



I-495 & I-270 P3 Program Update

ASHE Potomac Section

March 10, 2021





Agenda

- I-495 & I-270 P3 Program Overview
- I-495 & I-270 Managed Lanes Study
- I-270 Pre-NEPA
- Dynamic Pricing
- American Legion Bridge I-270 to I-70 Relief Plan
- Questions



I-495 & I-270 P3 Program Overview





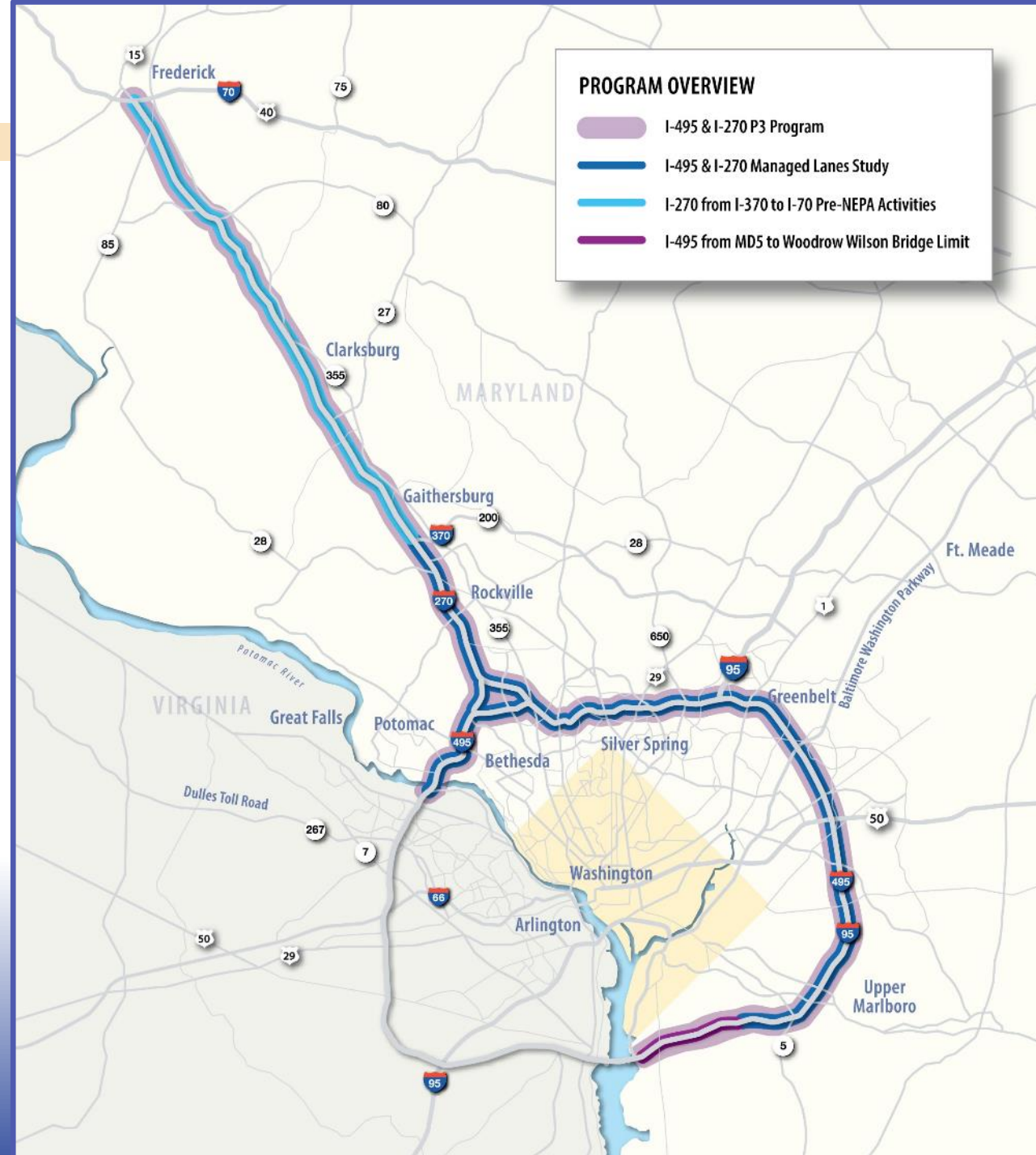
I-495 & I-270 P3 Program

The I-495 & I-270 P3 Program includes over 70 miles of highway improvements

- I-495 & I-270 Managed Lanes Study (48 miles)
- I-270 from I-370 to I-70 Pre-NEPA Activities (23 miles)
- I-495 from MD 5 to the Woodrow Wilson Bridge (future study)

For additional details, see

495-270-p3.com/program-overview/





P3 Program Delivery Goals



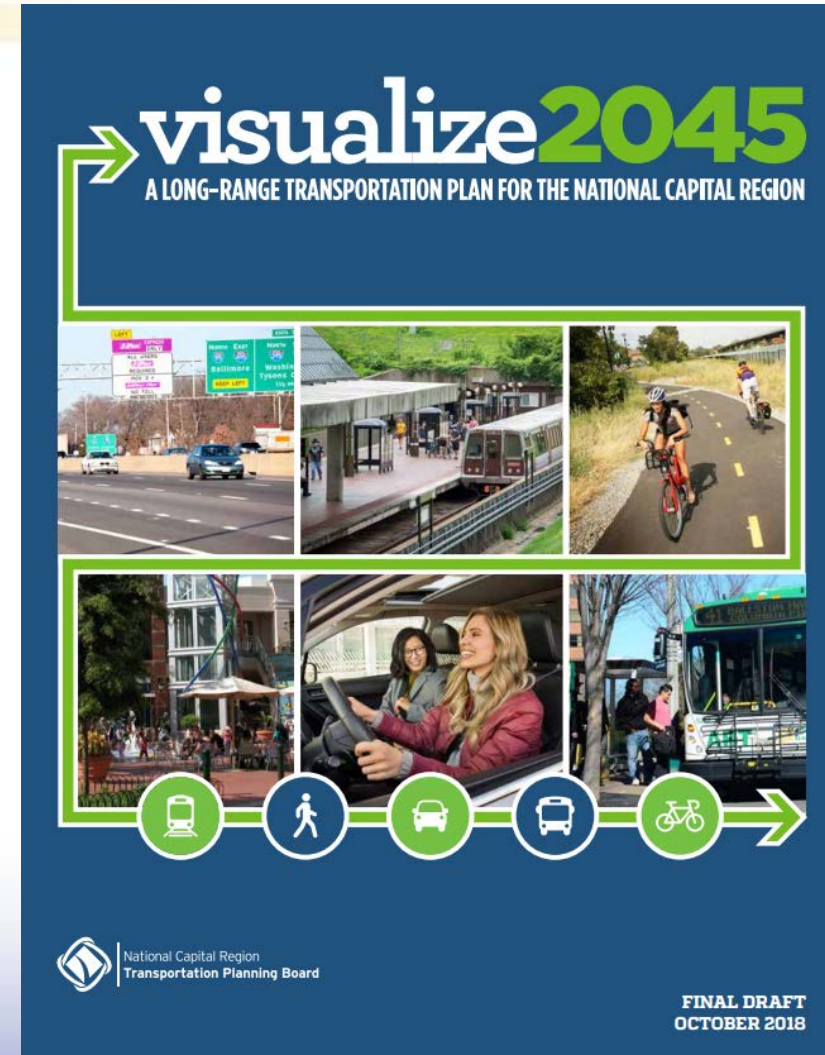


Regional Context- Visualize 2045

Long-Range Transportation Plan for the National Capital Region

For additional details, see

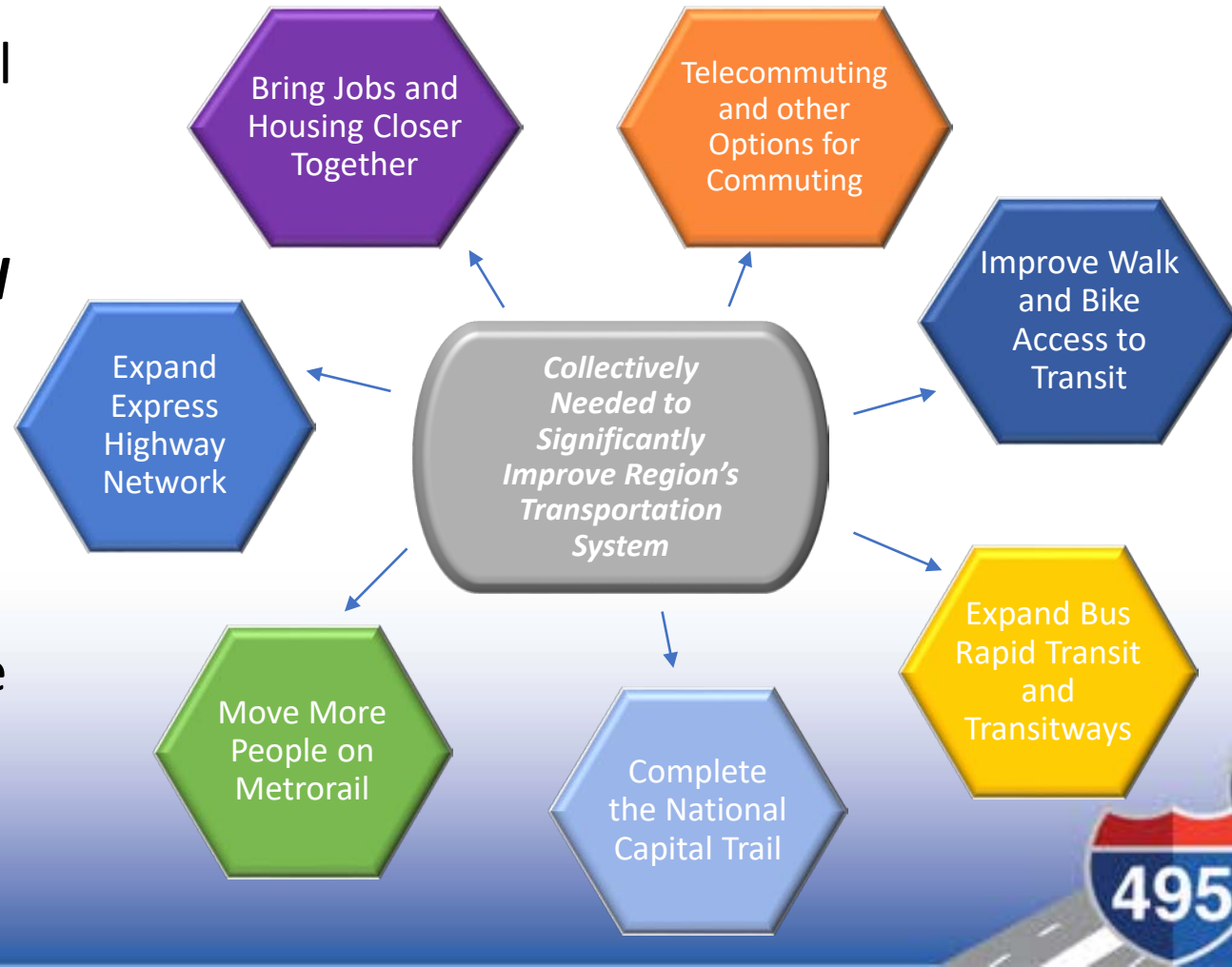
<https://www.mwcog.org/visualize2045/document-library>





Regional Transportation Plan: *Visualize 2045*

- Adopted by National Capital Region Transportation Planning Board (TPB)
- Includes ***Seven Aspirational Initiatives***
- Calls for ***expanding the region's express highway network*** – new managed lanes on all of I-495 & I-270 in Maryland that incentivize carpools and provide new opportunities for transit to





Why is this P3 Program Needed?

Maryland does not have the funds to address long-term congestion on I-495 and I-270, or replace aging facilities like the American Legion Bridge, without a P3.

Without the P3 Program:

- The amount, frequency and duration of congestion will continue to worsen
- Frustration will grow as Marylanders spend ever-more of their precious time and money stuck in congestion
- Maryland will continue to lose jobs and economic growth to neighboring states

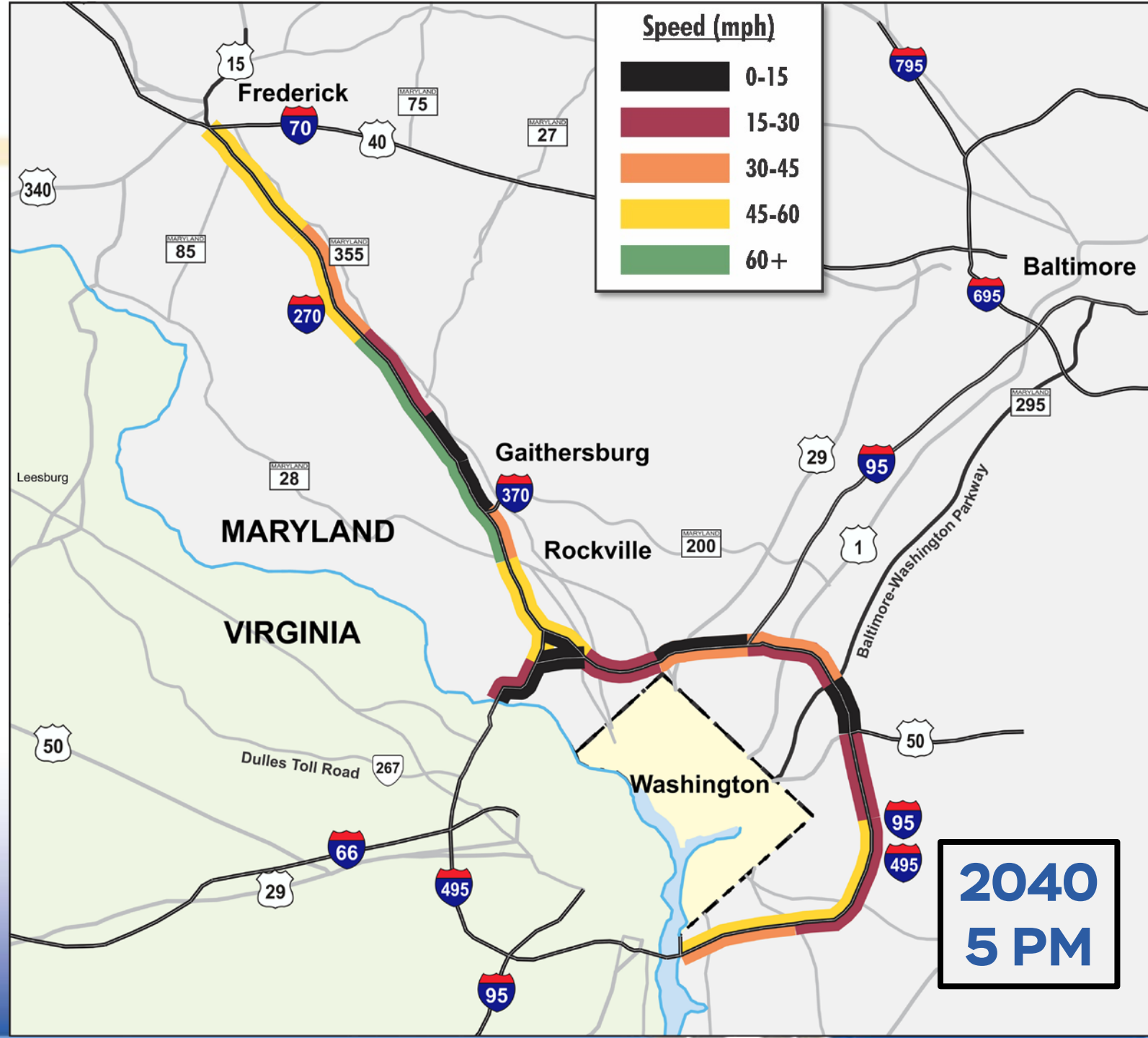
Studies show just doing the transit improvements in the Region's long-range plans will not reduce congestion or provide the P3 Program's other benefits.





I-495 & I-270 Traffic Congestion

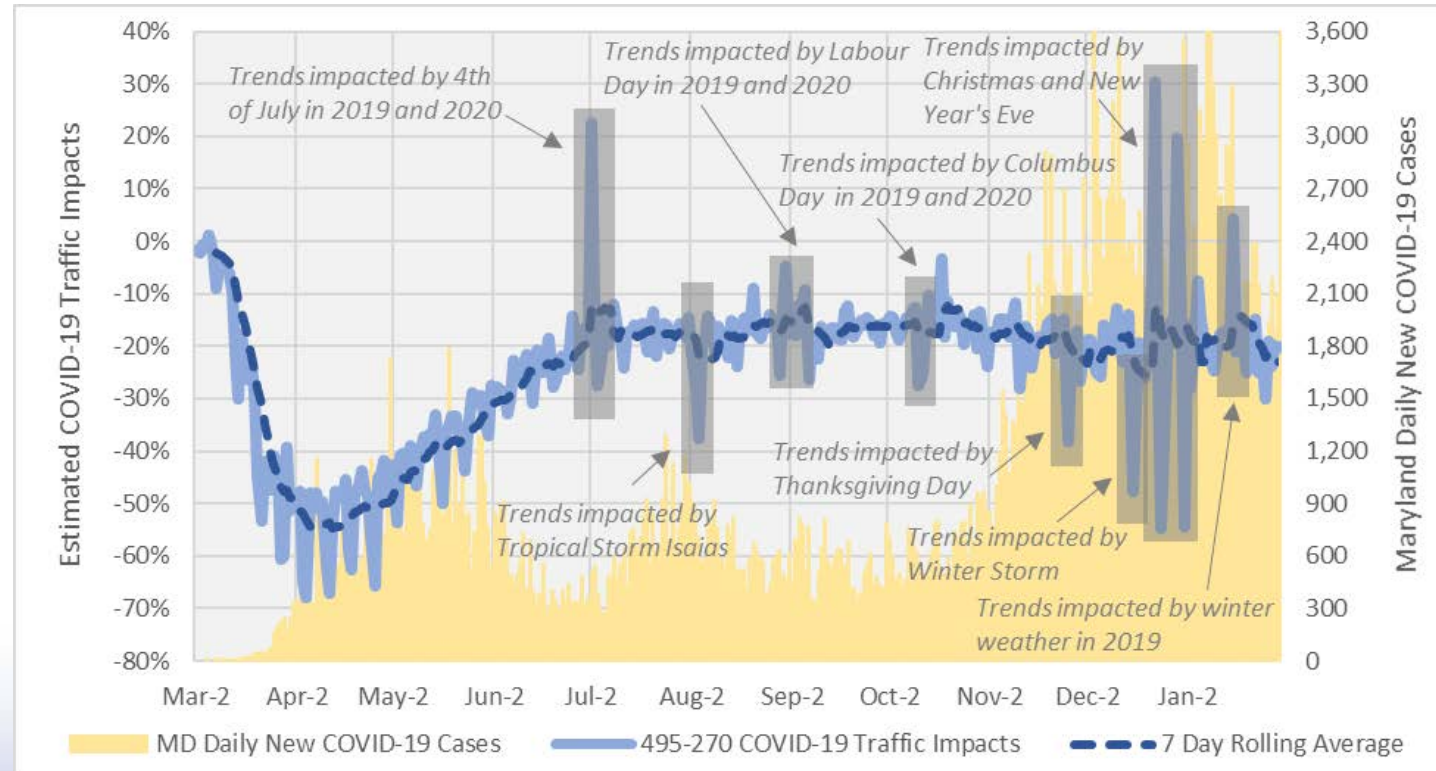
- 2nd highest commuting times in the country
- **Daily severe congestion** averaging:
 - o 7 hours on I-270
 - o 10 hours on I-495
- National Capital Region (NCR) commuters lose an average **of 11 work days** and **over \$2,000** to congestion annually
- Cost of congestion in the Maryland NCR was over \$1.7 B in 2017





How Is the COVID-19 Pandemic Being Considered?

- Traffic on area highways dropped significantly in April during the height of the COVID-19 lockdown
- Highway traffic volumes have since recovered to roughly 80 percent of pre-COVID levels
- Telework has increased, but commuting only accounts for about 20% of daily trips, and fewer people are using transit
- 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





Economic Benefits of the P3 Program

- Faster, more reliable movement of goods & services, lower shipping costs
- Improved access to employees, jobs and housing; better quality of life
- More money in consumers' pockets: Congestion costs the average household over \$2,000 a year in added costs
- More jobs: More than \$3B in private infrastructure investment for Phase 1 South will support economic development and job growth in communities and the region - Phase 1 South is estimated to support over 7,500 jobs/year during construction
- Real budget savings: The P3 Program includes upgrades and repairs to existing lanes worth \$1.7 Billion – that would otherwise come out of the Transportation Trust Fund
- Boost MD's economic competitiveness in the region



I-495 & I-270 Managed Lanes Study

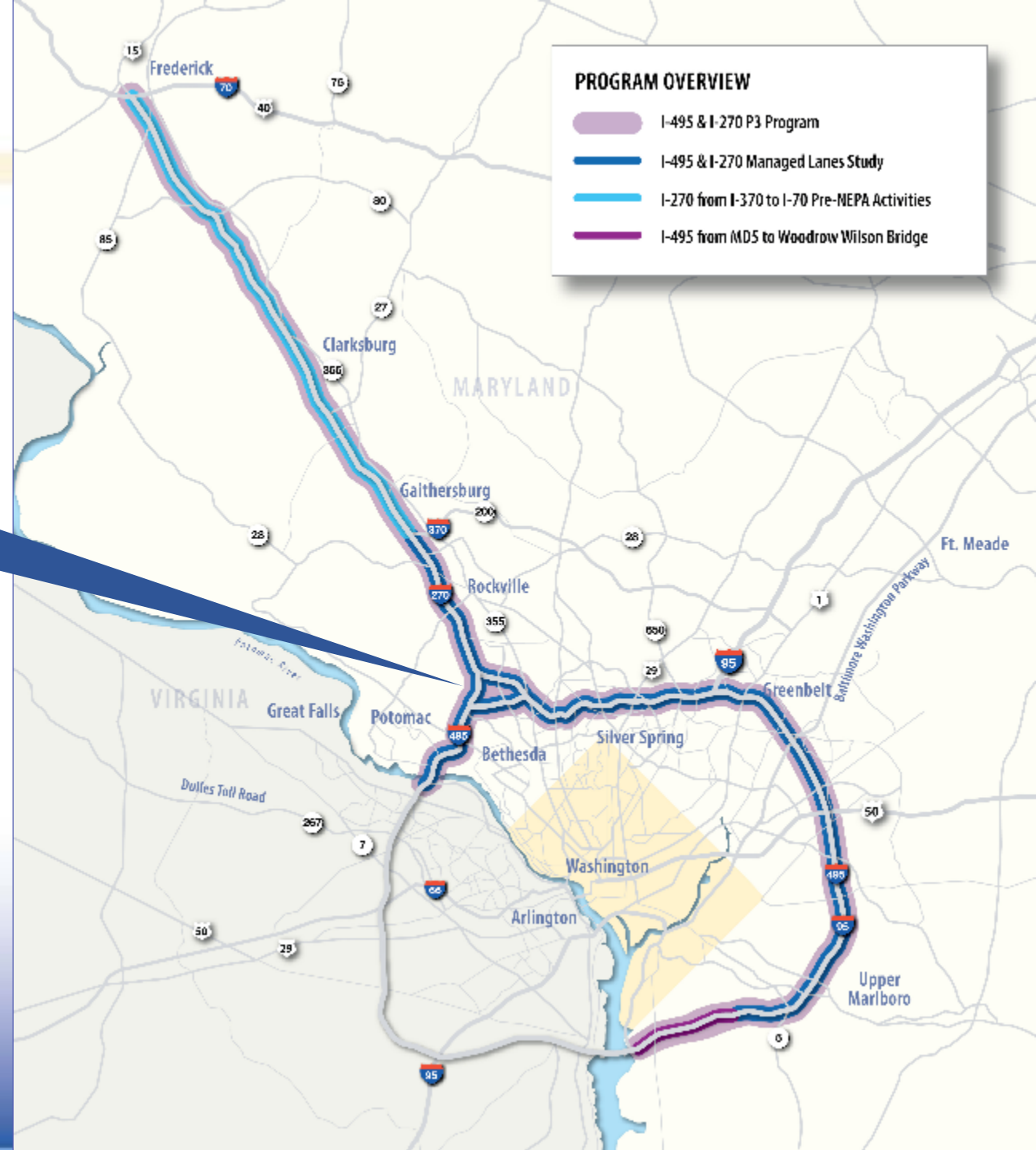




I-495 & I-270 Managed Lanes Study

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

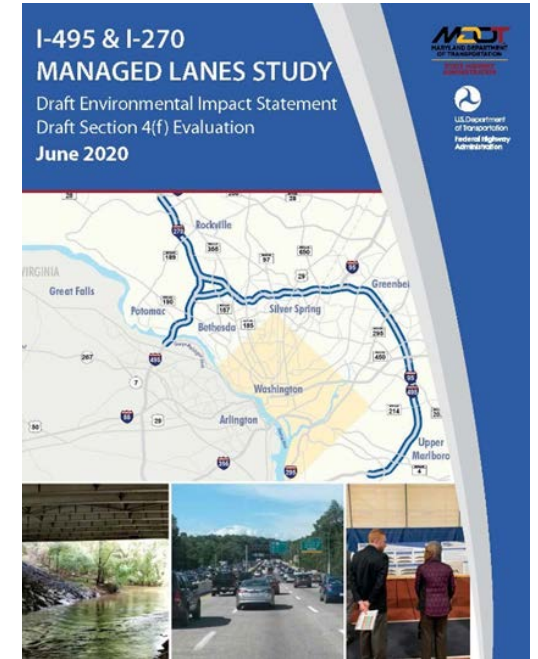
- The 48-mile study area begins south of the George Washington Memorial Parkway on I-495 in Virginia, crosses the American Legion Bridge and extends to west of MD 5 and along I-270 from the Capital Beltway to north of I-370
- First environmental study under the P3 Program





MDOT Recommended Preferred Alternative (RPA)

- The MLS Draft Environmental Impact Statement (DEIS) was published on July 10, 2020 for a **123-day public and agency comment period**
- **Numerous alternatives were considered**, including transit-only alternatives (bus rapid transit, heavy-rail, light-rail) and using MD 200 (ICC) as a diversion to using the top side of I-495
- After thorough review and consideration of comments, MDOT SHA recommends the **two High Occupancy Toll (HOT) lane alternative** be identified as the Preferred Alternative in the FEIS

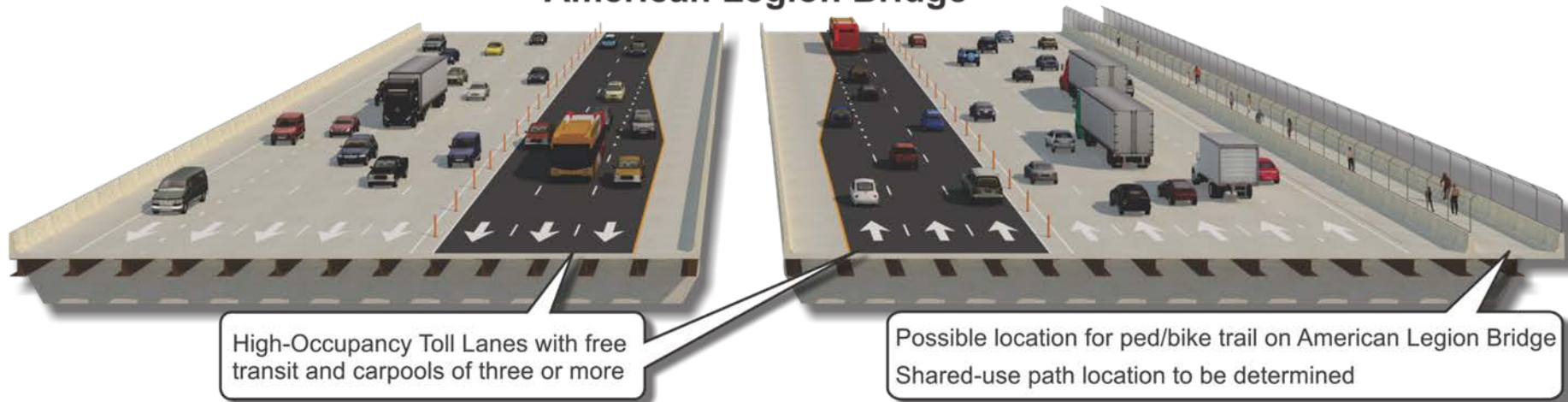




Alternative 9- High Occupancy Toll (HOT) Lanes

Two High-Occupancy Toll (HOT) Lanes in each direction

American Legion Bridge



View of ALB from Virginia looking north towards Maryland

Key Benefits:

- Performs best for average speed and corridor travel times (41 mph in **FREE** GP lanes)
- Greatest annual savings per commuter (73 hours in 2040)
- Largest reduction in delay on local roadway network (7%)
- New Options – Carpools **FREE** (three or more)
- New Opportunities – Transit Usage **FREE**
- Most regionally compatible with existing system in VA
- Middle of the range of preliminary environmental impacts
- Most publicly favorable of build alternatives



How Will Alternative 9 (HOT Lanes) Improve Travel Time?

HOT Lanes would offer **RELIABLE** free-flow travel at or above 45 mph.

Commute from American Legion Bridge to ICC (PM Peak Period)

Alternatives	Average Speed (mph)	Travel Time (min)	Time Savings (min)	Annual Savings Per Commuter*	
				Minutes	Hours
No Build	24	32	-	-	-
Alt 9 (GP)	33	23	9	2,340	40
HOT/ETL (All Alts)	52	15	17	4,420	75

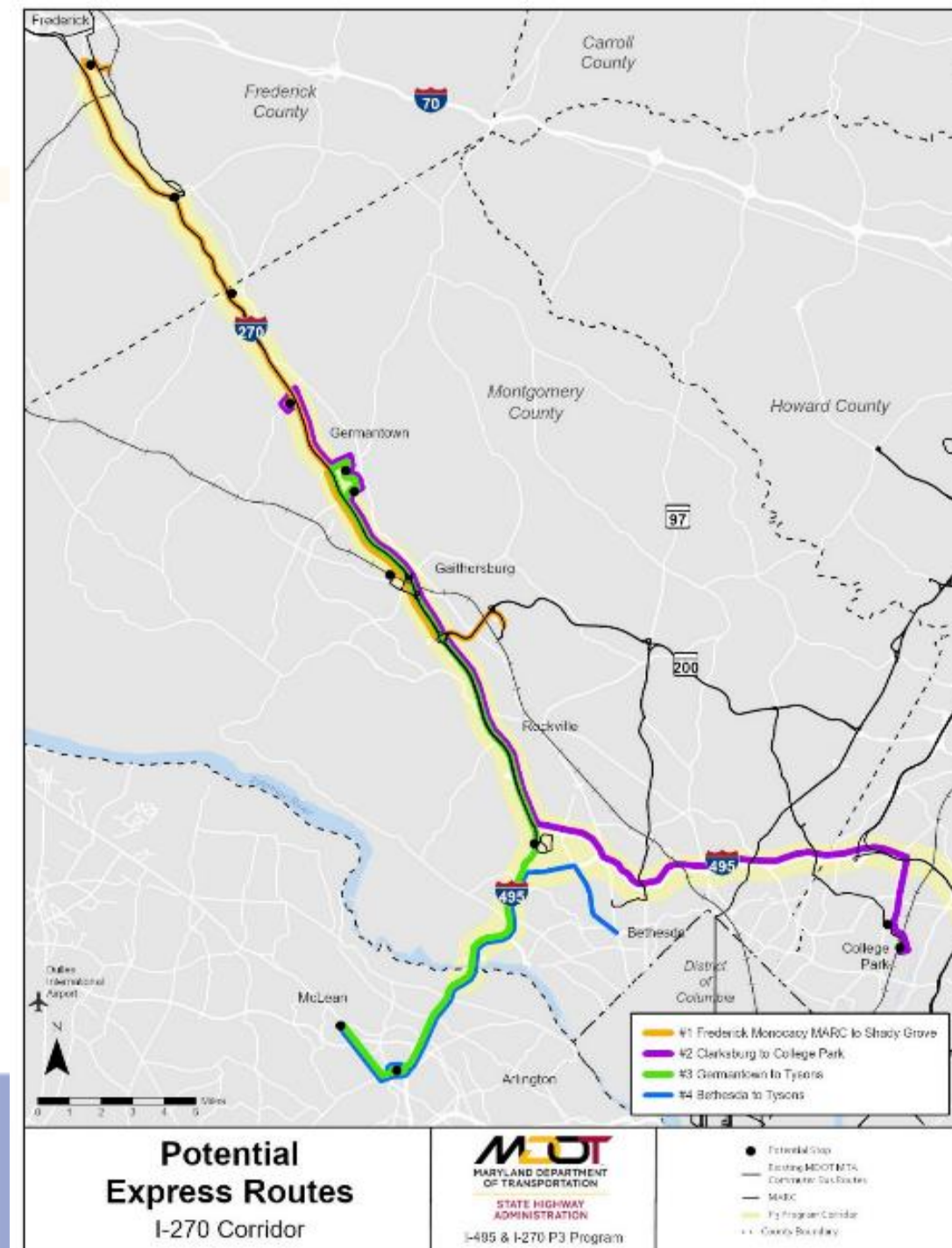




HOT Lanes Opportunity for New and Expanded Transit

Potential Enhanced Transit Network

- Integrated service network with MDOT MTA 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 (ALB) to Virginia



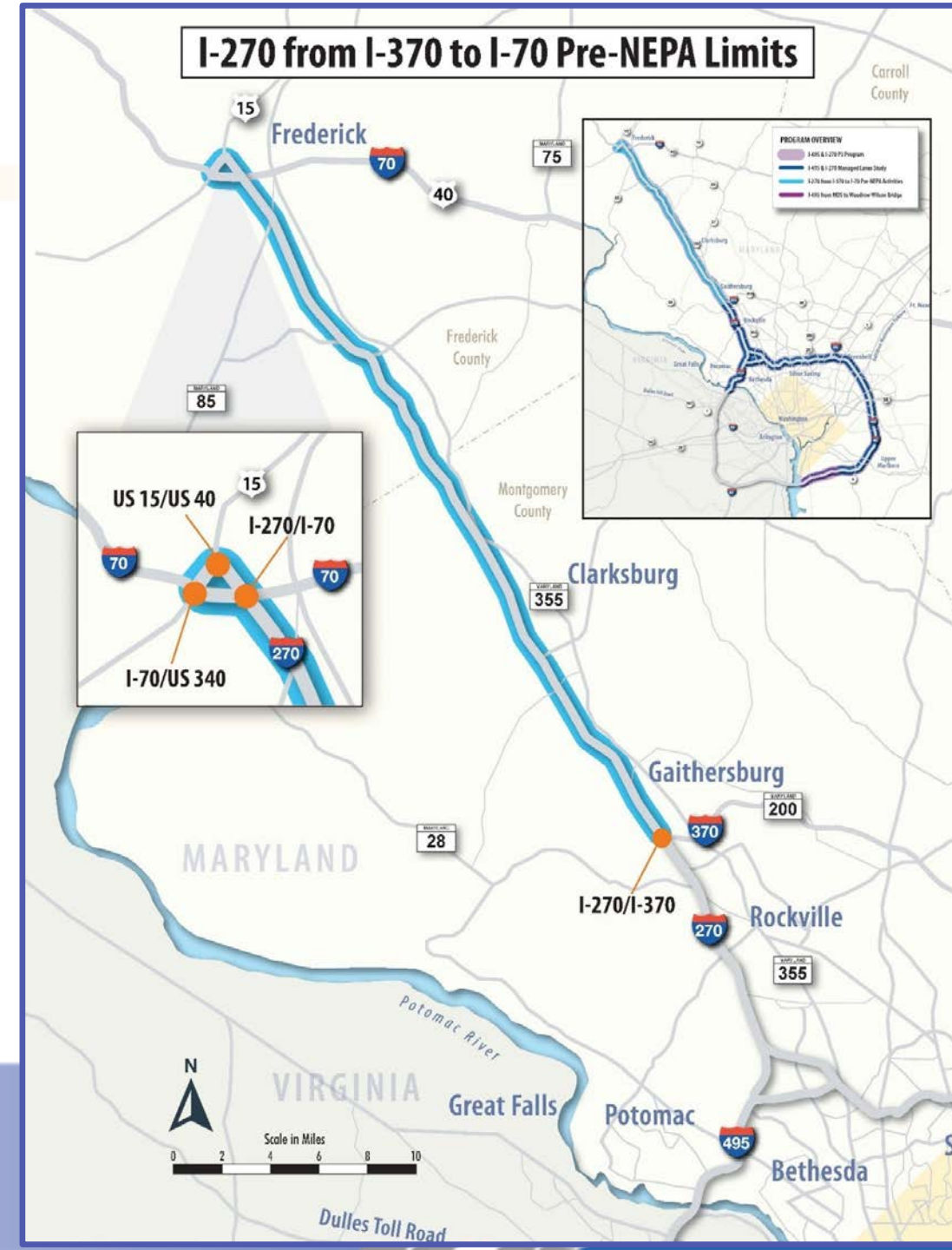
I-270 Pre-NEPA





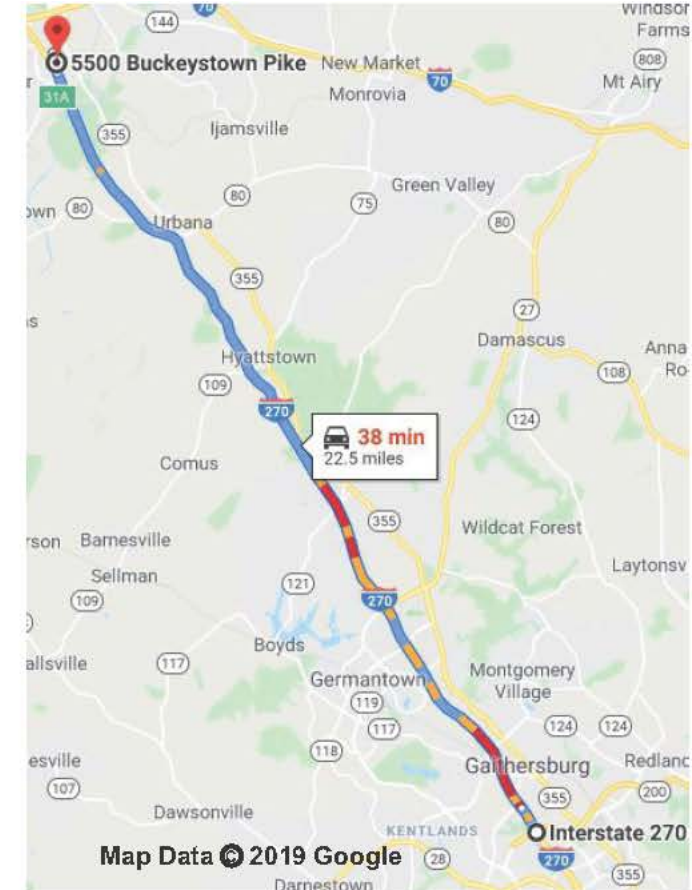
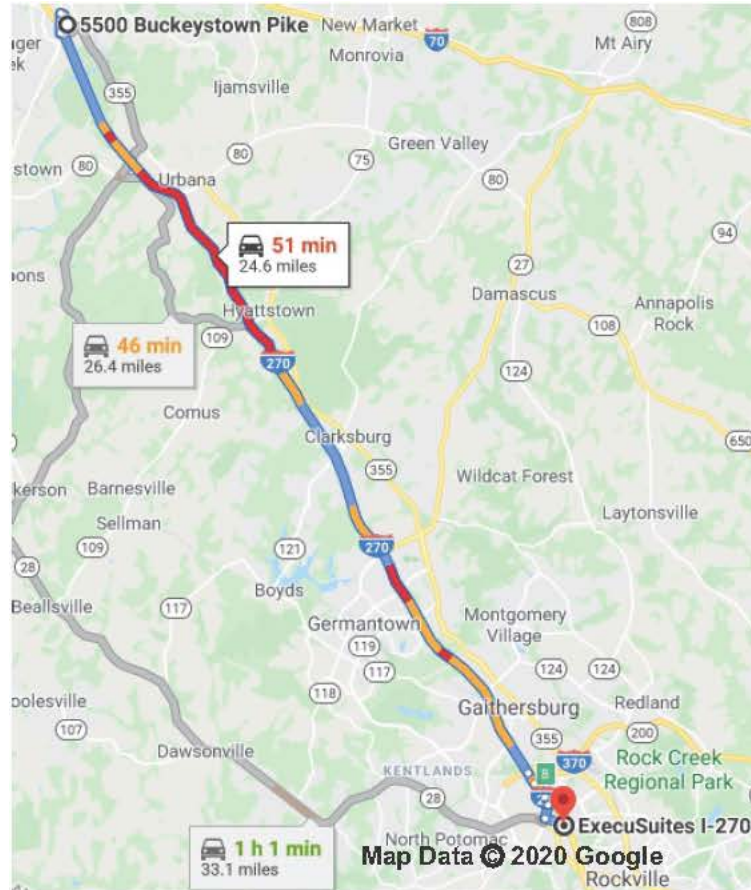
I-270 from I-370 to I-70 Pre-NEPA Activities

- Agency Coordination
- Existing Conditions Data
- Purpose and Need
- Preliminary Alternatives and Alternatives Screening Criteria





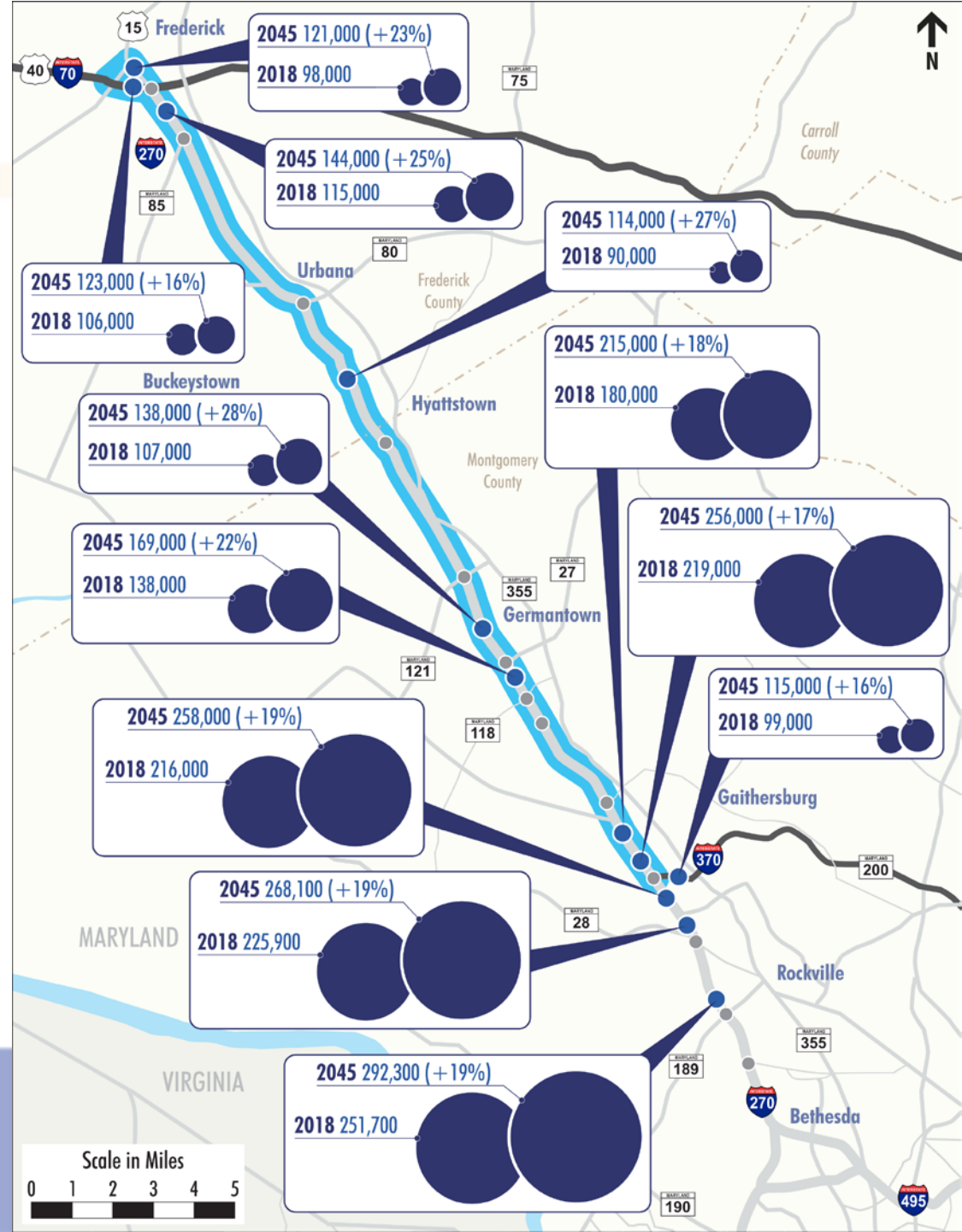
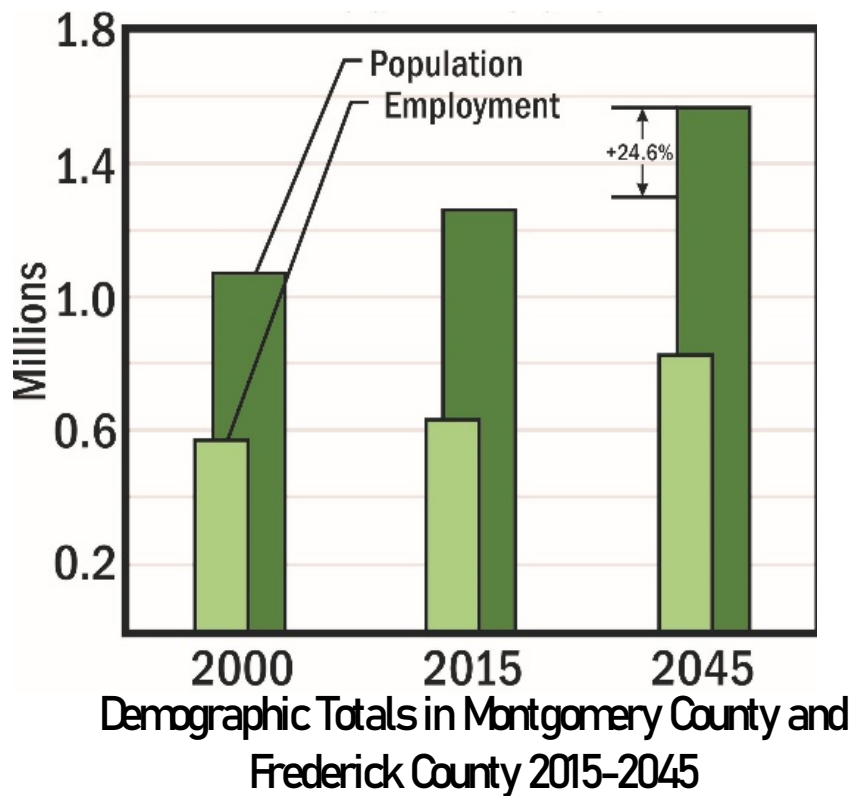
I-270 From I-370 To I-70: Congestion



Traffic bottlenecks occur at multiple locations along I-270 where either lane reductions occur (NB) or high volume merges occur (SB). One example, shown in the photo above, is the lane reduction on northbound I-270, just north of MD 121. The Google map snapshots were taken at approximately 7:00 am (SB-left) and 3:30 pm (NB-right), near the time of the photograph.



I-270 From I-370 To I-70: Projected Growth





I-270 Transportation Needs

The I-270 corridor from I-370 to I-70 regularly experiences heavy congestion, which is expected to worsen in the future.

The transportation needs identified for this section of I-270 include:

- Reduce Congestion
- Trip Reliability
- Multimodal Connectivity
- Financial Viability

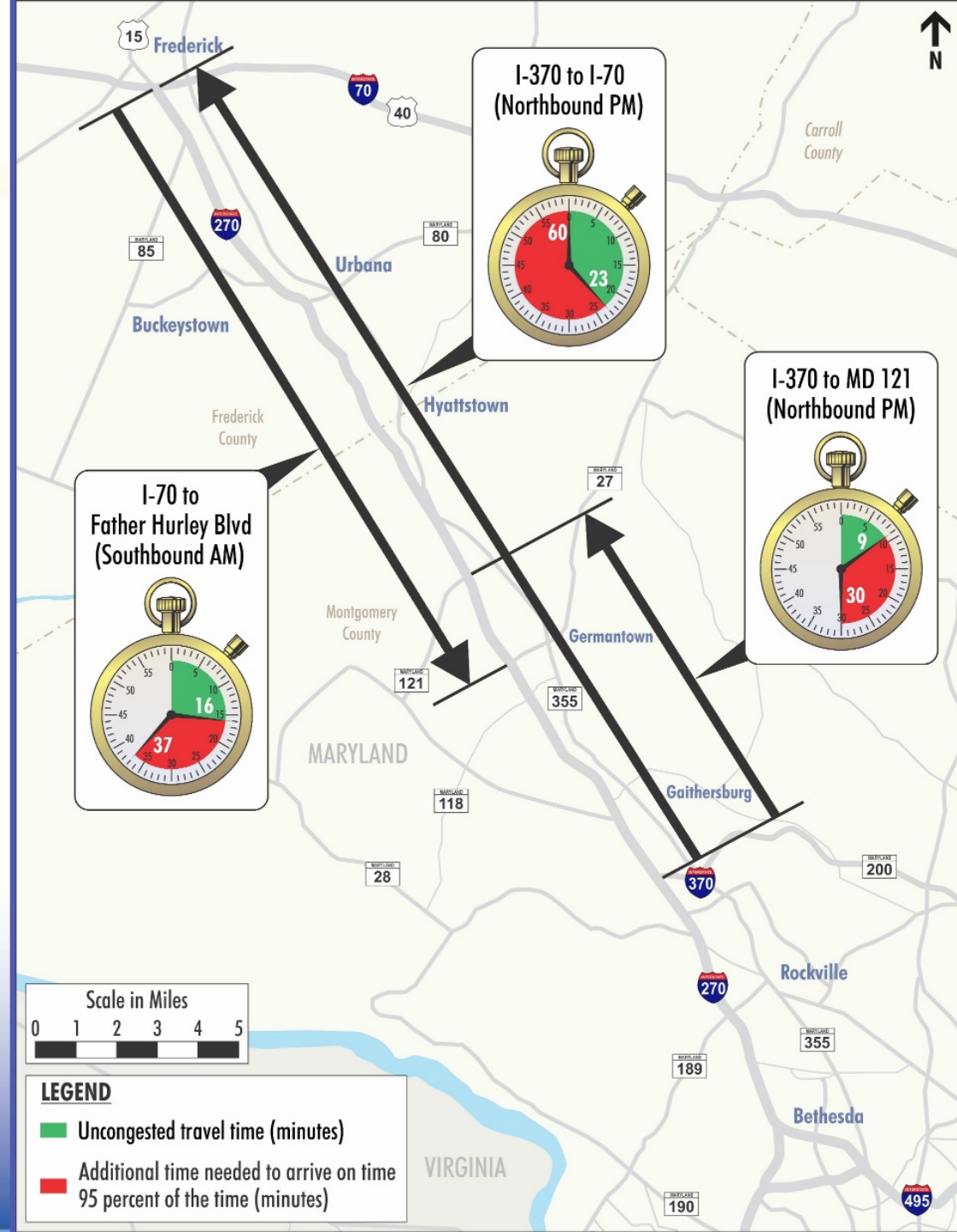




Transportation Need – Trip Reliability

Frequent I-270 congestion results in:

- Travel taking three times longer on average than during non-congested conditions
- More than 50 percent greater likelihood of rear-end crashes compared to statewide average of 20-40 percent





Transportation Need – Multimodal Connectivity

- Improve and support multi-modal connectivity
- Improve traffic flow to make travel more efficient for all users, including buses



Four transit centers and 10 park-and-ride lots along or near I-270 between I-370 and I-70

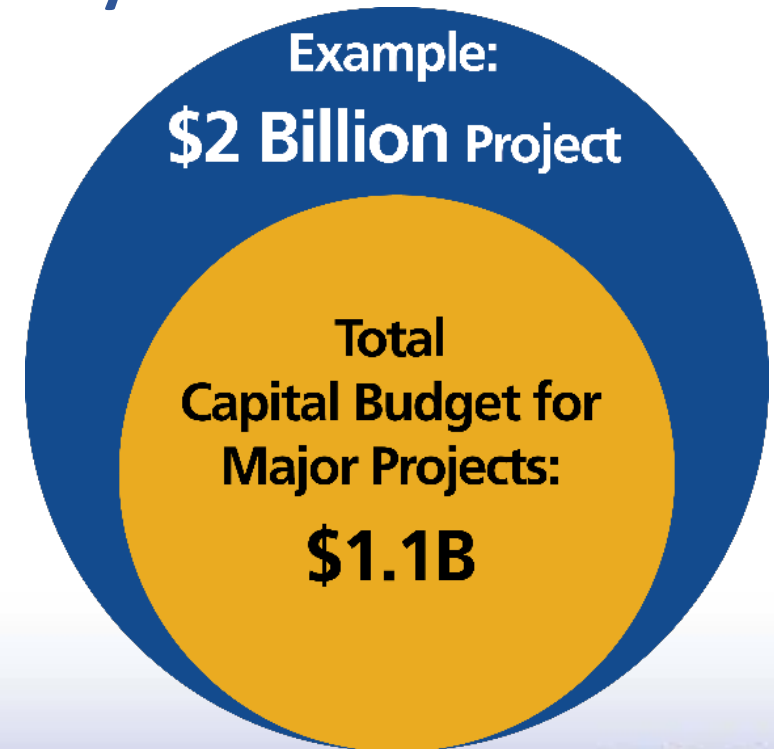
Make travel less difficult and more efficient for 16 bus routes and over 230 buses that use I-270 on weekdays





Transportation Need – Financial Viability

- Maryland's Transportation Trust Fund (TTF), cannot meet the transportation needs of I-270
- MDOT SHA's 6-year capital budget for major projects is \$1.1 Billion
- As an example, a \$2 Billion project to add lane capacity on I-270 using TTF would take about 11 years to fund.
- Revenue-generating measures, such as tolls, are needed to provide funding



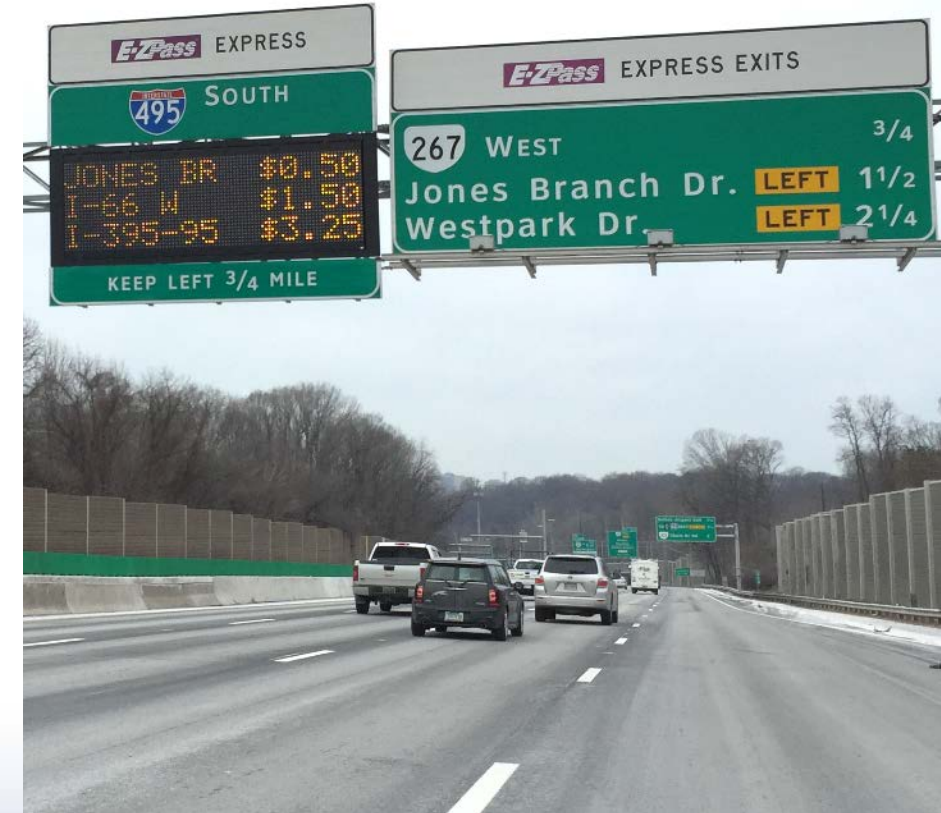
Congestion Pricing





Dynamic Pricing

- Congestion (Dynamic) Pricing enables the system to flow much more efficiently, allowing more cars to move through the same physical space.
- Developers will develop algorithms for setting specific toll rates within that range and the soft rate cap parameters.
- Toll rates are adjusted in response to real-time conditions
 - Travel speeds
 - Traffic density
 - Traffic volumes
- Toll rates are communicated through dynamic signage for real-time decision making.





MDTA - Toll Setting Process

- Transportation Article §4-312 of the Annotated Code of Maryland authorizes only the MDTA to fix, revise, and set toll rates.
- Public process will be identical to establishing tolls for MDTA existing facilities.
 - Toll Proposal to initiate toll rate setting process
 - Provide 60-day Public Comment Period and Hold Public Hearings (in affected counties) –Present public comments and seek MDTA Board approval of toll rate range
 - Present public comments and seek MDTA Board approval of toll rate range
- Toll rate setting process is separate and distinct from processes under the P3 Program.
- Variable Priced Facilities
 - Toll rate range: minimum and maximum per mile rate
 - Soft rate cap: rate cannot be exceeded unless vehicle speed is reduced, or vehicle volumes increase to predetermined thresholds



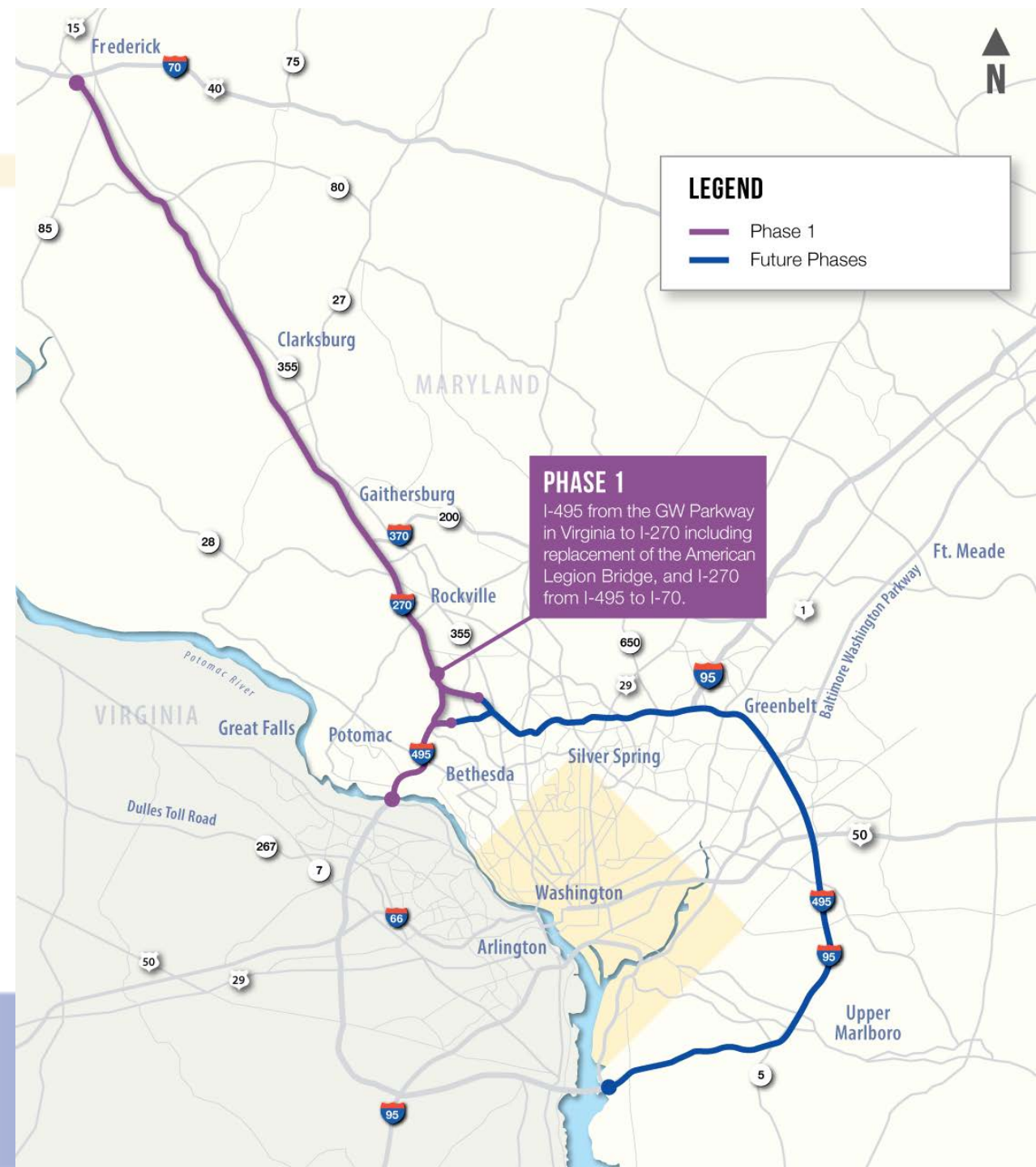
American Legion Bridge I-270 to I-70 Relief Plan





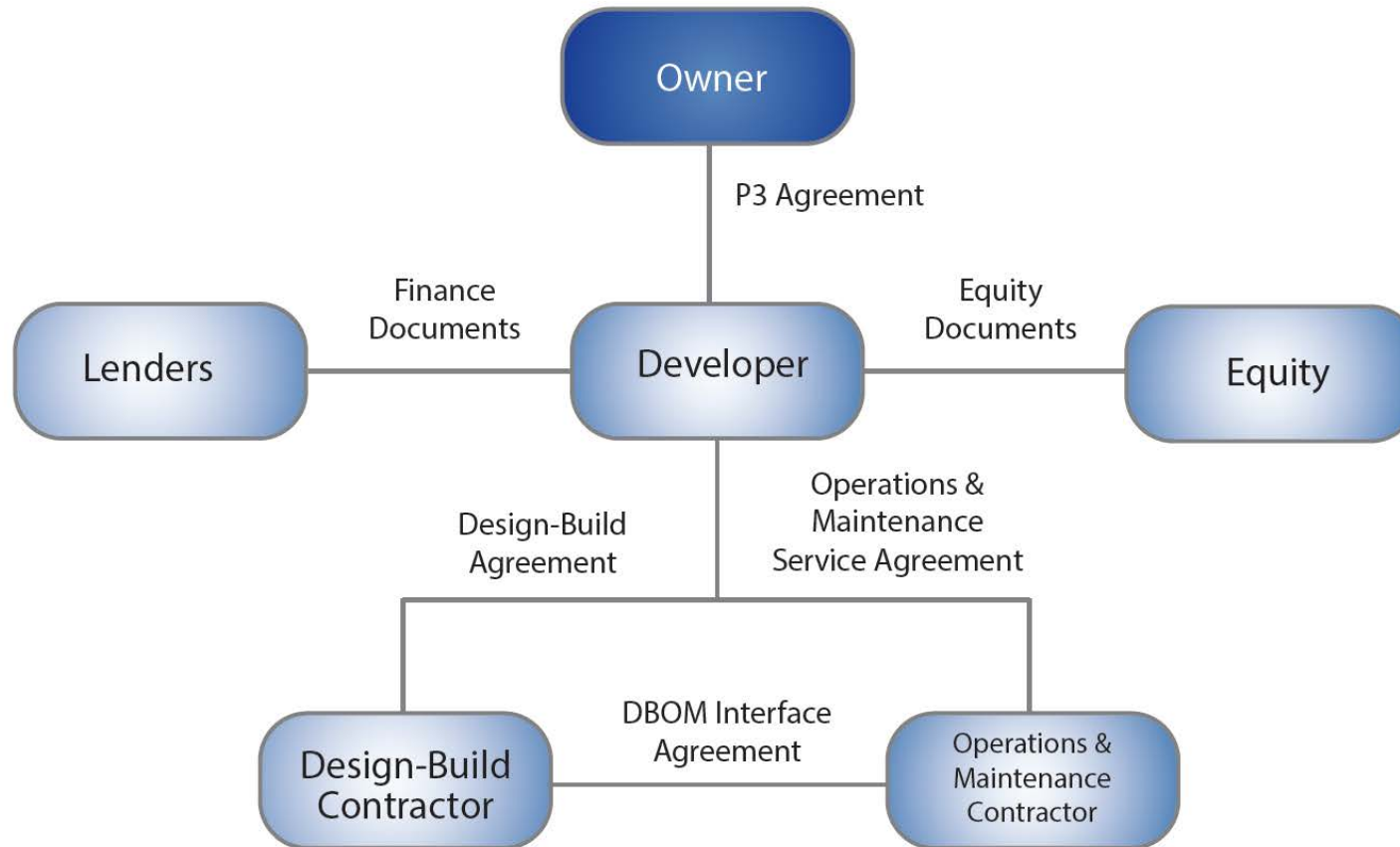
American Legion Bridge I-270 Relief Plan

- Phase 1 of the I-495 & I-270 P3 Program Limits
 - I-495 from the vicinity of the George Washington Memorial Parkway in Virginia to I-270
 - I-270 from I-495 to I-70
- Solicitation
 - Phase Developer
 - 10-year Phase P3 Predevelopment agreement



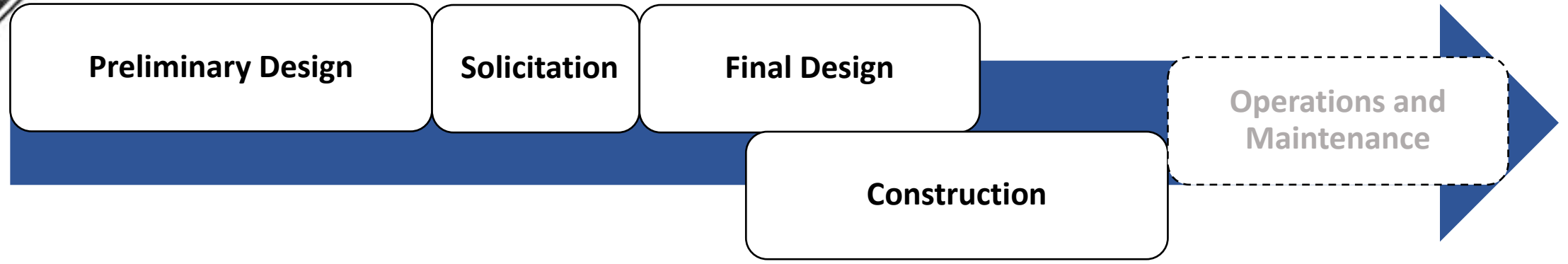


Typical P3 Structure

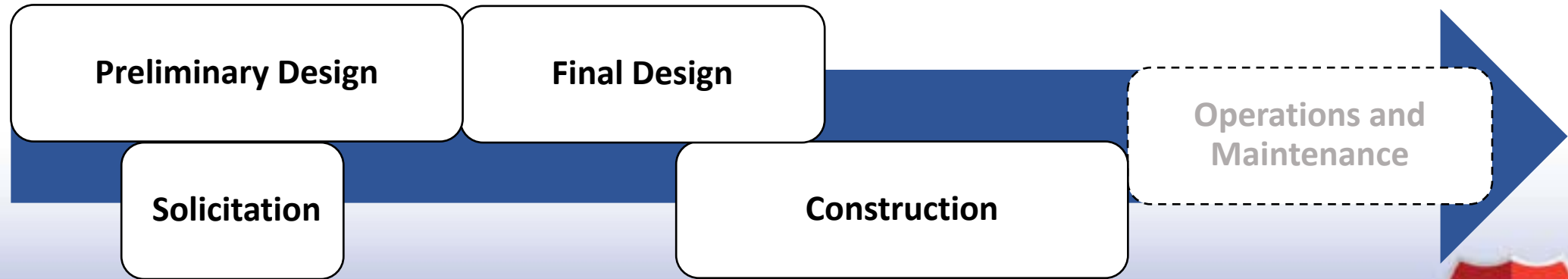




Fixed-Price vs. Progressive Process



Fixed-Price



Progressive





- Immediate focus is on delivering **Phase 1 South** starting with the American Legion Bridge
- **Phase 1 South** is I-495 from George Washington Parkway to I-270 and then 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 Developer

- Team selected to undertake the Predevelopment Work for Phase 1 and ultimately deliver the Section Work
- Phase Developer Team Includes
 - Lead Project Developer
 - Equity Members
 - Lead Contractor
 - Designer





Phase Developer Scope

- Strategic Partner to provide preliminary design and predevelopment activities to further develop improvements within Phase 1
- Work includes:
 - Collaboration and engagement with public and stakeholders
 - Further avoidance and minimization of impacts to environmental resources, communities, property, utilities, etc.
 - Developing Community Benefits Agreements
 - Risk reduction through site investigations, design and coordination
 - Section/sequencing of the work and pricing and schedule optimization
 - Financial Viability analyses
 - Debt Financing arrangements
 - Regional transit service improvement development assistance





P3 Solicitation Process

- Request for Qualifications
- Request for Proposals
 - Phase P3 Agreement
 - Performance Requirements
 - Section P3 Agreement Term Sheet





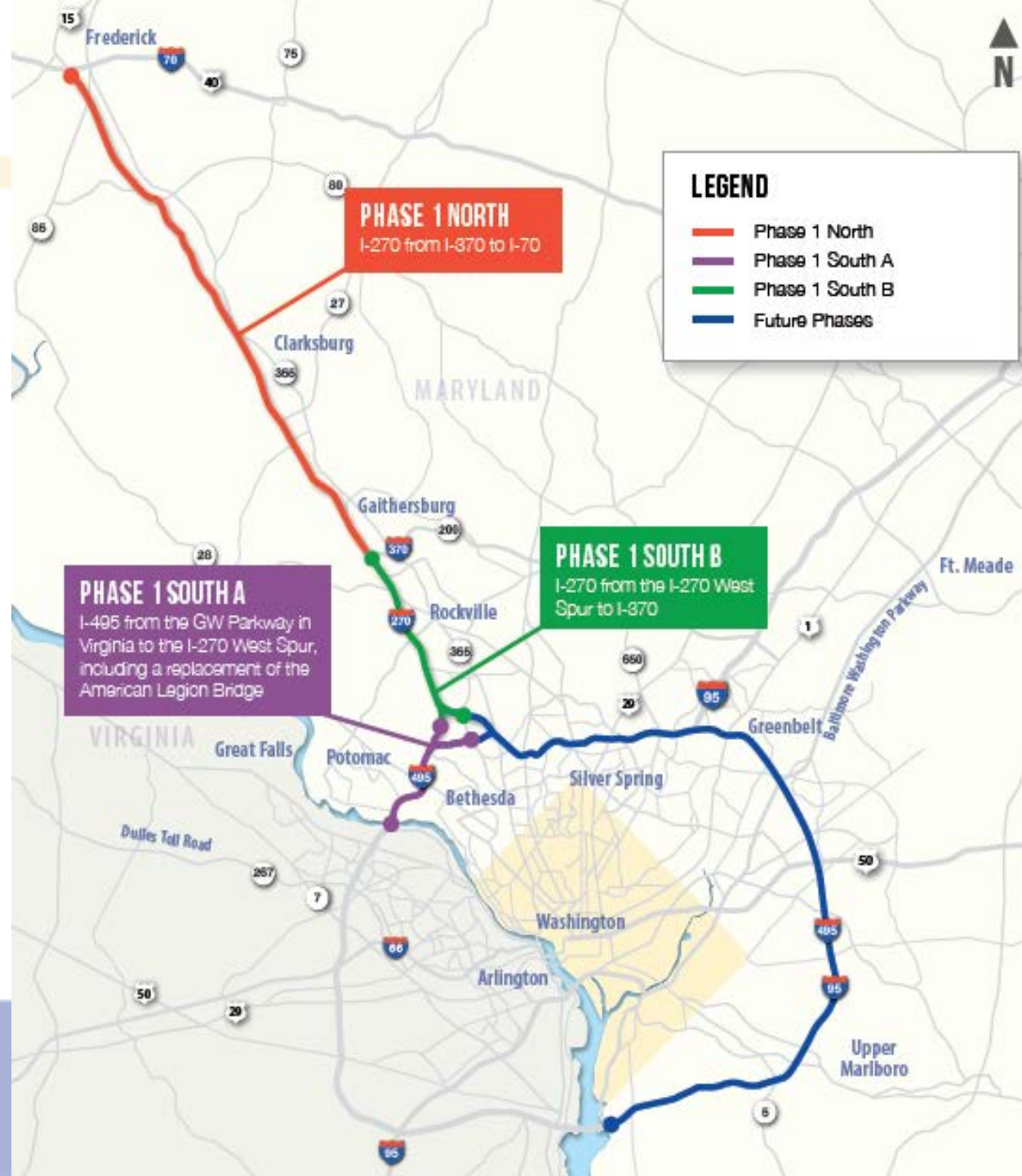
Request for Proposals and Proposal Collaborative Process

- One-on-One Meetings
 - Confidential
 - Non-Binding
 - Better Understanding of Terms
- Innovative Dialogue Process (IDP)
 - Confidential
 - Innovative Technical or Financial Solutions
 - IDP Submittals and IDP Work Sessions
 - Request to Change





- Predevelopment Work Proposal
- Financial Proposal
- Commitment to Deliver Phase 1 South A with no Maryland Funding at time of Proposal Submittal





Request for Proposals Evaluation Process

- Proposal Elements, each considered approximately equal in selecting Phase Developer:
 - Predevelopment Work Phase Proposal – evaluated qualitatively considering the goals of the phase
 - Delivery Certainty, Minimize Impacts, Maximize Value to the State, Community Benefits, and Congestion Relief
 - Financial Proposal – evaluated based on point values for financial elements
 - Includes the cost of performing predevelopment work, willingness to offer an upfront payment for the right to develop and deliver the American Legion Bridge I-270 Relief Plan, and other financial factors such as return on investment and profit margins
- Each evaluated independently to ensure the contents of the Financial Proposal do not influence the evaluation of the Predevelopment Work Phase Proposal





Progressive P3 Approach

Phase 1 Solicitation

Select Phase Developer for Phase 1: American Legion Bridge I-270 to I-70 Traffic Relief Plan

Predevelopment Work

Upon BPW approval, Phase Developer begins collaborative Predevelopment Work to advance the MDOT RPA for the MLS within Phase 1 South

Committed Section Proposals

At conclusion of the Predevelopment Work and NEPA process, the Phase Developer will offer a committed price and schedule for delivery of the first section

Section Development

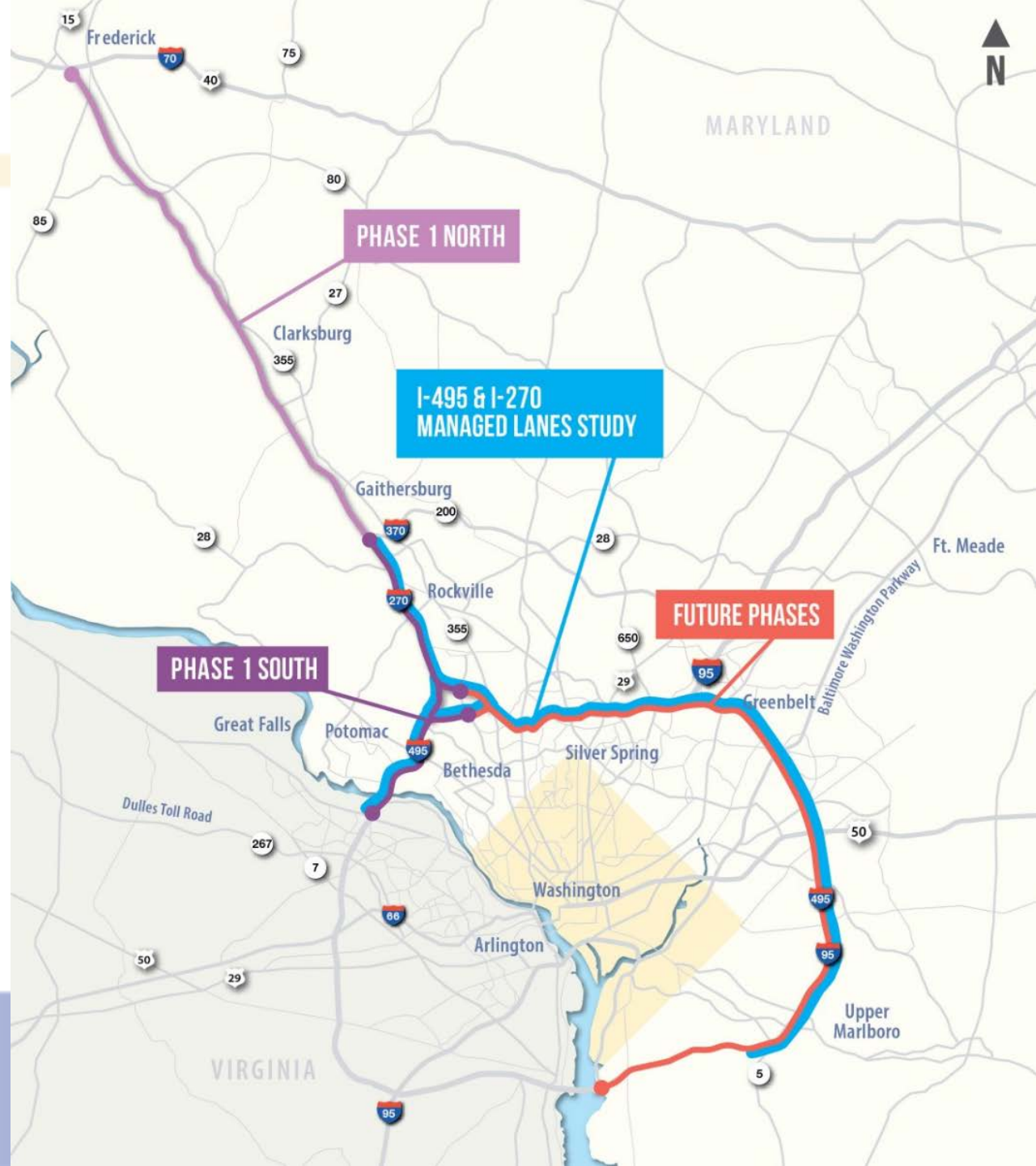
BPW will be asked to consider and approve the committed section proposal to deliver the first section





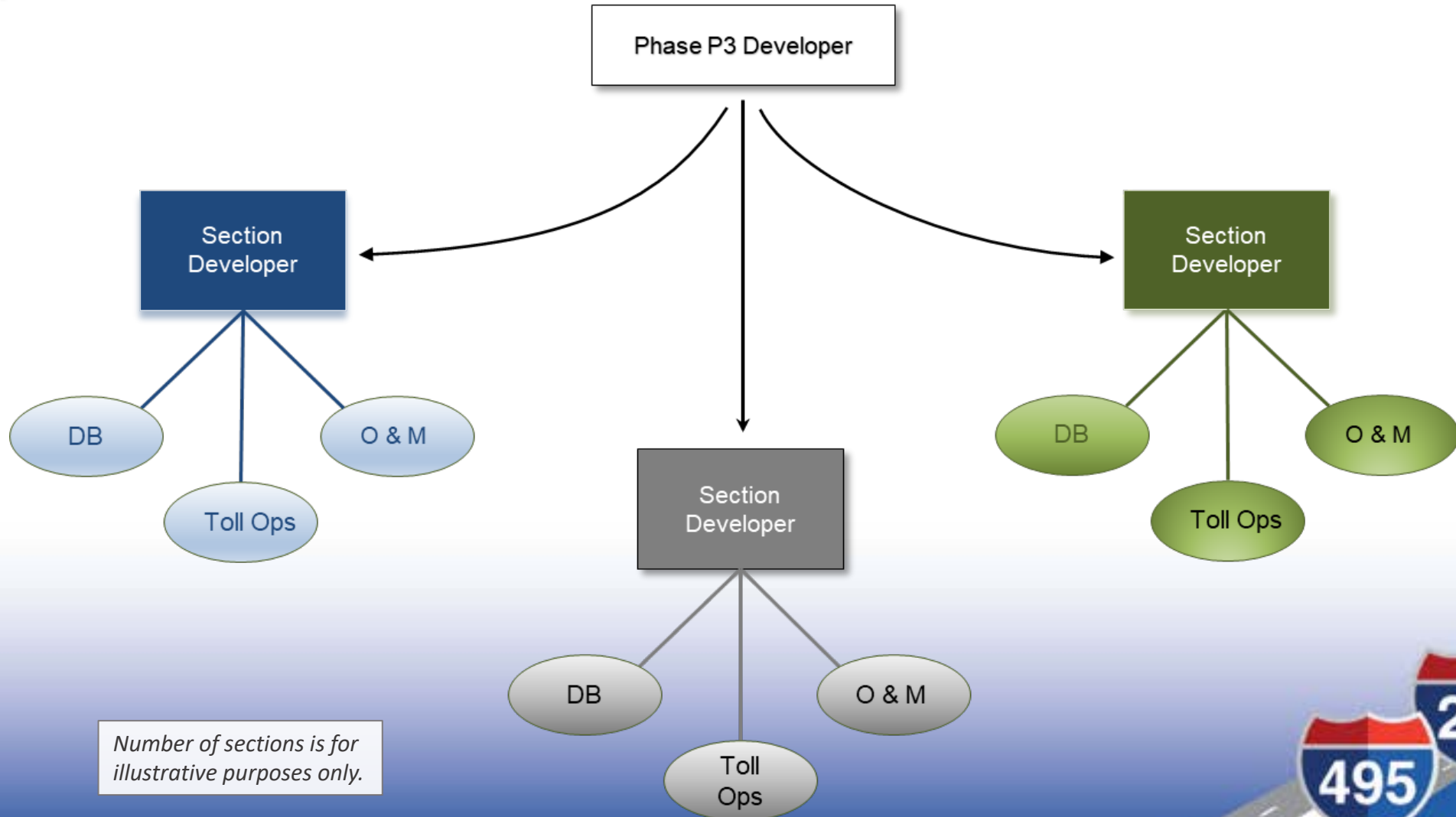
Phased Delivery Approach

- Phased Delivery Progressive P3
 - No Section P3 Agreement until after NEPA complete
- Phased Permits
 - Seeking permits to be provided by MDOT for Phase 1 South
- Phased Implementation
 - Immediate Focus is Phase 1 South
 - Additional environmental review of future phases, involving further agency coordination and engagement



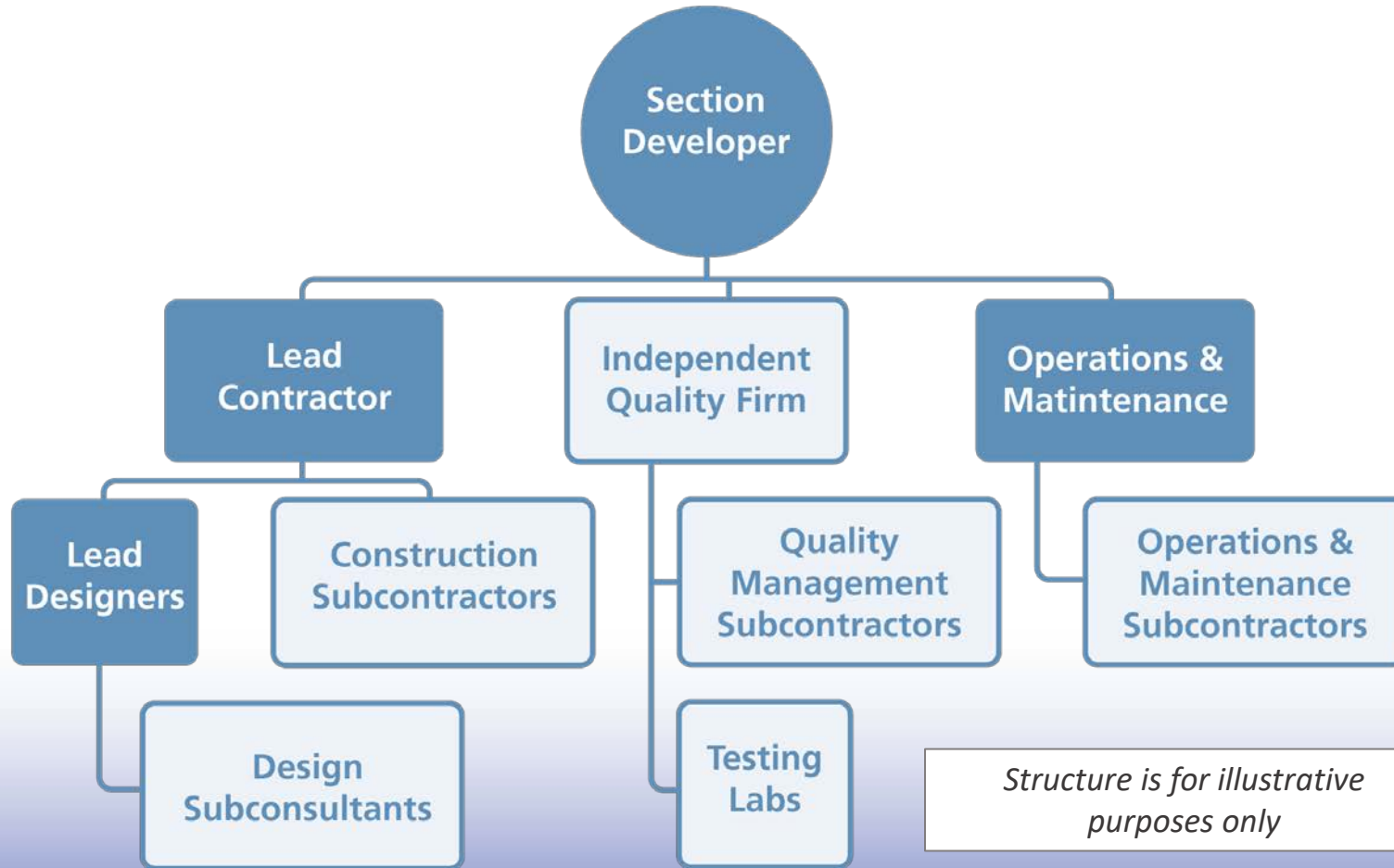


Phased Approach Structure





Section Developer Responsibilities



Structure is for illustrative purposes only





Opportunity MDOT

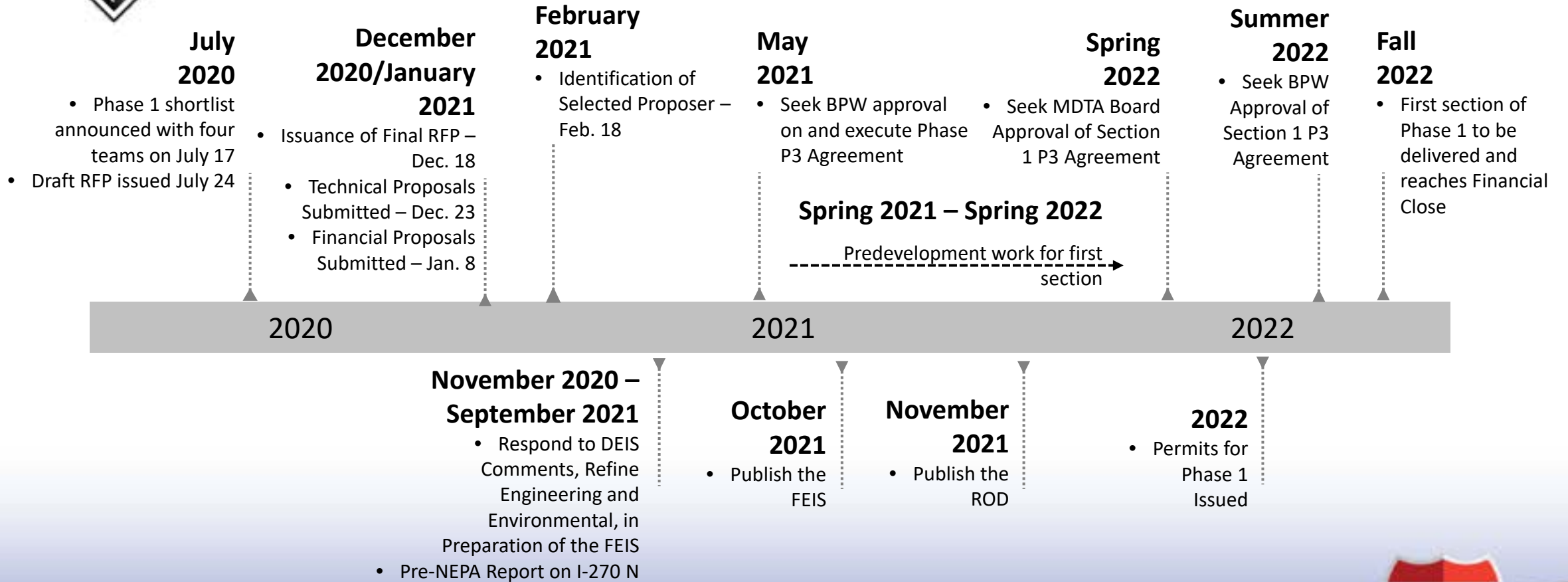
- Key Areas of Focus

- Cooperation, partnership, and integration of the community stakeholders, local unions, and local contractors to ensure fair prevailing wages, fair labor and hiring practices, and necessary safety training, standards and practices for the workforce
- Career training programs and hiring of local socially and economically disadvantaged workers from the community for long-term career development and advancement
- Engagement and utilization of small, minority, disadvantaged, and veteran-owned businesses in performing the work
- Encouraging investment that benefits the local community





Phase 1 Predevelopment/NEPA Study – Timeline





Questions?

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