AGENDA ITEM #3 March 19, 2019 **Briefing**

March 18, 2019

TO:

County Council

FROM:

Glenn Orlin, Deputy Director

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SUBJECT:

I-495 & I-270 Managed Lanes Study

PURPOSE:

Briefing

The Council has invited Maryland Department of Transportation (MDOT) Secretary Pete Rahn and State Highway Administrator Greg Slater to provide a briefing on the status of the Managed Lanes Study and to entertain questions. Staff from the Montgomery County Planning Board and the County Department of Transportation (DOT) will also be on hand to answer questions.

Background. In 2017 Governor Hogan announced that the State Highway Administration (SHA) was initiating a study with the maximum goal of widening both the entirety of the Capital Beltway (I-495) within Maryland and the entirety of I-270 from the Beltway to I-70 in Frederick, each by four lanes (two in each direction). The lanes would be designed, constructed, and operated by a concessionaire under a public-private partnership (P3) arrangement; revenue to pay for this effort would be derived by tolls on these additional lanes.

The study proceeded in early 2018. Under the National Environmental Policy Act (NEPA) process, the first steps were the preparation of a Purpose and Need Statement and identification of Preliminary Alternatives. In the late summer of 2018 SHA identified fifteen Preliminary Alternatives and several sub-options. On September 11, 2018, the Council was briefed on these alternatives by the Planning Board and County Department of Transportation (DOT) staffs.

Over the subsequent six months SHA evaluated the Preliminary Alternatives according to six objectives: engineering, homeland security, movement of goods and services, multi-modal connectivity, financial viability, and environmental impact. On February 13, 2019, SHA announced that the Preliminary Alternatives had been culled down to seven Screened Alternatives. Their descriptions and typical cross-sections are shown on ©1-2. Once detailed traffic, environmental, and financial analyses of the seven Screened Alternatives are completed, SHA will hold a series of six public workshops in April, three of which will be in Montgomery County:

Saturday, April 13, 10am-Noon @ Pyle Middle School, Bethesda Wednesday, April 24, 6:30-8:30pm @ Eastern Middle School, Silver Spring Thursday, April 25, 6:30-8:30pm @ Wootton High School, Rockville

A Virtual Workshop will also be available on the SHA website starting on April 11.

Subsequently, SHA will reduce the number of alternatives further to a set of Alternatives Retained for Detailed Study (ARDS). The ARDS will be the subject of much more intense environmental and engineering reviews. The results of the detailed analyses will be presented in a Draft Environmental Impact Statement (DEIS), which will also contain SHA's Preferred Alternative.

The presentation prepared by MDOT/SHA is on ©3-17. Within the last week the County Executive and Council sent a letter to the Secretary detailing the County's position on this study (©18-22). The County letter calls for the next phase of study to include an analysis of direct ramps between several existing and planned bridges over I-270/western I-495 and the managed lanes, to allow for an express bus service and bus rapid transit. It also calls for major improvements to MARC service along the Brunswick Line, and interlining it with Virginia Railway Express to allow for a one-seat ride from the County to Northern Virginia.

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PRELIMINARY SCREENED ALTERNATIVES





No Build (Existing):

All projects in Constrained Long-Range Plan (CLRP) (including I-270 Innovative Congestion Management (ICM) improvements)







1-Lane, HOT Managed Lane Network: Add one HOT managed lane in each direction on I-495 and convert one existing HOV lane in each direction to a HOT managed lane on I-270





2-Lane, ETL Managed Lanes Network on I-495, 1-Lane ETL and 1-Lane HOV Managed Lane network on I-270 only Add two ETL managed lanes in each direction on I-495 and add one ETL managed lane and retain one HOV lane in each direction on I-270





2-Lane, HOT Managed Lane Network: Add two HOT managed lanes in each direction on I-495 and convert one existing HOV lane to a HOT managed lane and add one HOT managed lane in each direction on I-270





New HOT Managed Lanes New ETL Managed Lanes

* Note: Managed Lanes Could Include Buses

NOT TO SCALE February 2019

MARYLAND DEPARTMENT OF TRANSPORTATION STATE HIGHWAY ADMINISTRATION





PRELIMINARY SCREENED ALTERNATIVES



2-Lane, ETL Managed Lane Network and 1-Lane HOV Managed Lane Network on I-270 only

Add two ETL managed lanes in each direction on I-495 and on I-270 and retain one existing HOV lane in each direction on I-270 only





2-Lane, HOT Managed Lane Network on I-495; HOT Managed, Reversible Lane Network on I-270: Convert existing HOV lanes to two HOT managed reversible lanes on I-270 while maintaining GP lanes





2-Lane, ETL Managed Lane Network on I-495; ETL Managed, Reversible Lane Network and 1-Lane HOV
Managed Lane Network on I-270

Maintain existing HOV managed lanes on I-270 and add two reversible ETL managed lanes on I-270





New HOT Managed Lanes New ETL Managed Lanes

* Note: Managed Lanes Could Include Buses

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MARYLAND DEPARTMENT OF TRANSPORTATION STATE HIGHWAY ADMINISTRATION

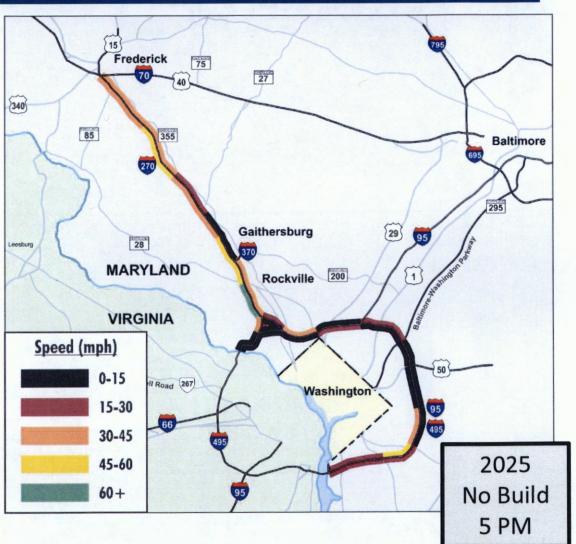
P3 Program Corridor



- ► I-495 & I-270 P3 Program includes 70-mile interstate corridor
- ▶ P3 Program will remove the serious regional bottleneck at the American Legion Bridge
- ► I-495 & I-270 Managed Lanes Study currently underway for the first portion of the P3 Program, terminating at I-370
- Solicitation of P3 Program will begin concurrent with Managed Lanes Study
- VDOT I-495 NEXT Project environmental study underway independently

Corridor Congestion

- Congestion on Maryland highways in the National Capital Region costs the economy nearly \$1.3 billion annually in terms of car and truck delays
- ▶ Travelers on I-495 and I-270 in Maryland experience significant congestion throughout the day – negatively affecting residents, businesses, freight and other transportation modes including transit
- Travelers on the corridor regularly experience delays of triple or quadruple free-flowing travel times
- With population increasing and continued economic growth, congestion is expected to worsen, and travel times during peak hours are expected to be 70% longer by 2040



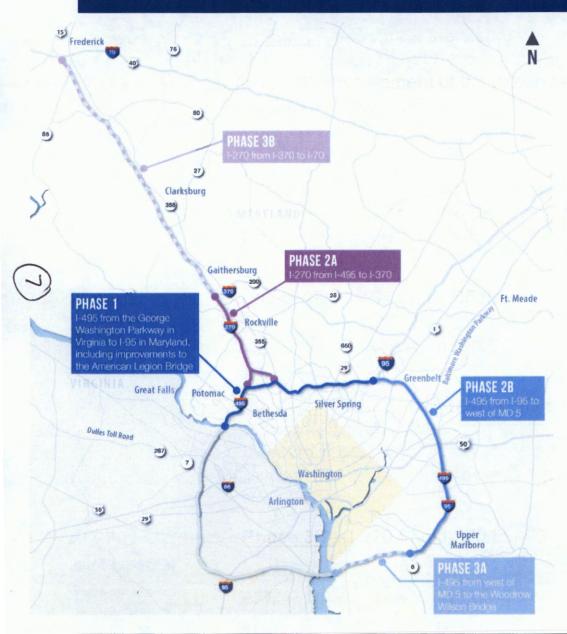
P3 Program Details

- ► The P3 Program addresses the following goals:
 - ► Reducing traffic congestion along I-495 and I-270
 - Minimizing impacts to the corridor
 - Accelerating delivery
 - ▶ Pursuing shockingly innovative approaches
 - ▶ Delivering the solution at no net cost to the State
- ► The P3 Program addresses these goals by undertaking multiple solicitations for the delivery of 70 miles of new priced managed lane capacity along I-495 and I-270 through comprehensive agreements with private developers
- ► The P3 Program will also enhance transit mobility. Program delivery will include an investment in the Corridor Cities Transit-way and include multi-modal network connectivity and access investment to Prince George's County Transit Oriented Development sites. Program will also work to include usage scenarios of the new managed lanes by public transit
- ▶ Developers will assume the toll revenue risk for the life of the agreement, with no net cost to the State and all debt being "non-recourse" to the State, allowing for the funding of the priced managed lane system

P3 Program Details

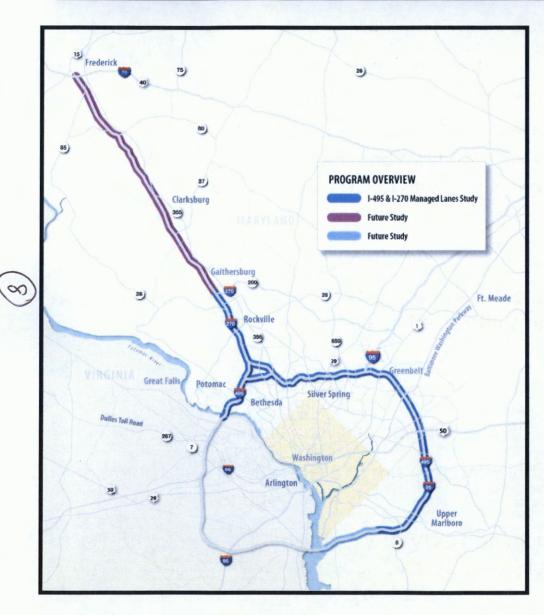
- ► The P3 Program will provide guaranteed and reliable travel for those who choose to pay and reductions in travel time for those who continue to use the free lanes
- ▶ New bridges and smoother pavement will be provided for all users, at no impact to the Transportation Trust Fund (TTF). Addressing state of good repair on I-495 and I-270 until 2030 is estimated to cost \$1.7 B, funding that would not be needed from the TTF with the P3 Program. The P3 Program allows this funding to be invested into other vital transportation improvements
- Preliminary analyses on alternatives still under study for the P3 Program show the following improvements compared to 2040 No-Build:
 - Arterial roads accessing I-495 or I-270 would generally experience a 2-4% reduction in traffic volumes within the vicinity of the interstates
 - ▶ Between 110,000 and 160,000 additional commuters within the study area would be able to access jobs within 60 minutes, which is a 10-15% increase in job accessibility

P3 Program Phasing



- Phase 1 I-495 from the George Washington Memorial Parkway in Virginia, including improvement of the American Legion Bridge, to I-95 - Phase was originally linked with the Purple Line in previous studies providing a tangible multi-modal connection
- Phase 2A I-270 from I-495 to north of I-370 - Anticipates an investment in the Corridor Cities Transit-way
- Phase 2B I-495 from I-95 to west of MD 5
 Provides connectivity and investment in access to TODs at Greenbelt, New Carrollton, Largo and Branch Avenue
- Phase 3A I-495 from west of MD 5 to the Woodrow Wilson Bridge - Includes HOV travel across the Woodrow Wilson Bridge and integration with the Virginia HOT lanes
- ► Phase 3B I-270 from I-370 to I-70
- All phases will include usage scenarios of Managed Lanes by public transit

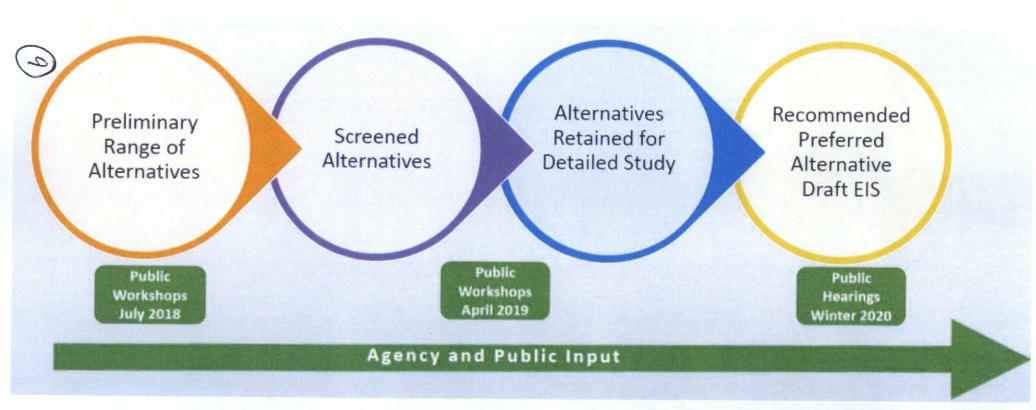
Environmental Studies



- ► I-495 & I-270 Managed Lanes Study
 - Recommended Screened Alternatives released
 - No-Build and 6 Alternatives with Priced Managed Lanes (Express Toll Lanes (ETL) or High Occupancy Toll (HOT) Lanes)
 - Ongoing Community Meetings
 - ▶ 6 Public Workshops in April to present detailed effects and seek feedback
- ► I-270 North I-370 to I-70
 - ▶ Initial activities beginning in 2019
- ► I-495 MD 5 to the Woodrow Wilson Bridge
 - Coordination with VDOT on roles and integration with VDOT's High Occupancy Toll Lanes

I-495 & I-270 Managed Lanes Study

Alternatives Screening Process



I-495 & I-270 Managed Lanes Study

Alternatives Screening Process: Screening Criteria

- Criteria based on transportation needs and goals outlined in the study Purpose and Need
- Criteria was consistently applied to each alternative
- Alternatives that clearly did not meet the Purpose and Need were dropped from further consideration

Accommodate existing and long-term traffic growth Enhance trip reliability Provide an additional roadway travel choice Ease of usage for travelers Accommodate Homeland Security Improve movement of goods and services Financially self-sustaining **Enhance multimodal connectivity**

I-495 & I-270 Managed Lanes Study

Recommended Screened Alternatives

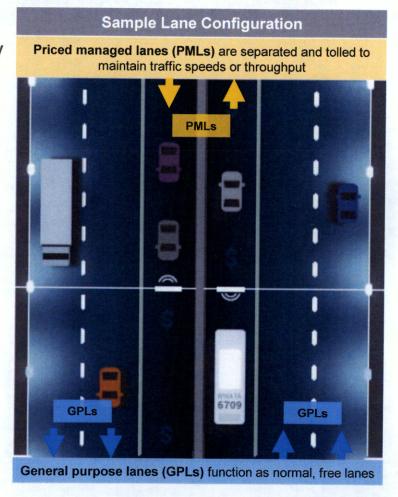
- ► Alternative 1 No Build
- ► Alternative 5 1-Lane, HOT Managed Lane Network on both I-495 & I-270
- ► <u>Alternative 8</u> 2-Lane, ETL Managed Lane Network on I-495 and 1-Lane ETL Managed Lane Network plus 1 HOV Lane on I-270



- ► Alternative 9 2-Lane, HOT Managed Lane Network on both I-495 & I-270
- ► <u>Alternative 10</u> 2-Lane, ETL Managed Lane Network on I-495 & I-270 plus 1 HOV Lane on I-270
- ► <u>Alternative 13B</u> 2-Lane, HOT Managed Lane Network on I-495; HOT Managed, Reversible Lane Network on I-270
- ► <u>Alternative 13C</u> 2-Lane, ETL Managed Lane Network on I-495; ETL Managed, Reversible Lane Network plus 1 HOV Lane on I-270

Priced Managed Lanes Fundamentals

- ▶ Priced managed lanes provide travelers the opportunity of using a specific lane with reliable, reduced travel times.
- Drivers may choose to pay a toll to drive in the priced managed lanes, with tolls that vary to maintain constant speeds and/or throughput, or drivers may choose to drive in the free lanes
- All unrestricted free lanes today will remain free
- ► The unrestricted free lanes are considered "general purpose" lanes
- Experience around the world has shown general purpose lanes experience less congestion when drivers opt to use the priced managed lanes
- ► Locally, after the addition of ETLs, the general purpose lanes on I-95 north of Baltimore have seen a 12% reduction of delay



P3 Rationale

- ► Without a P3, there is no other option to provide congestion relief for decades
 - ► If Maryland devoted its entire capital expansion budget to delivering priced managed lanes (PML), the system would not be built until 2045
 - Issuing State debt against the toll revenue cash flows would still result in a multi-billion dollar gap – with no funding available to fill it



- A P3 allows Maryland to leverage private capital to deliver the PMLs without a funding gap
 - Under a phased solicitation, PMLs can be delivered expeditiously, providing congestion relief in the near term
 - ▶ In a system approach combined with the Purple Line and an investment in WMATA, the only way for Maryland to achieve congestion relief is a P3 given current funding

Additional Benefits of the P3 Approach

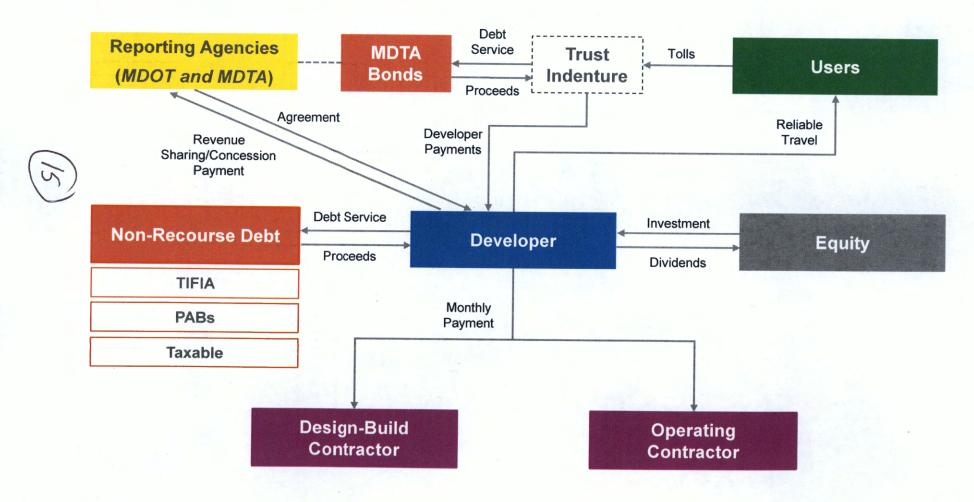
- ▶ Delivery of the 70 mile system will involve multiple long-term P3 agreements with private developers to design, build, finance, operate and maintain the priced managed lanes which provides benefits to Maryland:
 - ▶ Whole Lifecycle Planning and Cost Optimization Developer will require efficient lifecycle maintenance of the priced managed lanes from construction through the life of the contract



- ► Innovation in Design The P3 Program's solicitation will spur competition, maximizing efficiency, reducing impacts, reducing costs, and optimizing revenues
- ▶ Risk Transfer —Traditional risks that would be borne by the State of Maryland (e.g. construction cost and schedule, traffic and revenue, operating and maintenance cost inflation, etc.) will be contractually transferred to the developer

Proposed Organizational Structure

► Reporting Agencies will use existing authority to support the P3 agreement and financing structure:



Potential Workforce, Economic and Environmental Implications

Workforce

- ▶ At an estimated \$9-\$11 billion (2017 \$) construction cost, the P3 Program will support numerous construction, operations and maintenance jobs in the region. Recent estimates suggest every \$1 billion in highway construction supports approximately **13,000 jobs** for one year
- Agreements will include numerous requirements for job training and fair hiring practices and wages, as well as goals for minority/disadvantaged and small businesses
- ► MDOT is also creating a new partnership structure for minority/disadvantaged workers including a job training program, apprenticeships and additional incentives to retain workers helping people gain valuable skills and experience to change lives



Economy

- Due to the nature of the work, a large portion of the construction, operating and maintenance expenditure will stay in Maryland
- More efficient and reliable travel times will have a major impact on improving the economy and in improving citizens' well-being by reducing wasteful time spent in traffic

Environment

- ► As part of the NEPA process, the MDOT is actively engaging citizens, businesses and federal, State and local agencies about the impacts of the P3 Program
- Based on the results of the NEPA process, the P3 Program will be designed to completely avoid, minimize to the extent feasible or mitigate any impacts if complete avoidance is not possible
- ▶ As noted by the study "Vehicle emissions in congestion: Comparison of work zone, rush hour, and freeflow conditions", roadway congestion, characterized by slower speeds and increased acceleration/deceleration, leads to higher concentration of harmful air pollutants. Congestion relief provided by the P3 Program would reduce air pollutants

Solicitation Process

- Once designated by the BPW, MDTA and MDOT will implement a robust, transparent, fair and competitive solicitation process for the P3 Program, consistent with P3 regulations
- ► The solicitation process will include multiple multistep solicitations which will include industry outreach, a Request for Qualifications and a Request for Proposals from qualified teams
- (3)
- MDTA and MDOT will execute P3 agreements, subject to BPW approval, with best value teams based on
 - ► (i) their ability to demonstrate how their solution meets or exceeds evaluation criteria and
 - ▶ (ii) that their proposal is most advantageous considering other proposals



March 15, 2019

Pete K. Rahn Secretary, Maryland Department of Transportation 7201 Corporate Center Drive Hanover, MD 21076-0548

Dear Secretary Rahn:

We appreciate that MDOT has expressed interest in addressing traffic congestion on I-270 and I-495 in Montgomery County as traffic congestion on these two highways is a serious quality of life issue for our constituents that causes ripple effects throughout the region. State action to improve the performance of these corridors has been a priority for Montgomery County for many years. In fact, the County has advocated for additional High Occupancy Vehicle (HOV) or High Occupancy Toll (HOT) lane capacity on the American Legion Bridge, continuing along I-495 and on I-270 to Frederick County, based on the belief that these improvements could be accommodated within the right-of-way of these facilities. Coupled with State investment in transit, these HOV or HOT lanes could provide meaningful congestion relief while also expanding the range of transportation options for those who travel these corridors. The transit and highway projects together could be supportive of the County's sustainability and land use plans. However, we are now concerned with the sequencing, screened alternatives, scope and impacts of the I-495 & I-270 Managed Lanes P3 Program, as described below.

About two years ago, Governor Hogan announced the Innovative Congestion Management (ICM) project as a first step toward addressing longstanding bottlenecks affecting the performance of I-270. This announcement was followed by the unveiling of the Governor's plan to widen I-270, I-495, and the Baltimore-Washington Parkway (also known as MD 295), each by four lanes. Since that announcement, the Maryland Department of Transportation (MDOT) has initiated a National Environmental Policy Act (NEPA) review of this plan for a portion of I-270 and most of I-495. Additionally, MDOT has issued a Presoliciation Report, which initiates the State's efforts to advance this project as a Public Private Partnership. This Presolicitiaiton Report provides substantial clarity about MDOT's intentions that is lacking in NEPA documents released for public review. Your letter to Delegates King, Barve, McIntosh, and Kaiser dated February 13, 2019 also outlines MDOT's phasing plans for the implementation of managed lanes on I-495 and I-270.



Sequencing

Based on the expressed concerns of our constituents and the consensus of the Council and Executive, we request that MDOT pursue a revised approach to phasing the I-270 and I-495 improvements. In our view, the greatest potential for realistic improvement on I-495 and I-270 is between Virginia's I-495 Next project and Frederick. We ask that MDOT reconsider its phasing of the Traffic Relief Plan to first focus on this corridor. For many years, the County, in collaboration with Frederick County, has asked MDOT to prioritize improvements to this corridor. MDOT's rationale for pursuing improvements to the most constrained segment of the Beltway instead of I-270 remains unclear to us. The section of I-270 north of Gaithersburg to the Frederick County line and beyond is plagued by more regular traffic congestion than points south. We believe that this Upcounty segment warrants attention in an early phase of any capacity enhancements to I-270 and I-495. The constrained section of I-495 east of the West Spur should only be examined after the American Legion Bridge and I-270 have been addressed.

Screened Alternatives

Without any public notice, on February 13, 2019, MDOT posted Screened Alternatives for the Managed Lanes Project on its website. The Screened Alternatives appear to ignore input from agency stakeholders and the public sentiment expressed at MDOT's Open Houses and through other comment channels for the project. While we have strong reservations about many of the build alternatives that substantially expand the cross-section of these highways, there is not any information available regarding the type and magnitude of the impacts. With the impacts of the build alternatives unknown, we believe that the elimination of transit and transportation system management alternatives is premature, if not fundamentally flawed, as described in more detail below.

1. Transit Alternatives.

MDOT dismissed the transit alternatives, stating that they are not financially feasible. The information provided ignores substantial input from stakeholders about how these alternatives could be structured and artificially limits their potential funding sources to fare revenue. In its managed lanes projects, Virginia has demonstrated that toll revenues generated from managed lanes can be used to fund implementation of transit both on and off the highway corridors. The screening analysis also asserts that transit investment does not substantially reduce traffic, while ignoring the substantial benefits that will accrue to new transit riders. However, the analysis does not recognize that the highway expansion is guaranteed to increase traffic. The additional traffic underpins the financial viability of the tolled lanes.

A "highway-only" solution to congestion is counter to the County's transit-first policy, will hamper our efforts to reduce single-occupant vehicle (SOV) travel, and could deliver more traffic to our local road system, exacerbating congestion on arterial roads connecting to these corridors. We request that MDOT retain transit alternatives and take a more creative approach to evaluating how Bus Rapid Transit and Express Bus, in particular, can be an integral component of this project. We also ask that MDOT make a strong commitment at this early stage of the project



that transit will be able to use any new managed lanes without paying tolls or fees and that free HOV access will be retained.

2. Transportation Systems Management.

The County's most recent Transportation Priority Letter specifically requests implementation of Transportation Systems Management (TSM) on I-495 as is currently in progress on I-270. I-495 east of the I-270 Spur and continuing into Prince George's County has a highly constrained right of way, generally 200 feet, making capacity additions difficult. This section of I-495 is lined with residential neighborhoods, a hospital, a golf course, and parkland immediately adjacent to the highway and the highly constrained interchanges. We recognize that remaining within the existing right of way will limit or constrain any potential project there; nevertheless, the County's position is that any project remain within the existing right of way. In our view, TSM may be the only feasible alternative for I-495 and we are very concerned that it has been eliminated from consideration at this early state, before any environmental and property impacts for the build alternatives have been assessed. Additionally, it is also possible that more TSM could be implemented on I-270 as the current project is limited to what can be achieved with the available budget, rather than including all of the measures that could be implemented on the corridor. We request that MDOT retain TSM as an alternative for both corridors and develop a more comprehensive scope of TSM improvements and address how TSM performs.

Scope

In addition to any changes to I-270 itself, the project should complete the master-planned interchanges and overpasses of the I-270 corridor. Additionally, there are several arterial road crossings of I-270 that may provide strong opportunities for direct connections—especially for Express Bus Service and Bus Rapid Transit—to any new managed lanes. When developing the alternatives this phase of this project, we suggest that MDOT include several important enhancements to this corridor including the Little Seneca Parkway interchange in Clarksburg and the Dorsey Mill overpass in Germantown. These two new crossings, in addition to existing arterial crossings without interchanges, like Muddy Branch Road, Gude Drive, Wootton Parkway, Westlake Terrace, and Bradley Boulevard may be good opportunities to provide direct connections to I-270 and the western segment of I-495 that avoid complications at existing interchanges.

We are concerned about the potential toll-pricing of the new lanes on these corridors. If the toll revenue must cover the entire cost of construction, the tolls may be very high, which may affect the ability of a broad segment of our community to use the lanes. We are concerned the tolls will be excessive and put HOT lanes out of reach for average commuters. MDOT should consider some provisions to cap the toll rates or other programs to improve equity across the income spectrum. At a minimum, existing lanes should remain free of tolls, with the possible exception of the conversion of HOV to HOT lanes.

With high tolls anticipated, to improve equity and to mitigate the impacts of additional traffic from the toll lanes, transit is an essential component of this investment. Changes to the American Legion Bridge, I-495 and I-270 must support transit by allowing transit to use "priced"



capacity free-of-charge and by funding transit operations from toll revenue. Again, the project should include both Express Bus Service using any new capacity provided on the highways for longer distance travel and Bus Rapid Transit to provide a travel choice for those along the corridor that will not be able to use the new priced lanes. These services should connect activity centers in Maryland and Virginia.

Furthermore, the MARC Brunswick Line should play an important role in the overall program. Increasing parking capacity at MARC stations, improving the rail service, providing more connecting buses to MARC stations, and ultimately providing for through-routing of MARC with Virginia Railway Express, are all important elements of this program. Finally, we appreciate the statement in your February 13 letter to Delegates King, Barve, McIntosh, and Kaiser that you anticipate investment in the Corridor City Transitway (CCT) and request greater clarification about MDOT's plans for the CCT.

Impacts

We are hearing from our constituents that MDOT's approach to NEPA has not been well communicated and is frustrating. If MDOT had completed the environmental inventory, right-of-way identification, and other documentation of the affected environment before advancing alternatives, the public would have a better understanding of the potential impacts from this project. We urge you to make this information available as soon as possible and to delay selection of the Alternatives Retained for Detailed Study (ARDS) until this information is available to the public. Only with this information can reasonable decisions about the feasibility of alternatives be made.

The project must avoid damaging impacts to homes, parks and communities along these corridors. Where possible, we request that MDOT look at ways to add capacity through restriping lanes and through modifications to the left and right shoulders. Additionally, through the project MDOT must address the unmitigated impacts, in particular noise and stormwater runoff, to communities and the environment from past highway expansions on both I-495 and I-270.

We urge you to reconsider your approach to this project so that the outcomes enjoy broader community support and provide a more balanced, equitable, sustainable, resilient and reliable set of transportation options for travelers. Thank you for considering Montgomery County's request. We look forward to collaborating with MDOT to ensure that the I-495 & I-270 P3 Program works for Montgomery County.

Sincerely,

Marc Elrich
County Executive

Hans Riemer Councilmember At-large

Tom Hucker Councilmember, District 5



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Craig Rice Councilmember, District 2

Andrew Friedson Councilmember, District 1

Evan Glass Councilmember At-large

cc: Greg Slater, Administrator, Maryland State Highway Administration Craig Zucker, Chair, Montgomery County Senate Delegation Marc Korman, Chair, Montgomery County House Delegation Al Roshdieh, Director, Montgomery County Department of Transportation Casey Anderson, Chair, Montgomery County Planning Board