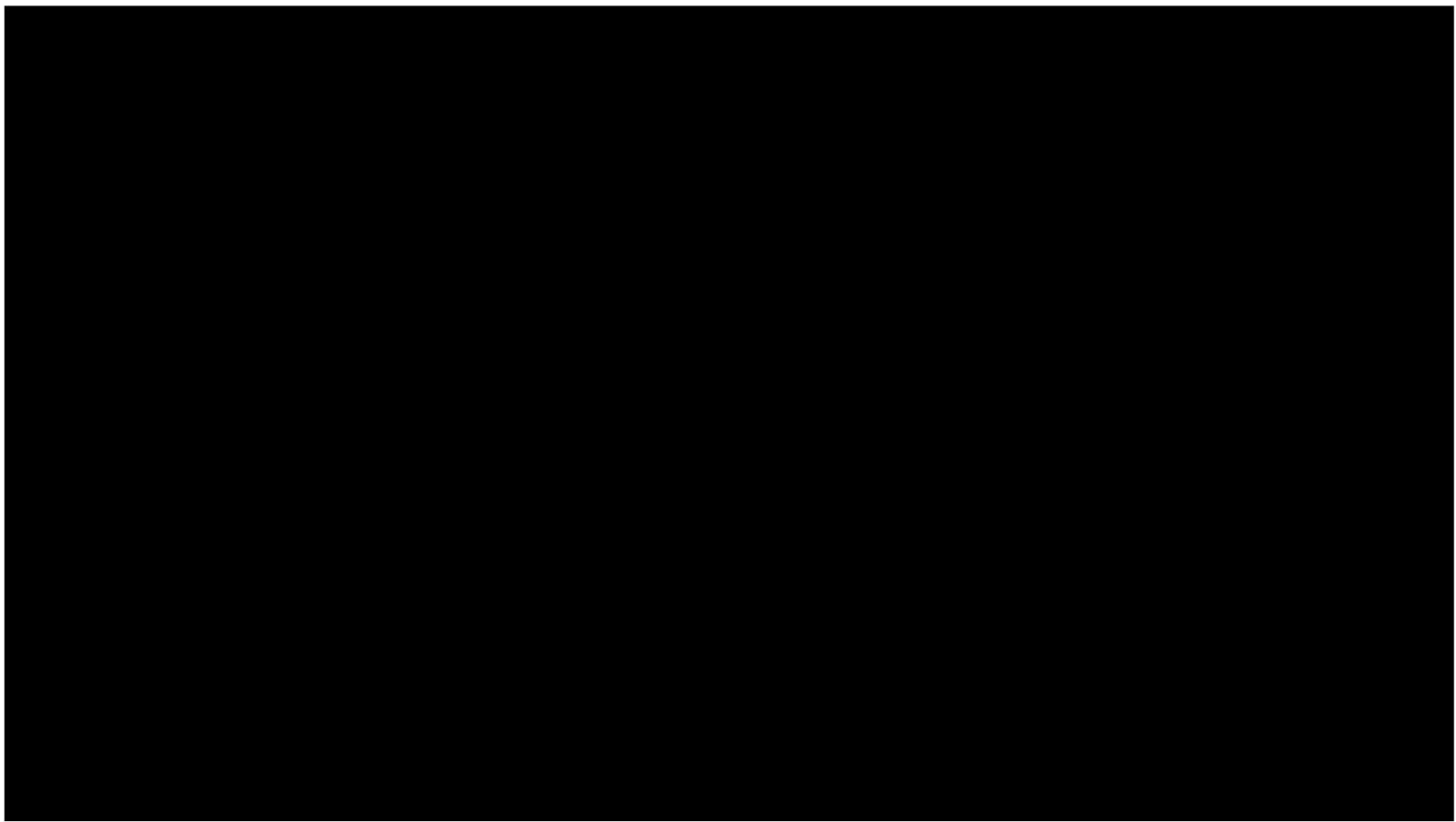
M.D.T. MARYLAND DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION

Agenda

- Welcome & Introductions
- Project Overview
- I-495 & I-270 Managed Lanes Study
- Program Phasing: Phase 1 Predevelopment
- Phase 1 Public-Private Partnership (P3)
- Phase 1 Developer – Accelerate Maryland Partners
- Your Community
- Schedule: Predevelopment & MLS Schedule
- Questions

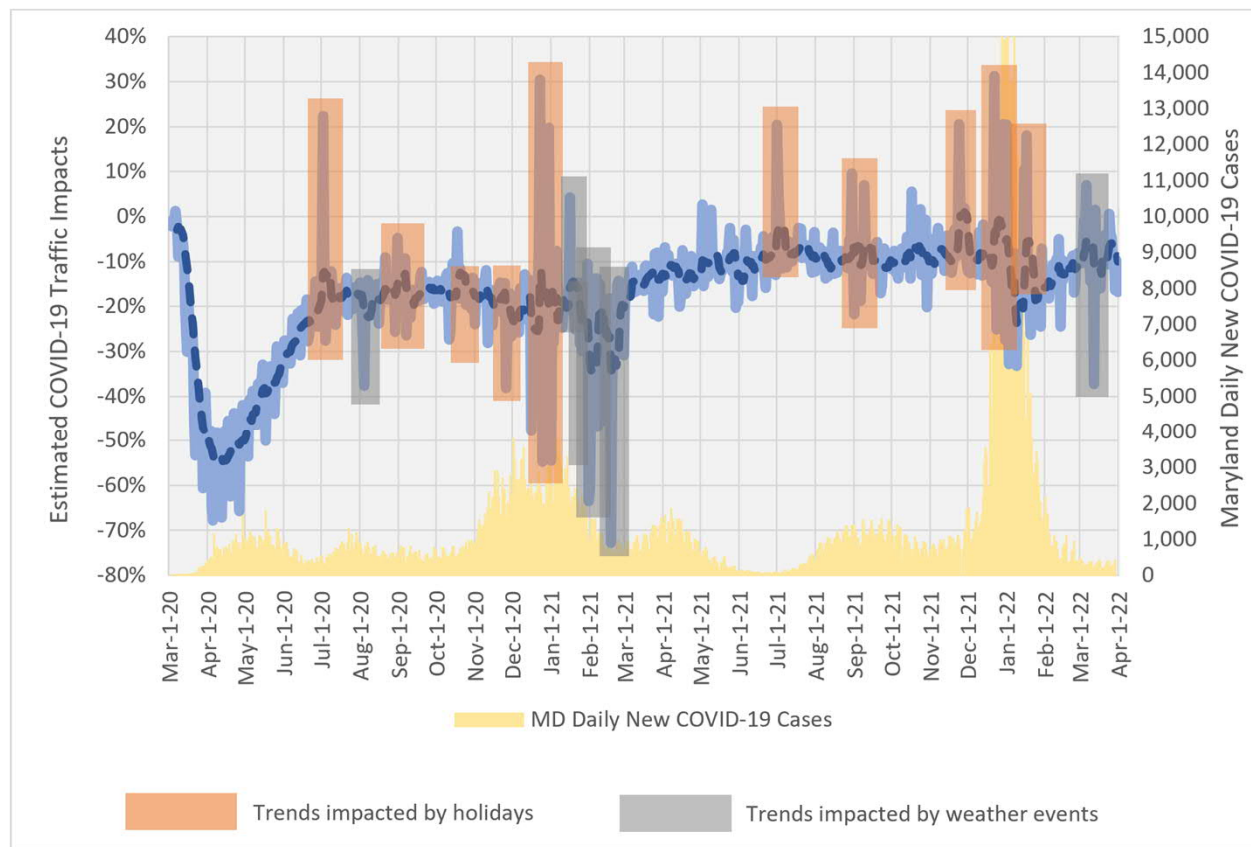
Project Overview

Op Lanes Maryland



Travel Rebounding From COVID-19 Levels

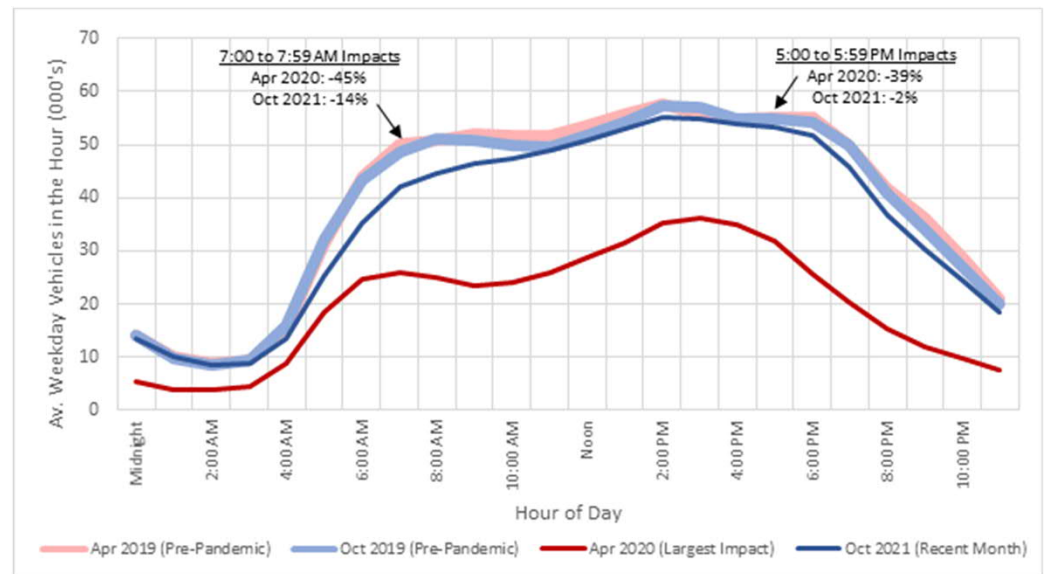
- Marylanders have been returning to roadways in numbers approaching pre-COVID-19 levels. Frequently, over the last year traffic volumes at the American Legion Bridge exceeded pre-pandemic levels in 2019
- With traffic volumes returning, regular recurring congestion is also returning
- Long-term forecasts: Continued growth in traffic, as the National Capital Region is projected to add another 1.3 million more residents and 1.0 million more jobs by 2045



Volume Trends on I-270 and I-495

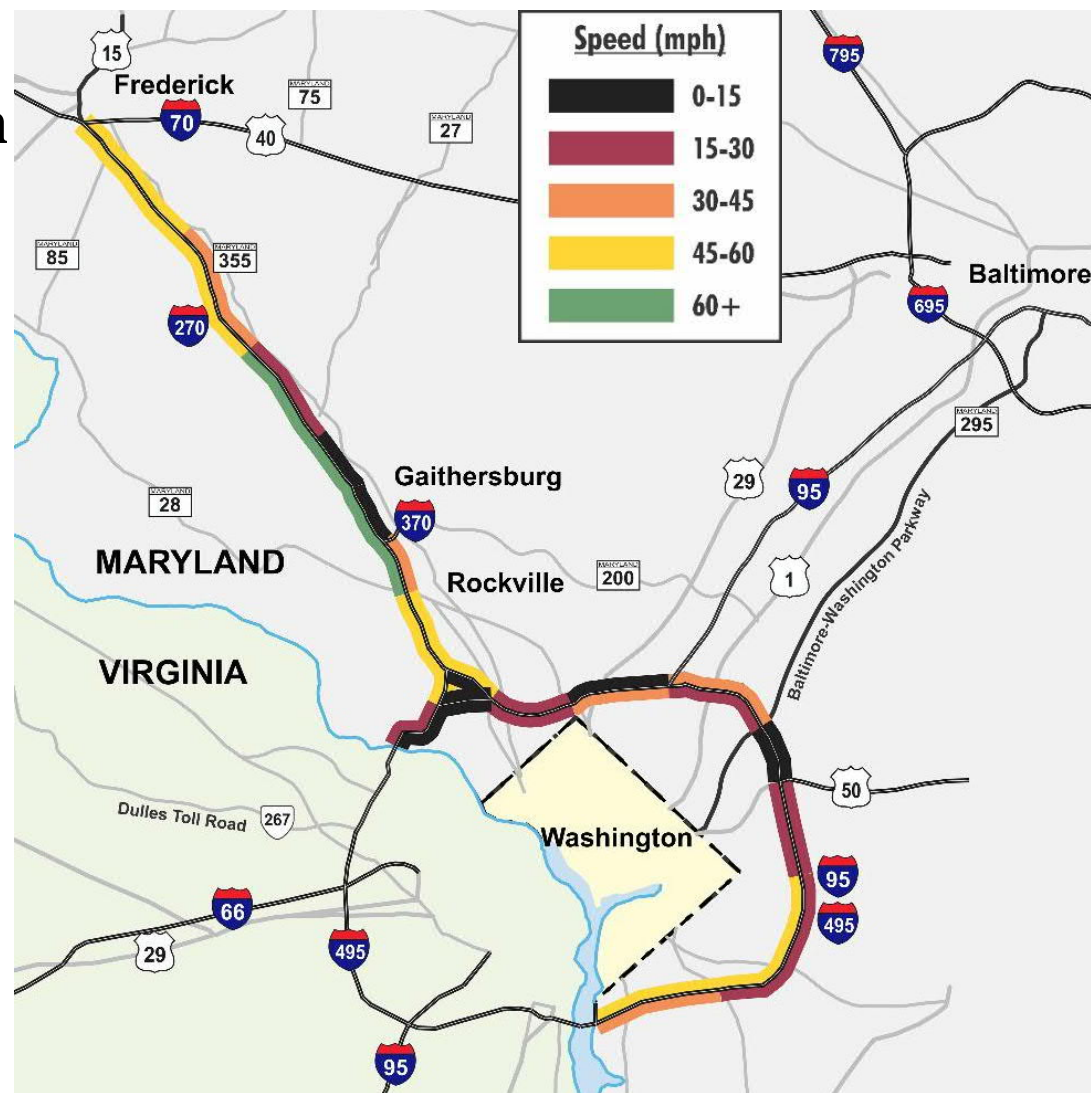
- By Fall 2021
 - Daily Volumes within 2% on I-270
 - Daily Volumes within 8% on I-495
- Omicron variant caused another dip in volumes in Early 2022
- By March 2022, volumes were back to Fall 2021 levels

Average Hourly Traffic at Permanent Count Stations on I-270 and I-495



I-495 & I-270 Traffic Congestion

- 2nd highest commuting times in the country
- 83% of MD urban interstates are congested—almost double the national average of 47%
- Cost of congestion on interstates in the Maryland NCR was over \$2B in 2019
- National Capital Region (NCR) commuters lose an average of **11 workdays** and **over \$2,000** to congestion annually



Montgomery County & Regional Plans

- **Montgomery County**

- Planning and corridor studies since the mid-1990s and “Priority Letters” to MDOT since 2007 consistently identify American Legion Bridge and I-270 widening as priority needs
- From Montgomery’s 2017 Priority Letter: “we request that the state advance the study of capacity and operational strategies from I-270 and along I-495 into Virginia that address freeway performance along with transit, pedestrian, and bicycle connections over the Potomac River, including advancement of the county recommended high-occupancy/toll lanes between the I-270 West Spur and Virginia.”
- To achieve key economic development goals in Thrive Montgomery and Corridor Forward, severe congestion that limits access to employment and housing opportunities throughout the I-270 corridor must be addressed
- Adding managed lanes will unlock new transit opportunities in concert with the County’s extensive planned bus-rapid-transit network and provide funding to support transit.

- **National Capital Region**

- Adding managed lanes on I-495 and I-270 is a foundational element of the Visualize 2045 long-range transportation plan
- Managed lanes will provide new travel options and opportunities to help meet the transportation needs of millions of new jobs and residents anticipated by 2045.



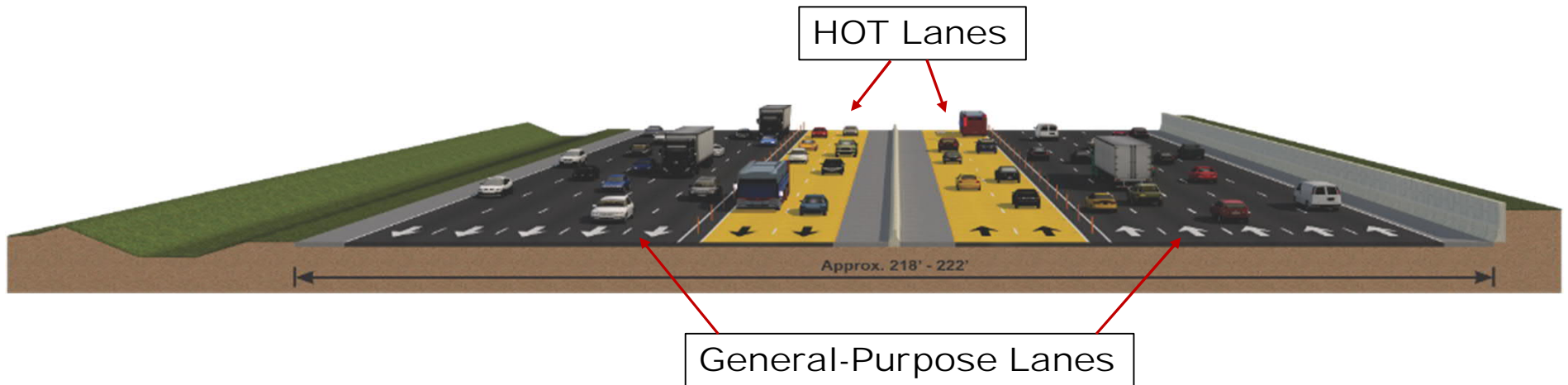
New American Legion Bridge I-270 to I-70 Traffic Relief Plan

- **Phase 1 South** is I-495 from the George Washington Memorial Parkway to I-270 and I-270 from I-495 to I-370
- **Phase 1 North** is I-270 from I-370 to I-70 and is a separate study that is in Pre-NEPA Phase



What are HOT Lanes?

- **High Occupancy Toll Lanes (HOT Lanes)** are travel lanes that use dynamic tolling to enable a consistent flow of traffic and provide a reliable trip
 - HOT Lanes allow for vehicles with three occupants to travel on them for free
 - Vehicles with less than three occupants that choose to use the HOT Lanes would pay a toll
 - The General-Purpose lanes remain free for all



Challenges Phase 1 Will Solve

- Need for a **New American Legion Bridge**:
 - Replacing bridge deck/structural repairs or full bridge replacement needed in the next decade in any case
 - Construction/traffic impacts similar for replacing the deck or full bridge replacement
- Need for **New Travel Options** - on the most congested, unreliable freeways in Maryland
- Lack of **Transit Opportunities** and Connections - No opportunities for reliable suburban transit services across the American Legion Bridge due to congested interstates
- Barriers to **Bicycle and Pedestrian Connections**
 - No connection across American Legion Bridge linking trails in Virginia and Maryland
 - Barriers created by interstates – missing important connections across the highways



Economic Benefits

- The average commuter already loses **87 hours to congestion each year - costing each resident over \$2,000 annually**; this will only grow over time, threatening Maryland's economy and quality-of-life, unless we take action.
- **Op Lanes Maryland** will reduce congestion and facilitate more efficient movement of goods and people – This is critical, as **1.3 million more people** and **1 million more jobs** are projected to come to the region by 2045.
- Just in **Phase 1 South**:
 - **Over \$3 billion in private investment in our public infrastructure** will support small local, minority, women, veteran and certified disadvantaged business enterprises (DBEs)
 - **Will support thousands of construction jobs** per year
 - **Private investment will offset more than \$1.2 billion** otherwise needed to maintain regional infrastructure that can be used for other transportation improvements, further growing Maryland's economy



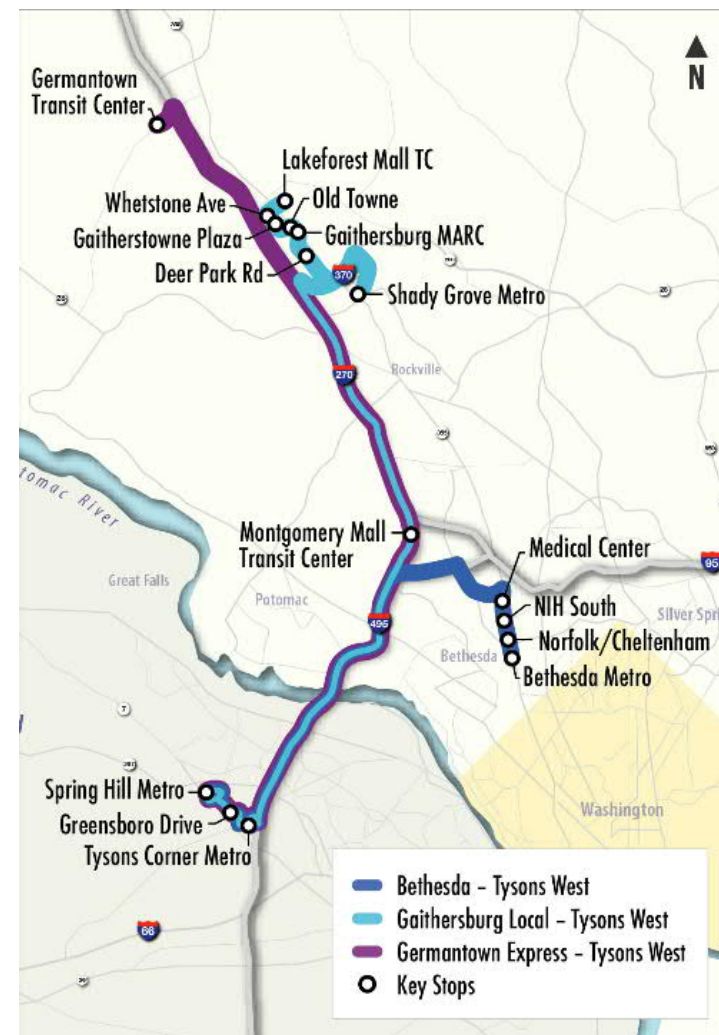
Opportunities For New and Expanded Transit

Potential Enhanced Transit Network

- Integrated service network with existing Commuter Bus and Montgomery County Ride On services
- Combination of peak hour commuter bus routes with new all-day routes
- New service across American Legion Bridge to Virginia

Potential Capital Improvements – Phase 1

- Phase 1 South – ALB to I-370
 - Westfield Montgomery Mall Park and Ride
 - Shady Grove Metrorail Station bus capacity expansion



Dynamic Pricing

- Only the **Maryland Transportation Authority (MDTA)** can fix, revise, and set toll rates.
- Process was separate from the Op Lanes Maryland program.
- Dynamic Pricing manages demand to allow free-flow travel and includes:
 - Toll Rate Cap – Minimum and maximum rate/mile
 - Soft Rate Cap – Rate cannot be exceeded unless speed is reduced, or vehicle volume increases to predetermined thresholds
 - Discount/Free Passage – HOV 3+; Buses; motorcycles
 - Escalation Factors – Effectively manages demand and ensures reliability for HOT lanes in the future



mdta.maryland.gov/ALB270TollSetting

MDTA Board approved Final Toll Rate Ranges on November 18, 2021 for Phase 1 South.

Anticipated Customer Experiences

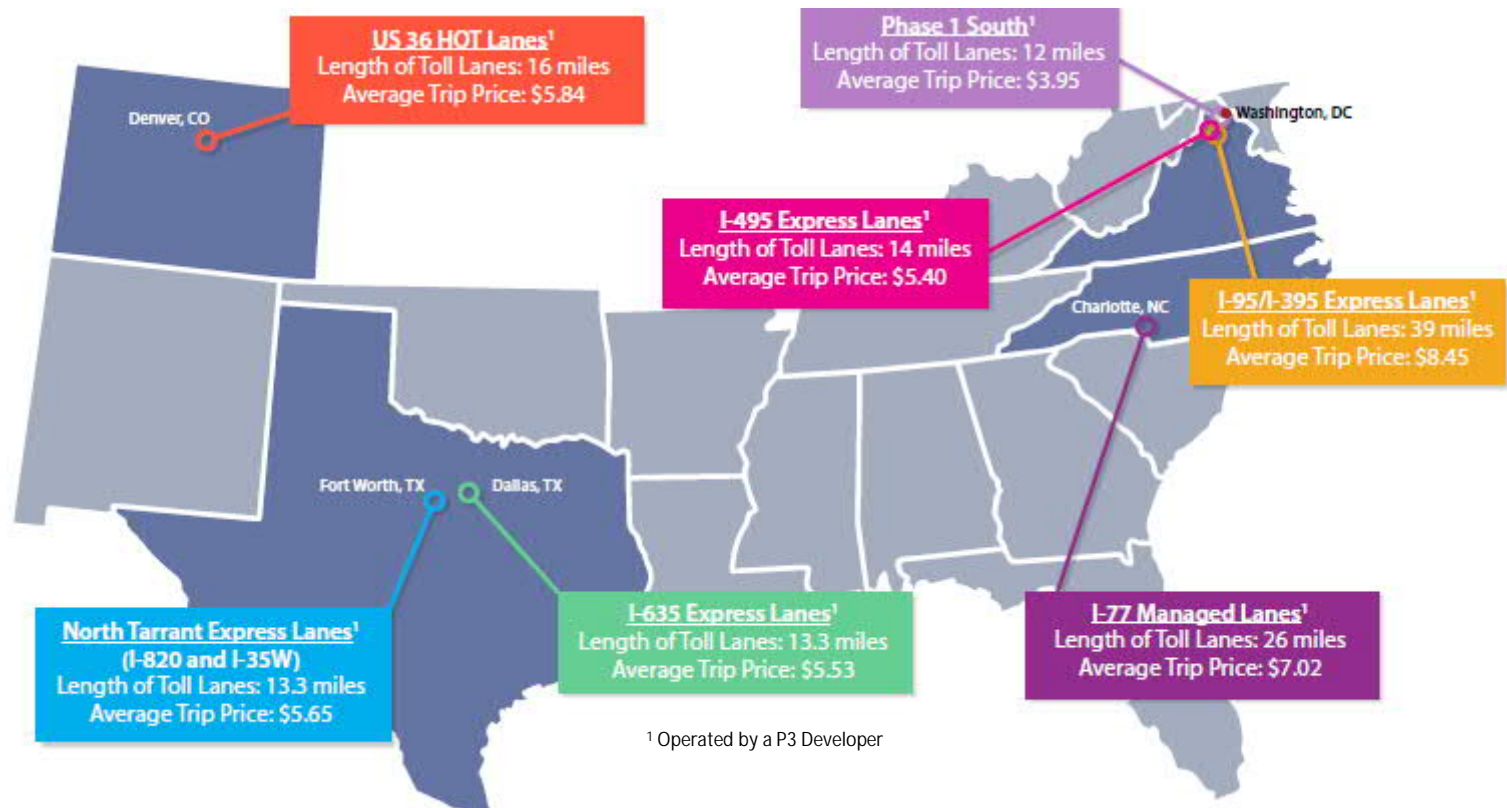
In Maryland, Phase 1 South ALB I-270 to I-370:

- Most common trip is projected to be the 6 miles between George Washington Memorial Parkway and MD 187
- Total distance between George Washington Memorial Parkway and I-370 is about 12 miles
- Average trip length is projected to be 7 miles
- Weekday average tolls are projected to be \$4.42 Northbound per trip, \$3.44 Southbound per trip, and \$3.95 overall per trip (2-axle transponder, 2021 model year in 2021 dollars)

In Virginia:

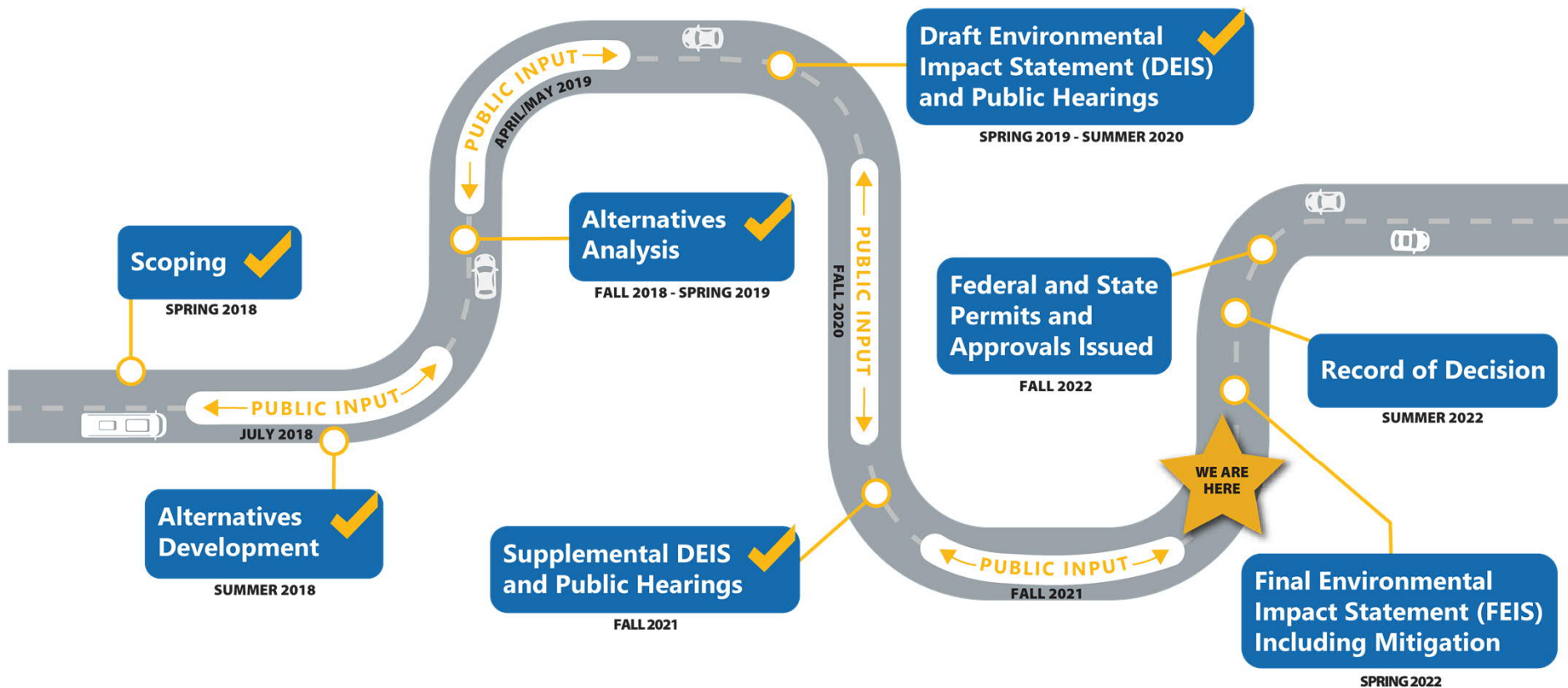
- Average tolls for Virginia's managed lanes on I-495 and I-95 are \$5.40 and \$8.45 per trip, respectively
- On I-495, 87% of trips were less than \$12 and 85% of customers spend less than \$20 a month
- On the Virginia I-95 Express Lanes, 74% of customers spend less than \$20 a month

How Do MD's Proposed Toll Rates Compare to Other Similar Dynamically Tolled Facilities?



I-495 & I-270 Managed Lanes Study (MLS)

Managed Lanes Study: NEPA Process and Schedule



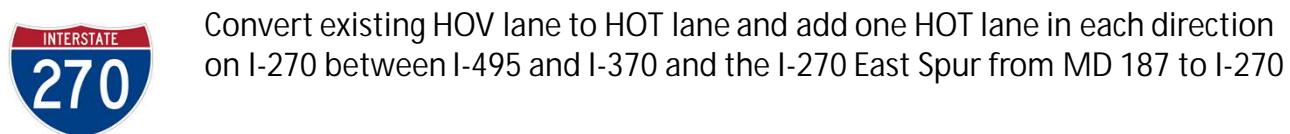
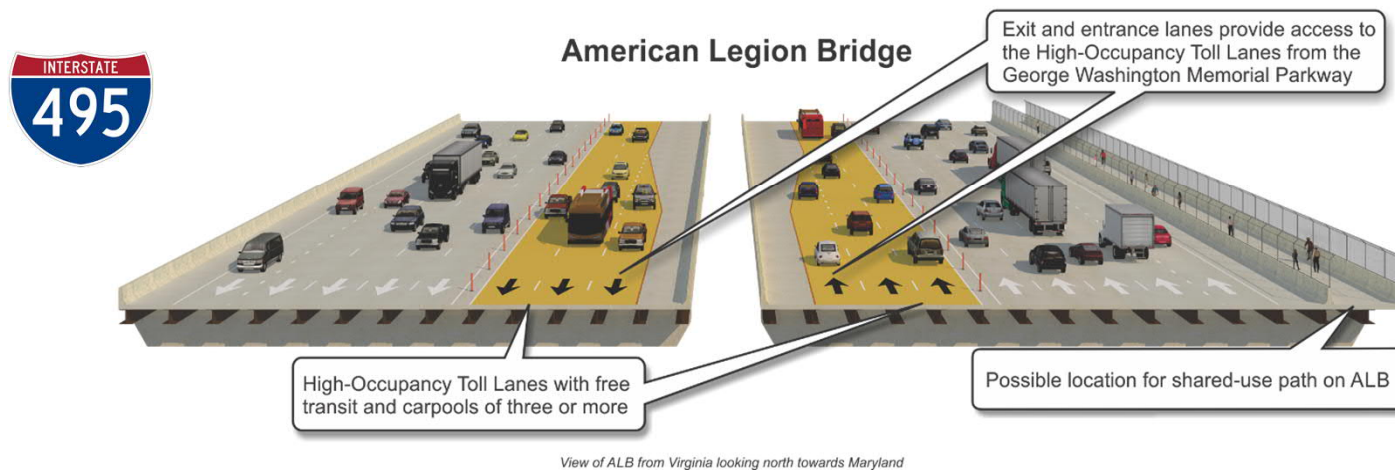
Managed Lanes Study: Preferred Alternative

Alternative 9 – Phase 1 South

- **Will Provide two HOT Lanes** on I-495 from George Washington Memorial Parkway to MD 187; and then on I-270, from I-495 to I-370, including the I-270 east spur to MD 187
- **No Action at This Time:** I-495 From MD 187 to West of MD 5



Alternative 9 – Phase 1 South



Alternative 9 - Phase 1 South: Significantly IMPROVES Travel Speeds

Travel Speeds Improve In Both Peak Hours – On All Impacted Segments of I-495

Peak Period	Corridor	Travel Lanes	Alternative (mph)		
			No Build	Preferred	Difference
AM Peak	I-495 Outer Loop from I-270 West Spur to George Washington Memorial Parkway	GP Lanes	35	50	+15 mph
		HOT Lanes	-	62	+27 mph
	I-495 Inner Loop from George Washington Memorial Parkway to I-270 West Spur	GP Lanes	38	55	+17 mph
		HOT Lanes	-	63	+25 mph
PM Peak	I-495 Outer Loop from I-270 West Spur to George Washington Memorial Parkway	GP Lanes	22	52	+30 mph
		HOT Lanes	-	63	+41 mph
	I-495 Inner Loop from George Washington Memorial Parkway to I-270 West Spur	GP Lanes	14	15	+1 mph
		HOT Lanes	-	62	+48 mph

Source: Travel Speed data from Table 4-7 in locations where action is proposed, FEIS

Alternative 9 - Phase 1 South: Significantly IMPROVES Travel Speeds

Travel Speeds Improve In Both Peak Hours – On Most Impacted Segments of I-270

Peak Period	Corridor	Travel Lanes	Alternative (mph)		
			No Build	Preferred	Difference
AM Peak	I-270 Northbound from I-495 to I-370	GP Lanes	55	61	+6 mph
		HOT Lanes	-	63	+8 mph
	I-270 Southbound from I-370 to I-495	GP Lanes	44	45	+1 mph
		HOT Lanes	-	62	+18 mph
PM Peak	I-270 Northbound from I-495 to I-370	GP Lanes	27	27	0 mph
		HOT Lanes	-	45	+18 mph
	I-270 Southbound from I-370 to I-495	GP Lanes	57	58	+1 mph
		HOT Lanes	-	63	+6 mph

Source: Travel Speed data from Table 4-7 in locations where action is proposed, FEIS

Phase 1 South: Travel Commitments and Enhancements

HOW WILL
PHASE 1
SOUTH
PROVIDE
MORE
TRAVEL OPTIONS
& RELIABLE
TRIP TIMES?

MOVE 30% MORE  **PEOPLE ACROSS**
THE AMERICAN LEGION BRIDGE IN THE AM


REDUCE SYSTEMWIDE DELAYS BY 32% EACH AFTERNOON

MOVE 15-20% MORE PEOPLE 
AT I-270 AND MONTROSE ROAD
DURING RUSH HOURS



SAVE 20 MINUTES PER PM PEAK TRIP
FROM SILVER SPRING TO ROCKVILLE

REDUCE LOCAL ROAD DELAYS BY 
NEARLY 5% IN MONTGOMERY COUNTY

Phase 1 South: Equity Commitments and Enhancements

WHO
CAN
BENEFIT
FROM
PHASE 1
SOUTH?

TRANSIT RIDERS, HOV 3+ CARPOOLERS
AND VANPOOLERS WHO TRAVEL
TOLL-FREE IN ALL LANES



TRANSIT RIDERS WITH CONNECTIONS
TO AND EXPANSION AT 8 UNDERSERVED
AREA TRANSIT CENTERS

ALL MOTORISTS
WITH RELIABLE TRIP TIMES



EVERYBODY

THANKS TO REDUCED DEPENDENCY ON
SINGLE OCCUPANCY VEHICLES

Phase 1 South: Environmental Commitments and Enhancements

HOW
WILL
**PHASE 1
SOUTH**
PROTECT
LOCAL
RESOURCES?



**ZERO RESIDENTIAL
DISPLACEMENTS**

**ZERO BUSINESS
DISPLACEMENTS**



90% REDUCTION OF IMPACTS TO PLUMMERS ISLAND



**AVOIDS IMPACTS TO THE
HISTORIC MORNINGSTAR CEMETERY**

Ongoing Activities- Mitigation and Environmental Commitments

- Continued coordination with partner/resource and regulatory agencies to finalize mitigation for unavoidable impacts
- Final Mitigation Plan being prepared for review and consideration
 - Parkland (improvements to amenities and land replacement)
 - Water Quality Improvements
 - Ecological Restoration
 - Reforestation
 - Historic Resources and Archeology
 - Wetlands and Waterways
 - Noise Barriers



Alternative 9 - Phase 1 South: Commitments and Enhancements

These commitments are **additional enhancements that are above mitigation** for direct impacts:

Bicycle and Pedestrian Connections

Consistent with county master plans:

- New Pedestrian/bicycle path across ALB
- New side paths across River Road
- Upgraded side-path along Seven Locks Road
- New sidewalk along Seven Locks Road



Environmental Enhancements

Address water quality concerns on parkland:

- Stabilize stream banks/beds, create natural channels, remove concrete lined channels
- revegetate areas to improve water quality & reduce flooding and pollutant loads in identified priority M-NCPPC Parks.



Regional Transit Improvements

Enhance existing and planned transit and support new opportunities:

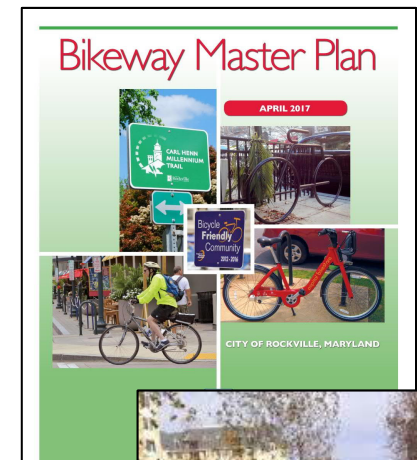
- Bus capacity expansion at WMATA Shady Grove Metrorail Station
- Park and Ride expansion at Westfield Montgomery Mall Transit Center



Bicycle and Pedestrian Improvements in the Preferred Alternative

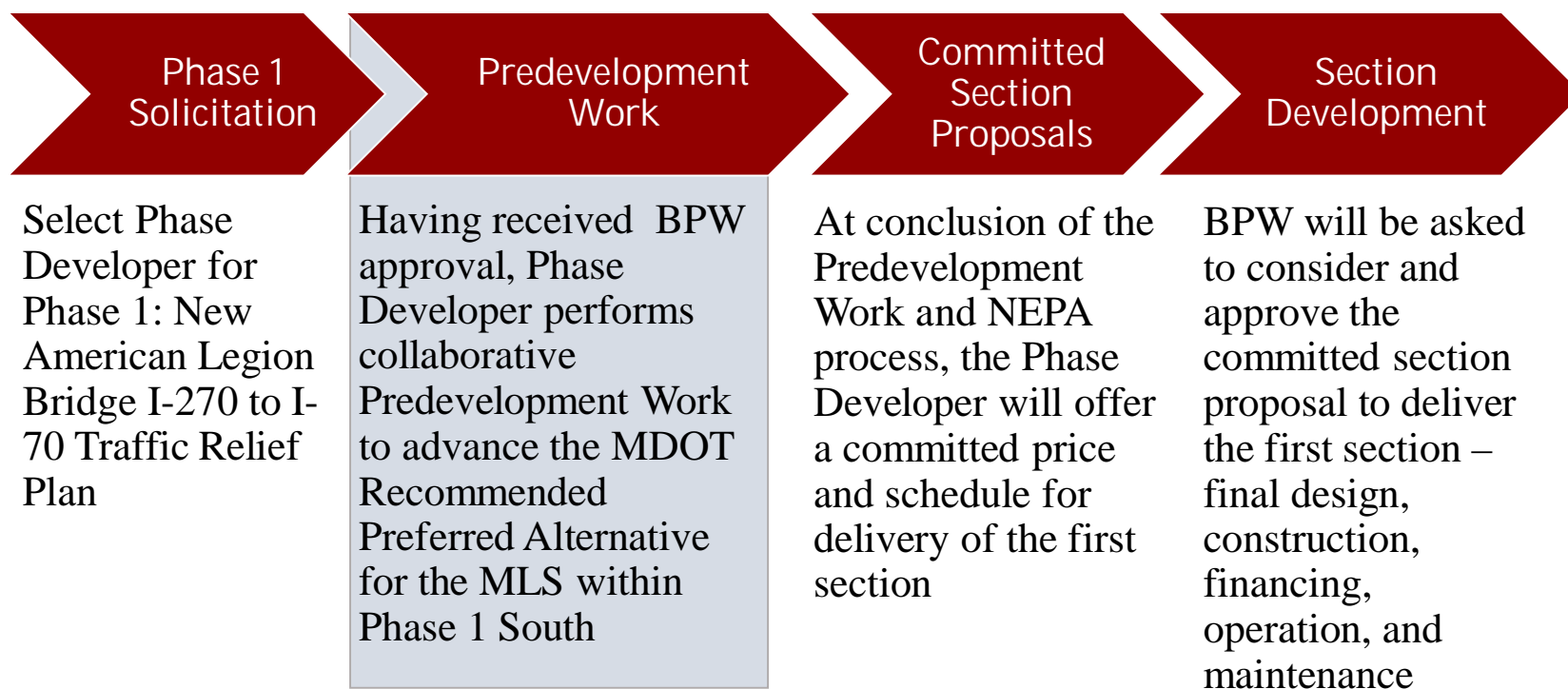
Design Approach: In accordance with MDOT SHA, Montgomery County, City of Rockville design requirements, Master Plans, and Complete Streets Design Guide.

- Impacted existing facilities would be **replaced in kind or upgraded** to meet master plan recommended facilities
- For facilities along crossroads where bridge would be reconstructed: **replace, upgrade, or provide new** facilities consistent with master plan
- Where mainline or ramps cross over roadway and bridge would be replaced: bridges would be **lengthened to accommodate footprint** for master plan facility underneath structure
- Facility types considered in Preferred Alternative:
 - ✓ Sidewalk
 - ✓ Bike lane
 - ✓ Shared lane
 - ✓ Sidepath (shared use path)
 - ✓ Off-street trail

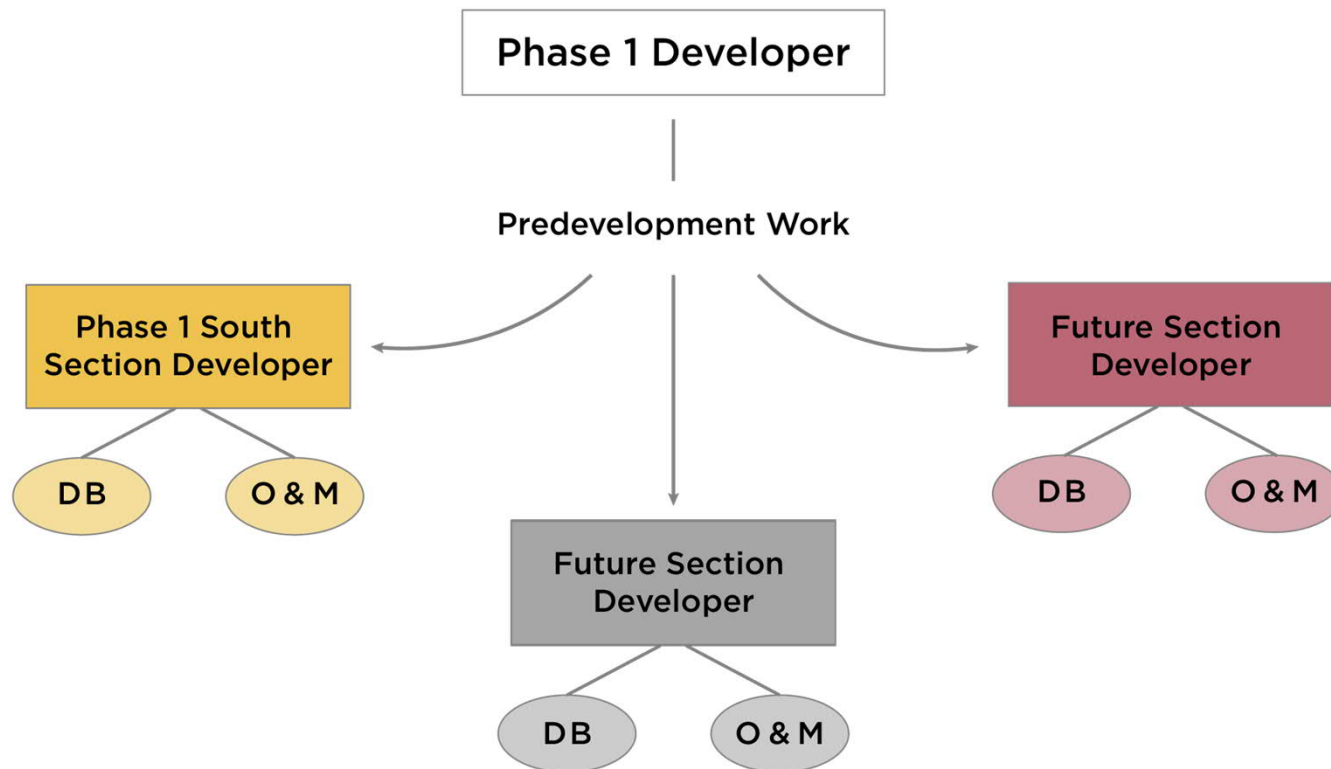


Phase 1 Public-Private Partnership (P3)

Progressive P3 Approach



Phase P3 Structure



Phase 1 Developer



Above and Beyond Commitments



This Project is made possible – with no public funding– through a public-private partnership with Accelerate Maryland Partners.

- \$300 million in transit-services through the Phase 1 South operating term
- \$50 million over the operating term toward a community grant program that benefits small, disadvantaged, women and veteran-owned businesses
- \$25 million over the life of the operating term for emerging technologies over the operating term in the form of an Innovation Alliance
- \$5 million for bicycle and pedestrian safety improvements during construction, supporting Montgomery County's Vision Zero
- Improvements to 18 intersections on county roads within close proximity to the corridor



*The exact investments would be determined as part of the Section P3 Agreement along with other components to advance final design, construction, financing, operations, and maintenance

Disadvantaged Business Enterprise and Workforce



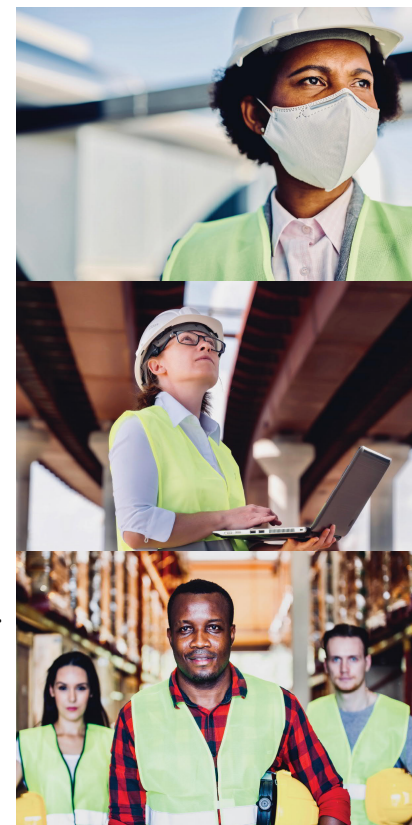
Accelerate Maryland Partners is committed to inclusivity and opportunity for all small, disadvantaged, women and veteran-owned businesses, union, and local contractor involvement.

Pre-Development Work Phase Goal: 26%

AM Partners has Memoranda of Understanding with organizations including:

- Maryland Black Chamber of Commerce
- COMTO
- Bowie State University
- Prince George's Community College
- EMPLOY Prince George's
- Hispanic Chamber of Commerce – Montgomery County

to develop training, education and workforce programs and promote and advertise opportunities for inclusion of DBEs in this project.



Predevelopment Work



The Predevelopment Work Phase allows time for coordination and collaboration to exist in order to create a project that provides the most value to the citizens of Maryland

What is Predevelopment Work?

This upfront effort will focus on advancing the preliminary design and due diligence activities for the Project by involving all stakeholders – including Montgomery and Frederick counties, municipalities, property owners, utilities, and citizens.

During the predevelopment work, the focus will be on further avoiding and minimizing impacts to environmental resources, communities, properties, utilities, and other features by working collaboratively with the Phase Developer and the counties, municipalities, State and federal agencies, property owners, utilities and citizens.

Ongoing Predevelopment Activities

- Advancing environmental permitting
- De-risking activities
- Advancing design
- Building community awareness and support
- Progressing competitive solicitation for a design and construction partner

Planning for Future Construction

A Transportation Management Plan (TMP) lays out a set of coordinated transportation management strategies and describes how they will be used to manage the work zone impacts of a road project.



Traffic Control Plan

AM Partners understands that local, regional, and long-distance travelers depend upon the project corridor daily.

- Enhancing capacity, managing demand, and operating efficiently on the roadway throughout the construction period
- Providing the traveling public, a consistent feel that promotes safety
- Updating plan on an ongoing basis to detail phasing, traffic control methods, anticipated lane shifts, closures, travel demand strategies, and impacts on access
- Requires close coordination with all applicable internal and external parties

Public Information Campaign

Coordinate and communicate project activities, traffic information and safety campaigns using proven approaches and tools such as:

- **Online** through social media and digital advertising that leverages geo-location data to most effectively reach drivers, virtual events, website
- **Direct outreach** to local homeowners and civic associations, including briefings and email newsletters; advisory messages on message signs near impacted routes; targeted pop-up booths at community events
- **Traditional media** including local television news, newspaper, radio ads, email/text notifications to subscribers

Operations Strategy

The plan will inform drivers what to expect during construction, allow them to make informed decisions about their trips, and provide alternative travel options.

AM Partners will develop proactive and sustainable travel measures with the State to improve traveler experience during construction, including analysis of opportunities to optimize regional transit networks.

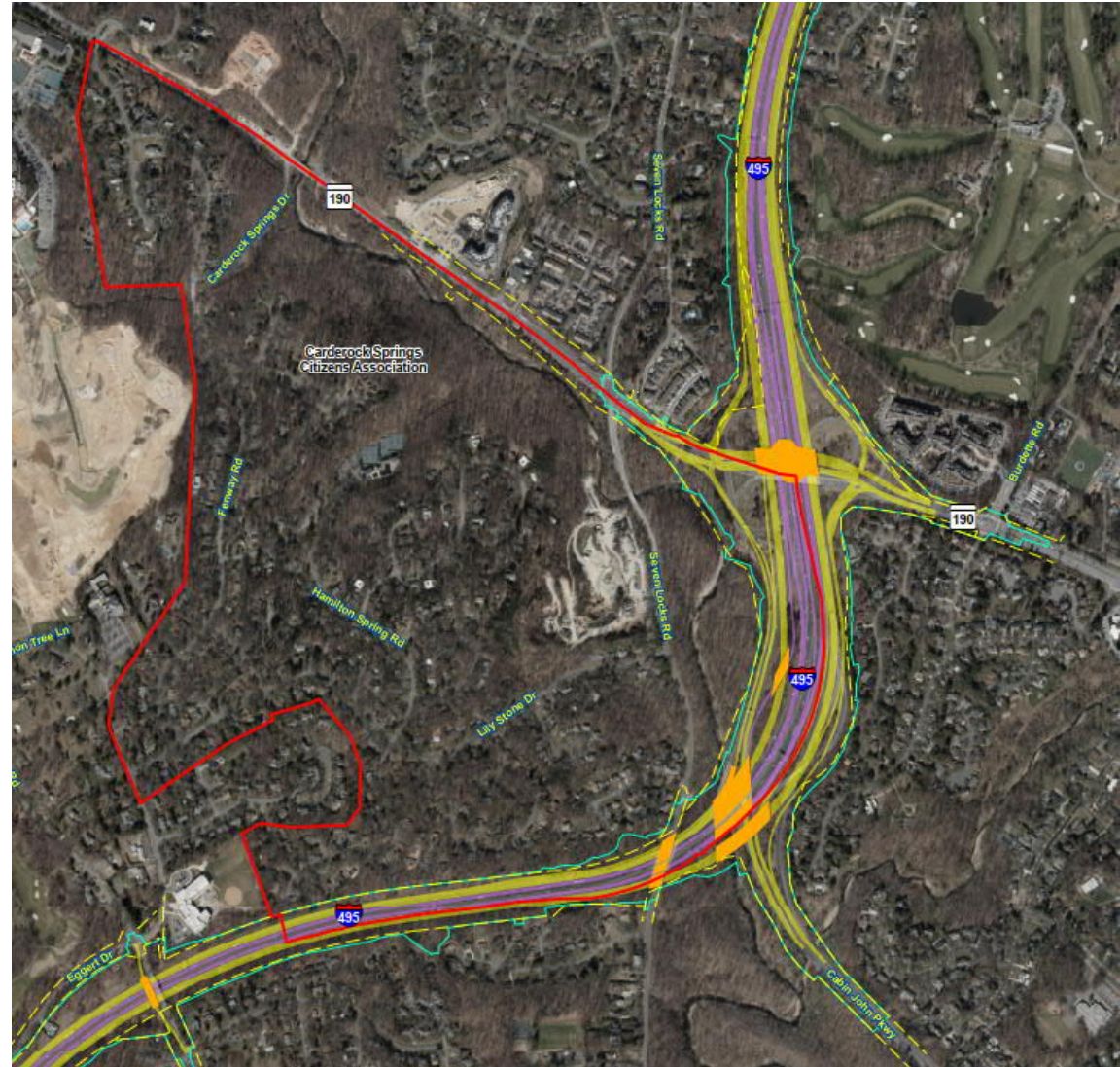
The plan establishes a framework for regular public information about alternate transit routes in lower congestion corridors to plan multi-modal transport, including the Commuter Connections program, third-party navigation, and transit planning apps (e.g. Google Maps, Waze).

Sign up to stay connected →



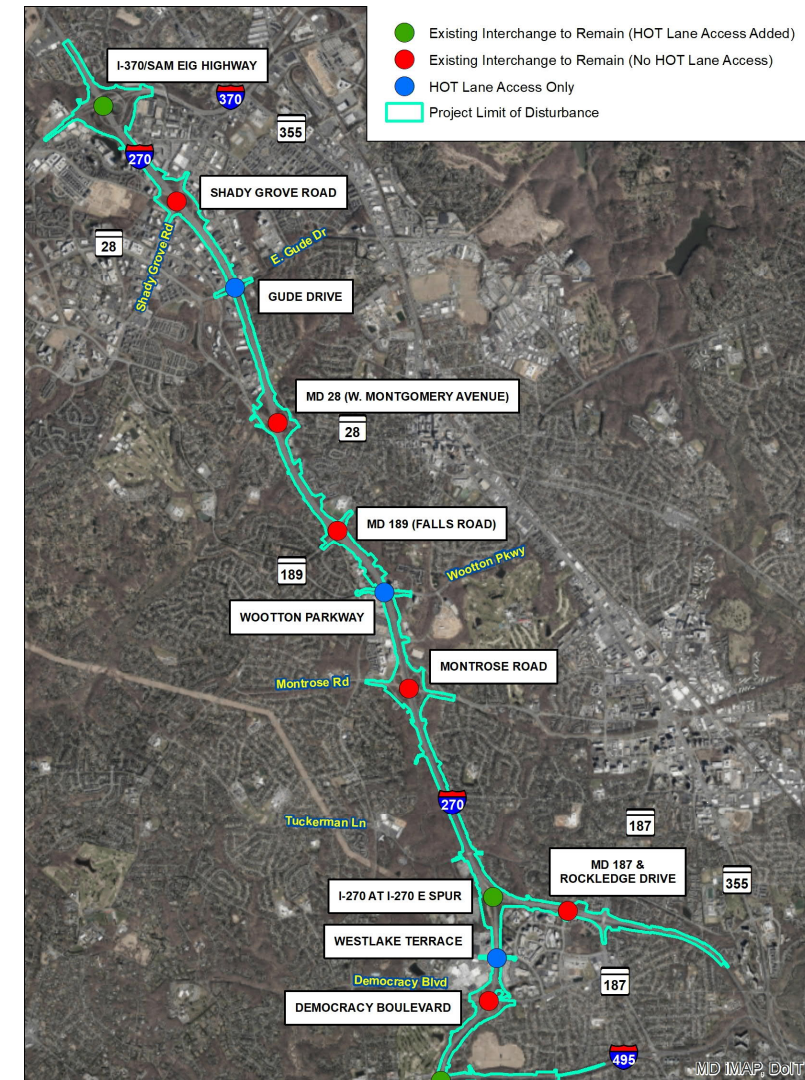
Your Community

- Proposed Access Points
- Project Area Near Your Community
 - Roadway
 - Noise Mitigation
 - Traffic Information



Proposed Access Points North

- The teal outline represents the Project Limits of Disturbance (LOD)
- The blue dots represent High Occupancy Toll (HOT) Lane only access points
- The red dots represent existing interchanges that will not offer HOT Lane access
- The green dots represent existing interchanges that will have HOT lane access added



Proposed Access Points South

- The red dots represent existing interchanges that will not offer HOT Lane access
- The green dots represent existing interchanges that will have HOT lane access added



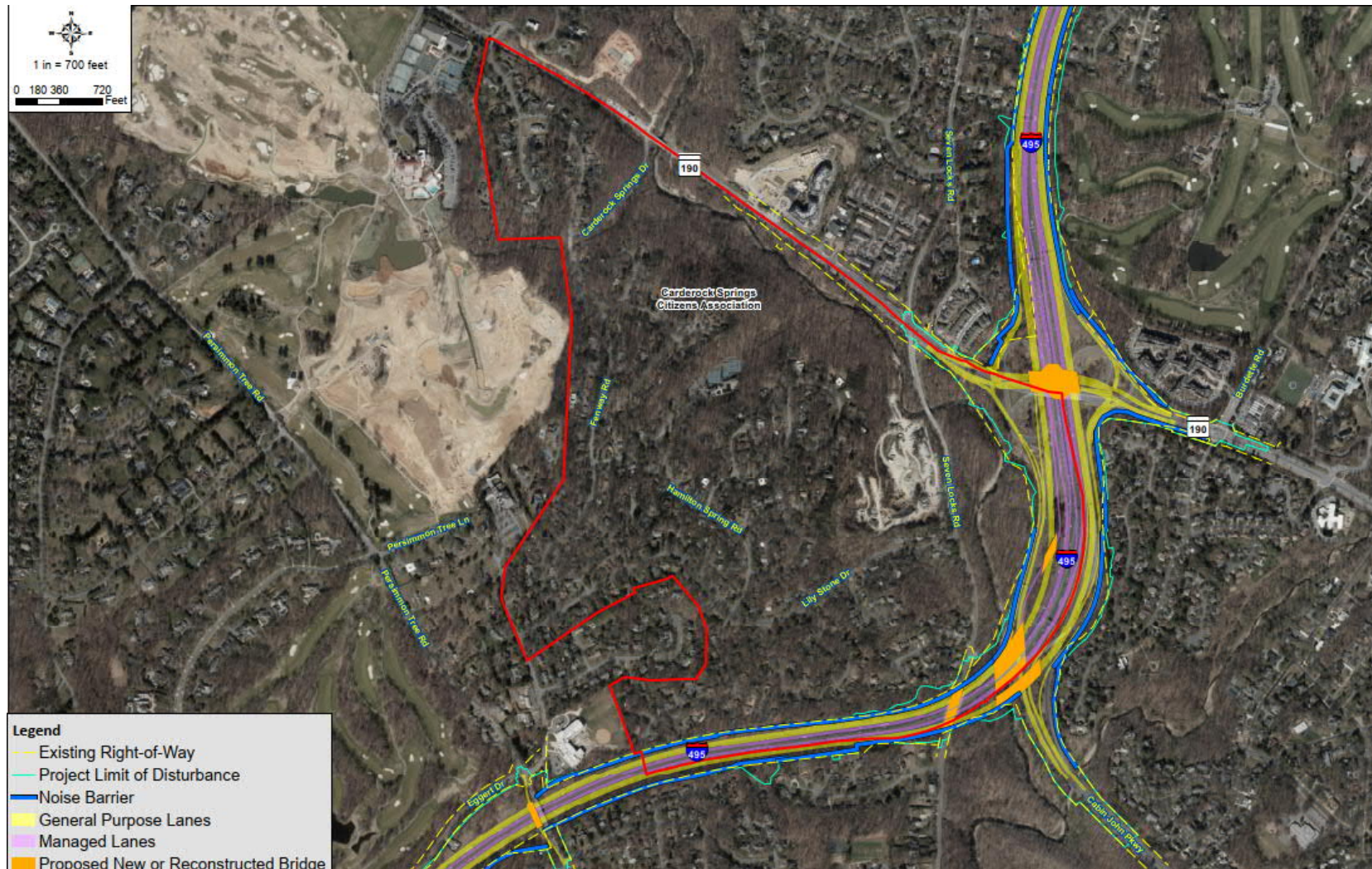
Legend

- Existing Right-of-Way
- Project Limit of Disturbance
- General Purpose Lanes
- Managed Lanes
- Proposed New or Reconstructed Bridge

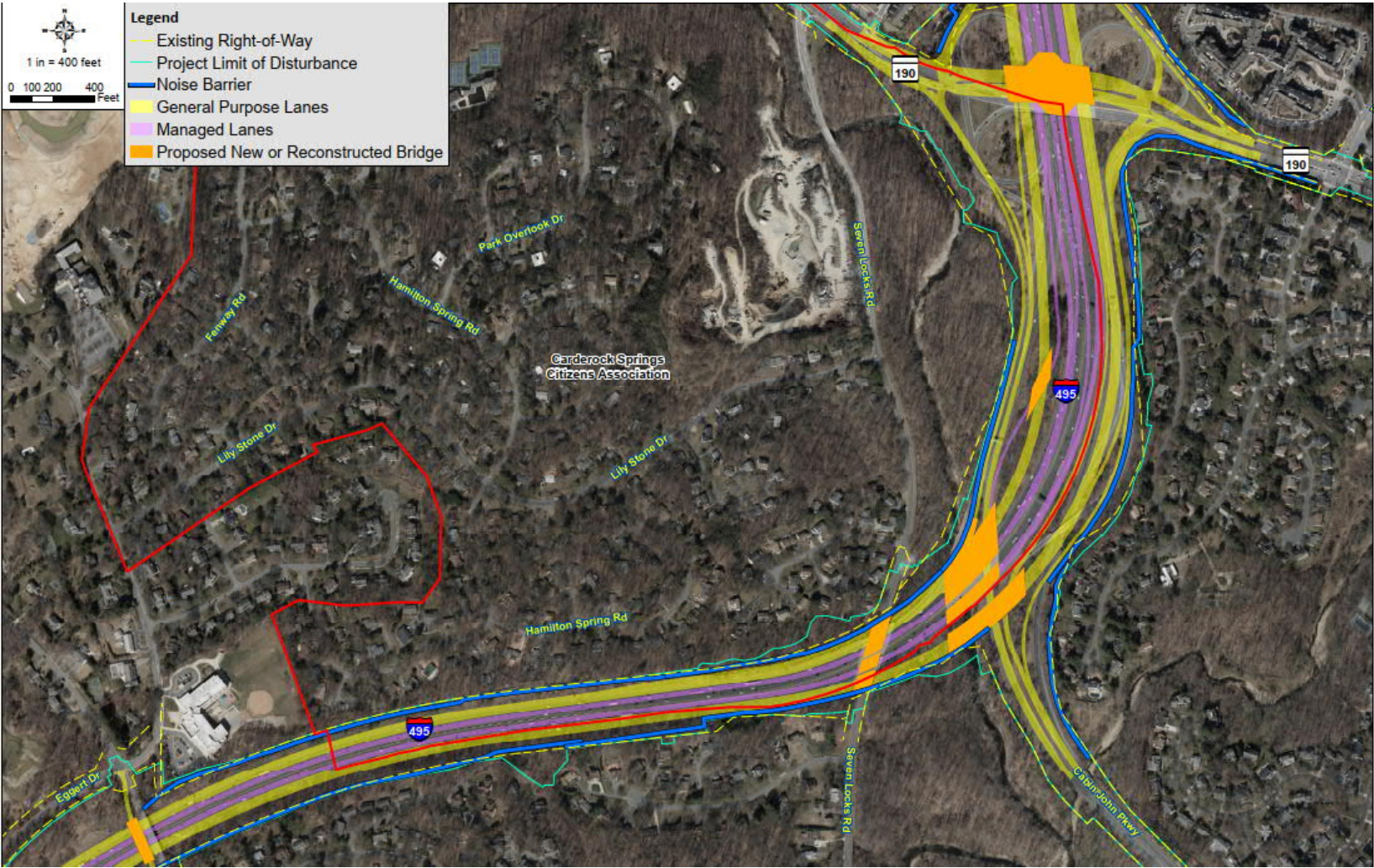
Scale: 1 in = 700 feet
0 180 360 720 Feet

Map Labels: Robinson Tree Rd, Persimmon Tree Ln, Carderock Spring Dr, Carderock Springs Citizens Association, Hamilton Spring Rd, Lay Stone Dr, I-495, I-190, Carderock Rd, Robinson Tree Rd, Persimmon Tree Ln, Carderock Spring Dr, Hamilton Spring Rd, Lay Stone Dr, I-495, I-190, Carderock Rd, Robinson Tree Rd, Persimmon Tree Ln, Carderock Spring Dr, Hamilton Spring Rd, Lay Stone Dr, I-495, I-190, Carderock Rd.

Noise Mitigation



Noise Mitigation



Traffic Speed Results - 2045

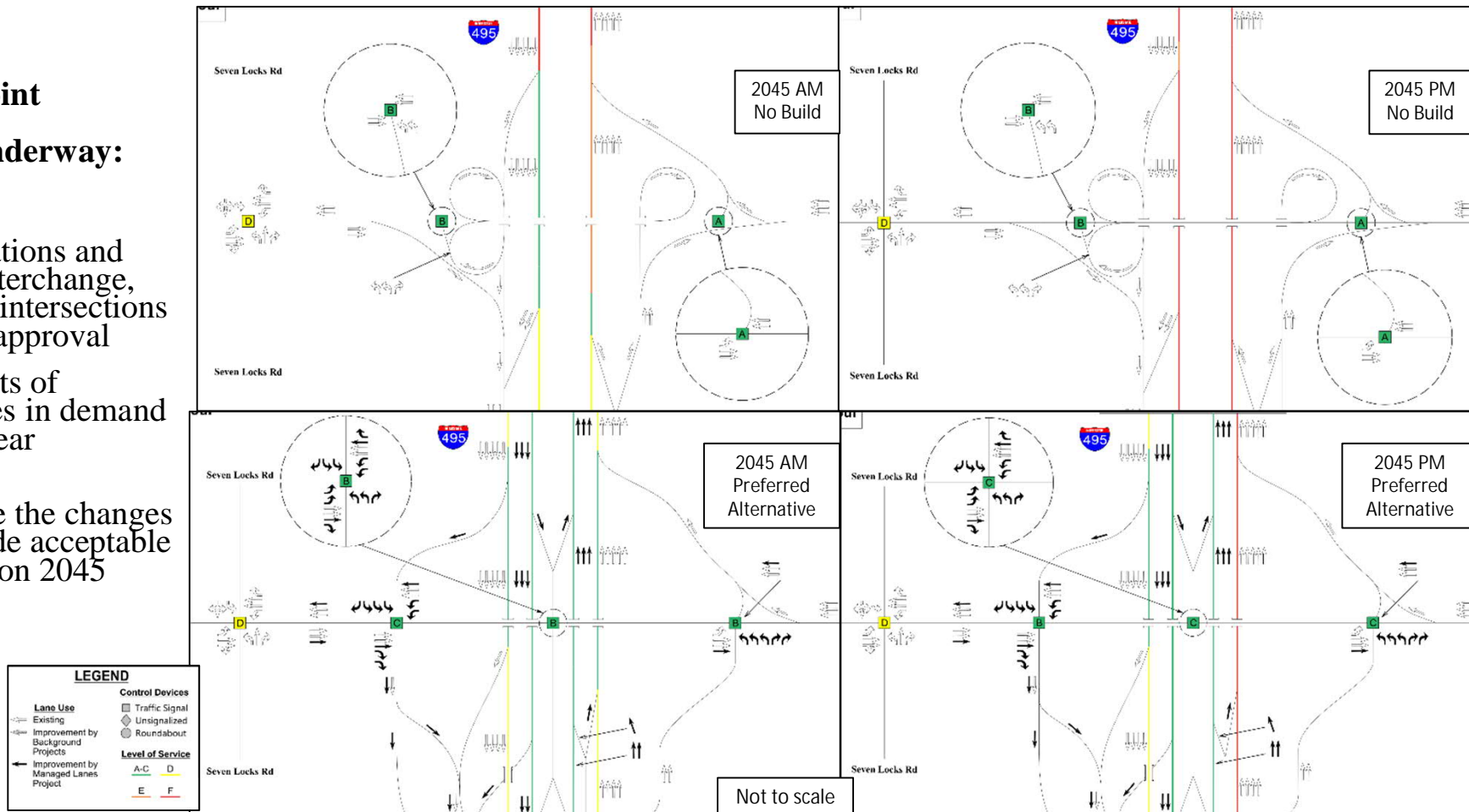
2045 Peak Period Speeds (mph)

Average Speed (mph)	MD 190 to GWMP			MD 190 to I-370		
	Via Outer Loop			Via Inner Loop and I-270 NB		
	No Build	GP Lanes	HOT Lanes	No Build	GP Lanes	HOT Lanes
6-7 AM	47	52-53	62	62	61	63
7-8 AM	46			62	60	
8-9 AM	52			52	54	
9-10 AM	51			42	49	
Average Speed (mph)	GWMP to MD 190			I-370 to MD 190		
	Via Inner Loop			Via I-270 SB and Outer Loop		
	No Build	GP Lanes	HOT Lanes	No Build	GP Lanes	HOT Lanes
3-4 PM	19	55	64	49	52	56-57
4-5 PM	17	19		44	52	
5-6 PM	6	4		44	52	
6-7 PM	5	5		51	52	

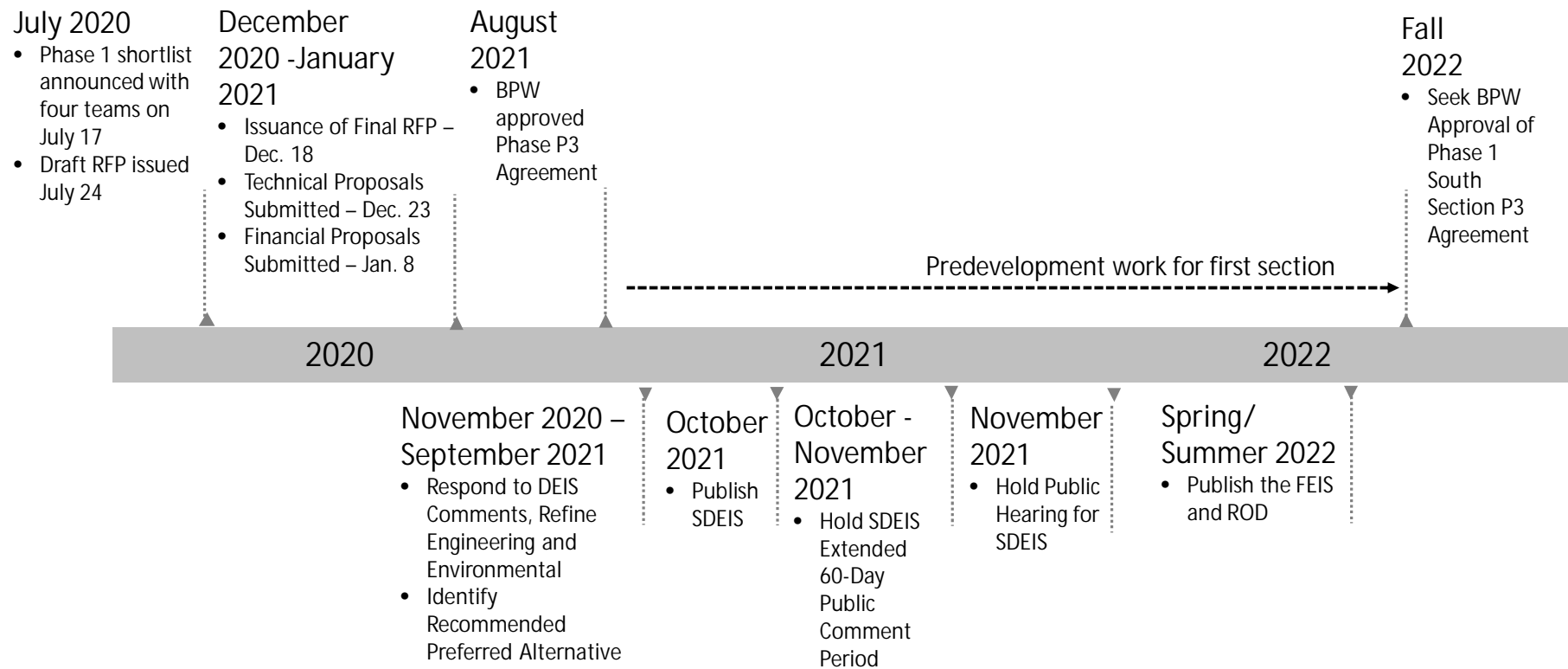
Traffic Analysis Near Carderock Springs

Interstate Access Point Approval (IAPA) documentation is underway:

- It evaluates operations and safety for each interchange, including nearby intersections to obtain FHWA approval
- It analyzes impacts of localized increases in demand on cross streets near interchanges
- It helps determine the changes required to provide acceptable operations based on 2045 forecasts



Phase 1 South – Predevelopment & MLS Schedule



More Information and Progress Updates



Connect to Phase 1 Contracting Opportunities:
acceleratemarylandpartners.com/connect

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