

December 11, 2018

The Honorable Peter Franchot  
Comptroller of Maryland  
80 Calvert Street  
Annapolis MD 21401

The Honorable Nancy K. Kopp  
Maryland State Treasurer  
80 Calvert Street  
Annapolis MD 21401

The Honorable Edward J. Kasemeyer  
Chair, Senate Budget and Taxation Committee  
3 West Miller Senate Office Building  
Annapolis MD 21401

The Honorable Maggie McIntosh  
Chair, House Appropriations Committee  
House Office Building, Room 121  
Annapolis MD 21401

The Honorable Anne R. Kaiser  
Chair, House Ways and Means Committee  
House Office Building, Room 131  
Annapolis MD 21401

Ms. Victoria L. Gruber  
Executive Director, Department of  
Legislative Services  
90 State Circle  
Annapolis MD 21401

Dear Comptroller Franchot; Treasurer Kopp; Chairs Kasemeyer, Kaiser, and McIntosh; and Ms. Gruber:

Under State Finance and Procurement Article, §10A-201, prior to issuing a public notice of solicitation for a public-private partnership (P3), reporting agencies must submit a pre-solicitation report concerning a proposed P3 to the Senate Budget and Taxation Committee, House Committee on Ways and Means, House Appropriations Committee (together, the Budget Committees), the State Treasurer, the Comptroller, and the Department of Legislative Services (DLS).

In accordance with the State Finance and Procurement Article, §10A-201, the Maryland Department of Transportation (MDOT) and Maryland Transportation Authority (MDTA) hereby submits the attached pre-solicitation report for the I-495 & I-270 P3 Program to the Budget Committees, State Treasurer, Comptroller, and DLS for review and comment. This report identifies the need and rationale for the I-495 & I-270 P3 Program and provides a detailed explanation of how MDOT and MDTA, as the reporting agencies, intend to pursue the benefits of a P3 and the solicitation process itself. This submission also includes an outline of environmental issues to be examined in a draft environmental impact statement, in accordance with budget bill language in J00, page 50 of the 2018 Joint Chairmen's Report.

The Honorable Peter Franchot  
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The Honorable Anne R. Kaiser  
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Ms. Victoria L. Gruber  
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Under the State Finance and Procurement Article, §10A-201, DLS and the Budget Committees have 45 days to review and comment on the pre-solicitation report. After the Budget Committees' review and comment period and before issuing a public notice of solicitation, reporting agencies shall seek the official designation by the Board of Public Works as a P3 and approval of the solicitation method.

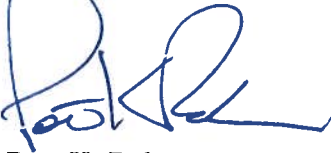
The MDOT and MDTA have, for many years, studied solutions to congestion that plagues travelers on Interstate 495 and Interstate 270. Over the past year, MDOT and MDTA have worked intensively to develop a solution to this acute problem, working closely with advisors to advance an environmental study, engage with industry, and analyze possible delivery methods. As a result of this work, MDOT and MDTA have determined that the I-495 & I-270 P3 Program, delivering a system of priced managed lanes through multiple design-build-finance-operate-maintain revenue risk concession agreements, is the only means to provide congestion relief in the near term for the region. This solution will bring approximately \$9 to 11 billion of private sector innovation and investment for the region, transferring key risks and providing numerous benefits at no net cost to the State of Maryland.

The I-495 & I-270 P3 Program, led by MDOT and MDTA and supported by a team of experienced technical, legal, and financial advisors, will conduct a fair, transparent, and competitive process to maximize value for the people of Maryland. The solicitation process itself will be consistent with Maryland's P3 law and MDOT's and MDTA's P3 regulations, and the I-495 & I-270 P3 Program will be submitted to the Board of Public Works for approval before issuing a public notice of solicitation in February 2019.

The Honorable Peter Franchot  
The Honorable Nancy K. Kopp  
The Honorable Edward J. Kasemeyer  
The Honorable Anne R. Kaiser  
The Honorable Maggie McIntosh  
Ms. Victoria L. Gruber  
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If you have any questions related to this letter, the attached pre-solicitation report, or anything related to the I-495 & I-270 P3 Program, please do not hesitate to contact Ms. Lisa B. Choplin, MDOT I-495 & I-270 P3 Office Director, at 410-637-3320 and [lchoplin@sha.state.md.us](mailto:lchoplin@sha.state.md.us). Ms. Choplin will be happy to assist you. Of course, you may always contact me directly.

Sincerely,



Pete K. Rahn  
Secretary  
Chairman, Maryland Transportation Authority

Attachment

cc: The Honorable Mike Busch, Speaker, Maryland House of Delegates  
The Honorable Thomas V. Mike Miller, President, The Senate of Maryland  
The Honorable Nancy King, Senator, The Senate of Maryland  
Mr. Steve McCulloch, Senior Policy Analyst, DLS



# PRESOLICITATION REPORT

I-495 and I-270 P3 Program

December 2018

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# #1 EXECUTIVE SUMMARY

The Maryland Department of Transportation (“MDOT”) including the Maryland Transportation Authority (“MDTA”), together as the “Reporting Agencies”, submit this public-private partnership (“P3”) presolicitation report for the I-495 and I-270 P3 Program (the “P3 Program”) to the Senate Budget and Taxation Committee, House Committee on Ways and Means, House Appropriations Committee (together the “Budget Committees”), the Comptroller, State Treasurer, and Department of Legislative Services (“DLS”) of the State of Maryland for review in accordance with the State Finance and Procurement Article § 10A-201(a) of the Annotated Code of Maryland.

After careful consideration of all comments, a final presolicitation report will be submitted to the Board of Public Works (“BPW”) to request its approval to advance the P3 Program via multiple design, build, finance, operate, maintain (“DBFOM”) revenue risk concession agreements (“Agreement”) between the Reporting Agencies and multiple private entities. Each Agreement will assign responsibility to the respective private entities for a phase or phases of road that independently provide value to the P3 Program. In accordance with State law, each Agreement will be submitted for separate review by the Comptroller, State Treasurer, Budget Committees and DLS and approval by the BPW.

## P3 PROGRAM OVERVIEW

The P3 Program was established to accomplish the specific goals of: **reducing traffic congestion, minimizing impacts to the corridor and accelerating delivery** while pursuing shockingly innovative approaches at no net cost to the State of Maryland (the “Program Goals”)<sup>1</sup>. Significant congestion along two of the most critical highways in the National Capital Region – I-495 and I-270 (the “Program Corridor”) – negatively affects residents and businesses daily.



## WHAT IS THE “PROGRAM CORRIDOR?”

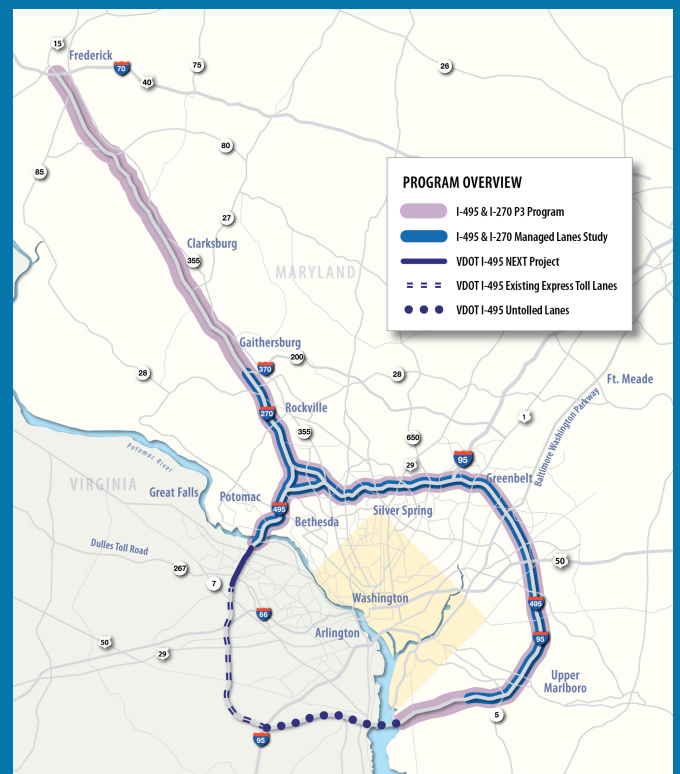


Figure 1: P3 Program Corridor

<sup>1</sup> I-495 & I-270 P3 Program website



Growing congestion and diminished travel time reliability may further limit economic development potential and negatively impact quality of life – costing the Region in terms of lost wages and wasted money, lower economic productivity, higher prices for goods and challenges in attracting and retaining talent<sup>2</sup>. A long-term solution is needed to address:

- Current and future travel needs;
- Lack of travel time reliability;
- Traveler safety issues; and
- Inability to efficiently move goods and people.

## ENVIRONMENTAL STUDY

The P3 Program is under concurrent development with the I-495 & I-270 **Managed Lanes Study ("MLS")**. The MLS limits extend from south of the American Legion Bridge in Virginia clockwise along I-495 in Maryland to west of MD 5 and along I-270 from I-495 to I-370, including the east and west I-270 spurs. Subsequent environmental studies under the P3 Program, not included in the first study limits, are anticipated to extend along I-270 from I-370 to I-70 beginning in 2019 and along I-495 to the Woodrow Wilson Bridge in conjunction with any coordination with the Virginia Department of Transportation.

All studies will follow the **National Environmental Policy Act ("NEPA")** process.

The MLS is being led by the **Federal Highway Administration ("FHWA")** jointly with the **MDOT State Highway Administration ("MDOT SHA")**. The purpose of the MLS is to develop and analyze managed lane solutions and reasonable alternatives that address congestion, improve trip reliability on I-495 and I-270 within the study limits and enhance existing and planned multimodal mobility and connectivity. The study will address the need to accommodate existing and long-term growth, enhance trip reliability, provide additional roadway travel choices, accommodate homeland security, and improve the movement of goods and services. The MLS will result in the development of an **environmental impact statement ("EIS")**, which presents the potential impacts of a proposed solution.

As required under the 2018 Joint Chairmen's Report on the Fiscal 2019 Operating Budget (Senate Bill 185) and the State Capital Budget (Senate Bill 186), an outline of the environmental screening analysis, "Outline of the Environmental Screening Analysis of the Environmental Issues for the I-495 & I-270 Public-Private Partnership Program", has been included as an attachment to this presolicitation report.

<sup>2</sup> Greater Washington Partnership (GWP), "Advancing our Region: Preface to a Blueprint for Regional Mobility," October 2017.

### P3 SOLICITATION DEVELOPMENT

Priced managed lanes are being considered as an alternative under the MLS. Priced managed lanes are separate, newly added highway lanes that use congestion pricing to maintain speed and/or throughput. Travelers have the option to pay a toll for reliable travel times in the priced managed lanes or may use the non-tolled, pre-existing general purpose lanes as they do now. General purpose lane users may enjoy less congestion when other travelers opt into the priced managed lanes. Accordingly, it is anticipated that the system improvements would provide congestion relief for all users, including users of bus services, across the Program Corridor.

Concurrent with, but separately from the MLS, the Reporting Agencies will be initiating the solicitation process with respect to the first phase of the P3 Program. The P3 solicitation milestones are being aligned with the MLS schedule to maximize efficiency in delivery of congestion relief while ensuring the integrity of the NEPA process, consistent with the United States **Code of Federal Regulations ("CFR")** in 23 CFR 636.109. While the solicitation process may be initiated prior to the identification of a recommended preferred alternative, it is anticipated that the MDOT SHA recommended preferred alternative will be identified by spring 2019, concurrently with the issuance of the request for qualifications. Consideration of information received through the solicitation process can occur in the NEPA process, but certain private entity actions are subject to CFR requirements prior to conclusion of NEPA. No actions by private entities can be taken that would bias the MLS toward a particular alternative prior to the conclusion of NEPA. In the event that priced managed lanes are not part of the recommended preferred alternative, the solicitation would not proceed. If priced managed lanes are included in the MDOT SHA recommended preferred alternative, then the solicitation process would proceed, and the final request for proposals would be issued after the public release of the draft EIS.

### P3 PROGRAM FINANCING

In exchange for designing, building, financing, operating and maintaining the facility over the term of an Agreement, the developer will be entitled to toll revenues generated by the facility over that same period. The toll revenues received by the developer are expected to be the developer's only source of repayment for its investment in the construction of the facility as well as ongoing source of funding for its operating and maintenance costs during the period that the developer operates the facility. Any Agreement would have a term of approximately 50 years. The length of the agreement will ultimately be determined by each phase's financial characteristics.

If the developer's assessment of the potential costs is less than the toll revenues forecast resulting in excess cash flow, the developer might offer the State of Maryland an upfront payment at the signing of the Agreement and/or a share of the excess revenues over the term of an Agreement. The primary risks of obtaining financing for, constructing, operating and maintaining a facility, as well as repayment of any debt incurred by the developer, will be absorbed by the developer under an Agreement. Any project financing will be non-recourse to the State of Maryland.

While a portion of the financing for the program is expected to be from one or more series of bonds issued by MDTA, repayment of the bonds will be solely from revenue generated from the P3 Program and will have no effect on the Transportation Trust Fund. The proceeds of the bonds are expected to be applied to pay certain costs incurred in connection with the P3 Program. Those bonds will be issued pursuant to one or more new indentures entered into between MDTA and a trustee in accordance with its statutory authority. The bonds issued by MDTA in connection with a facility will be subject to repayment solely from the toll revenues derived from the P3 Program. Revenues from MDTA's existing facilities will not be pledged to these bonds – their issuance will not impact coverage ratios of MDTA's existing bonds; however, the bonds will fall under MDTA's \$3.0 billion statutory debt limit (debt limit increases from \$2.325 billion to \$3.0 billion at the start of FY 2021).

At a preliminary construction cost estimate of \$9 - 11 billion (in 2017 dollars), the State of Maryland currently has no capital or maintenance funding budgeted to design, build, operate, and maintain improvements of the magnitude needed to address congestion along the Program Corridor. A traditional project delivery model requiring public funding and financing is not financially feasible even with the re-allocation of billions of dollars in the current capital plan for expansion in the next couple decades.



### PRICED MANAGED LANES: What drivers need to know

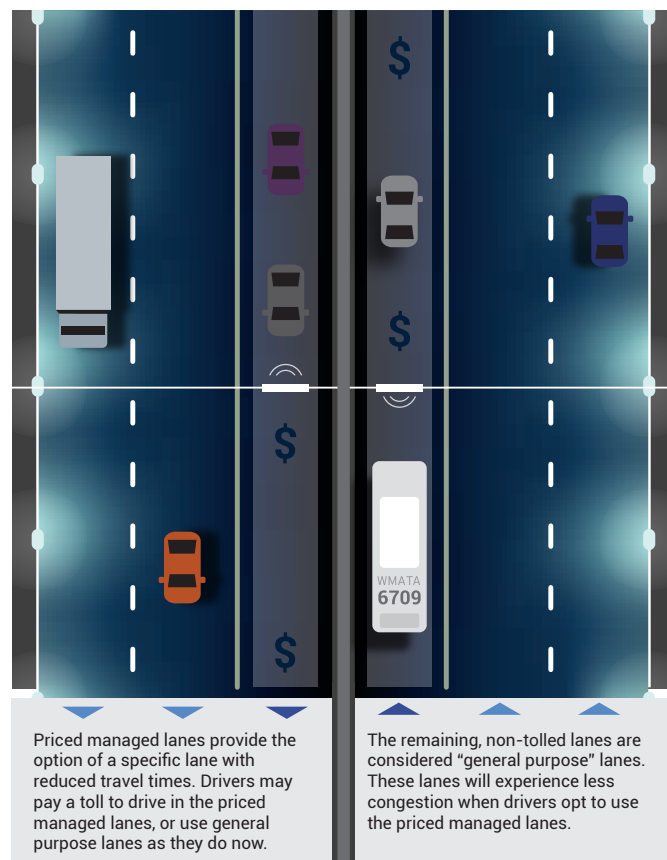


Figure 2: Priced Managed Lanes Overview

### P3 PROGRAM BENEFITS

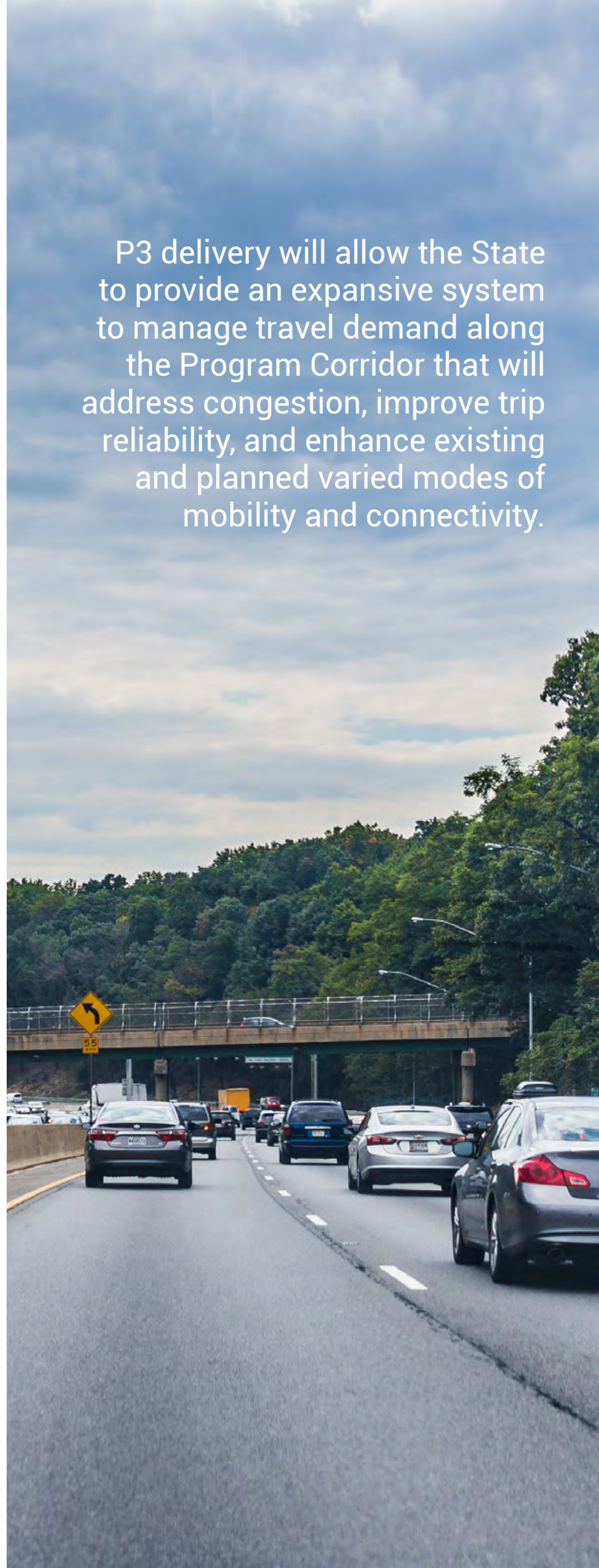
While the financial implications of this delivery approach are a significant advantage, there are several other important benefits to the State of Maryland:

- **Project Feasibility and Accelerated Delivery** — Allows for congestion relief in significant portions of the Program Corridor to be provided to the public approximately five years following signing of any Agreement. A traditional funding and delivery approach is not financially feasible within the foreseeable future due to the significant construction costs, lack of available funding for new projects and State and MDTA debt limitations. Without the delivery of the P3 Program, congestion will continue to grow on I-495 and I-270 increasing delays along these corridors and forcing travelers to seek alternate routes along local streets and through neighborhoods.
- **Whole Lifecycle Planning and Cost Optimization** — Developer will be obligated to maintain assets to meet key performance standards set by the Reporting Agencies over the life of the Agreement, requiring efficient lifecycle maintenance of the priced managed lanes from construction through the life of the contract. This includes handback provisions that dictate the condition of the facility when it is returned to the State
- **Innovation in Design** — The P3 Program's solicitation will spur competition among proposers to develop design concepts that maximize efficiency, reduce impacts to the Program Corridor, reduce costs, and optimize revenues within the performance requirements issued by the Reporting Agencies.
- **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.
- **Schedule and Cost Control** — The proposed P3 delivery will incentivize on-time and on-budget delivery because the developer will not receive toll revenues until it opens a phase for use.

The State of Maryland's current congestion problems along the Program Corridor require a solution that can be implemented now and provide benefits in the near future to maintain and improve Marylanders' quality of life and economic growth.

This presolicitation report provides information pursuant to State Finance and Procurement Article §10A-201 of the Annotated Code of Maryland and considerations from the **Code of Maryland Regulations ("COMAR")** 11.07.06.07 and 11.01.17.07, to include detail on the reasons for pursuing P3s, potential benefits and risks, broad considerations for the State of Maryland and overall expectations for a P3 in the event that priced managed lanes are the recommended preferred alternative from the environmental study.

P3 delivery will allow the State to provide an expansive system to manage travel demand along the Program Corridor that will address congestion, improve trip reliability, and enhance existing and planned varied modes of mobility and connectivity.

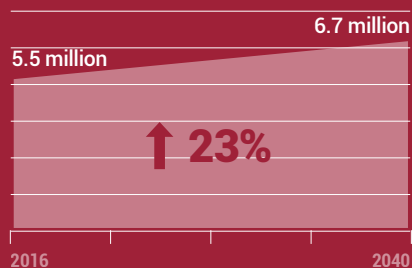


# #2 INTRODUCTION & P3 RATIONALE

**T**he Program Corridor, experiencing **Average Annual Daily Traffic ("AADT")** volumes of over 260,000 vehicles <sup>3</sup>, includes the most heavily traveled highways in the National Capital Region (the "Region"), encompassing the District of Columbia, Northern Virginia and Charles, Frederick, Montgomery, and Prince George's counties in Maryland.

The Region's population is expected to grow by over 23% from 5.5 million people in 2016 to 6.7 million people by 2040<sup>4</sup>. These additional 1.2 million people will increase trip demand across the already congested Region, especially as outer suburbs are expected to see the highest levels of population growth<sup>5</sup>. This growth will drive an additional 4 million trips per day, including nearly 1 million work trips per day by 2040<sup>6</sup>.

## REGIONAL POPULATION



**5.5 million** area residents rely on I-495 as the only connecting road to many radial routes. The region's population is expected to increase **23 percent** by 2040.



Portions of the Program Corridor experience more than **260,000 trips per day**



<sup>3</sup> Maryland Department of Transportation State Highway Administration (MDOT SHA), "2017 Annual Average Daily Traffic," April 5, 2018

<sup>4</sup> Metropolitan Washington Council of Governments (MWCOC), "2016 CLRP Amendment Documentation," November 16, 2016.

<sup>5</sup> MWCOC (2016)

<sup>6</sup> MWCOC (2016)

## PROGRAM LIMITS

I-495 is the only circumferential route that provides interregional connections to many radial routes for the 5.5 million people that live and travel throughout the Region, while I-270 is the only highway link between I-495 and the fast-growing suburbs in Frederick County.

In addition to heavy work-day commuter demand serving Marylanders around the Region, I-495 serves as the major thoroughfare linking the I-95 corridor, which connects the entire East Coast for freight and passenger travel. Additionally, I-270 is the predominant route for freight and long-distance travel between the Region and points west.

## TRAVEL DEMAND AND CONGESTION IMPACT

Commuters and their employers place a high value on efficient and reliable transportation infrastructure in the Region<sup>7</sup>. High and increasing travel demand in the corridor results in severe congestion throughout the day<sup>8</sup> however, making travel unreliable and inefficient. Commuter, business and recreational travelers currently experience significant delays during peak hours of triple or quadruple free-flowing travel times, adding hours to daily commutes. In 2040, these travel times are projected to increase another 25% without additional lane capacity, and congested lane miles across the Region are expected to increase by 66% by 2040<sup>9</sup>. This congestion costs the Region immensely, to the tune of nearly \$1.3 billion annually<sup>10</sup>, in terms of car and truck delays, wasted fuel and extra emissions. This situation is only expected to worsen as the Region's population and economy grows.

## P3 AND PRICED MANAGED LANES RATIONALE

During extensive periods of congestion, travelers on the Program Corridor do not have an option to avoid delays – local and arterial routes are already saturated with traffic<sup>11</sup>. Adding more general purpose lanes is neither financially feasible nor is it likely to relieve congestion over the long term as the Region's population is expected to grow and drivers, left without a reliable option that manages traffic demand, will be forced to drive in a congested corridor. While the Purple Line project and the State of Maryland's investment in **Washington Metropolitan Area Transit Authority ("WMATA")** improvements are important expansions of transit capacity and access in the Region, further expansion of rail services, which all have operating expenses well in excess of farebox revenues<sup>12</sup>, will not be self-sustaining either.

Priced managed lanes in the Region have been shown to provide congestion relief leading to more dependable travel times for all users even as demand increases. They also provide the revenue source to fund project costs (including the cost of private capital).

Priced managed lanes in the Region have been constructed as an effective solution to highway congestion. The I-495 and I-95 Express Lanes projects in Virginia, for example, benefit all drivers as average peak-hour travel times for general purpose lanes

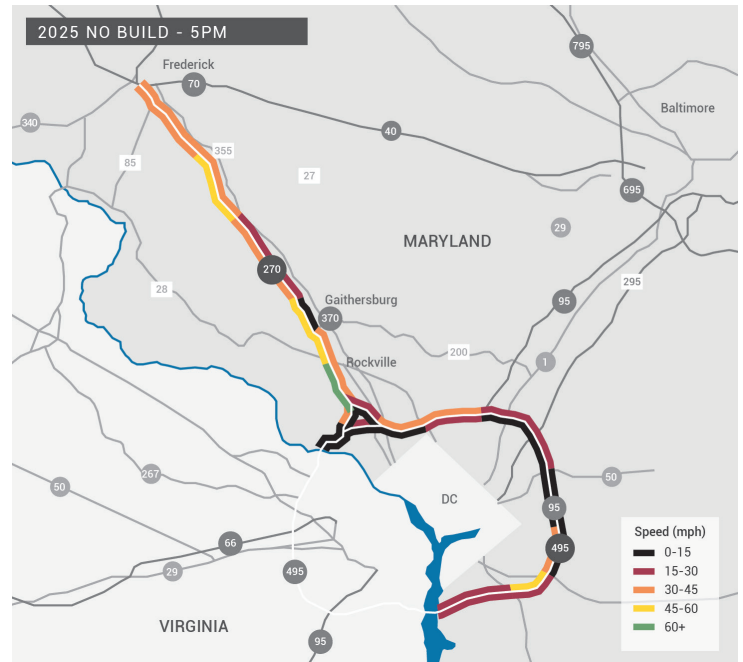
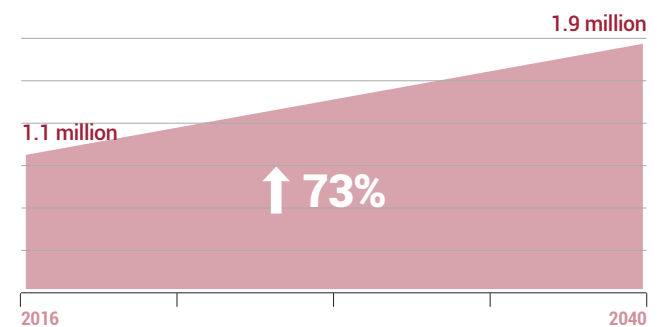


Figure 3: Program Corridor Conditions in 2025 (No Build)

decreased significantly when compared to travel times experienced before the project was in operation<sup>13</sup>. The I-495 and I-95 Express Lanes projects in Virginia added additional new, priced managed lane capacity to each roadway. In contrast, the I-66 Inside the Beltway project did not add any new capacity. As part of the I-66 Inside the Beltway project, **High Occupancy Vehicle ("HOV")**-only hours on I-66 were extended in both the morning and evening and the roadway was opened during HOV hours for vehicles with a single occupant opting to pay a toll. Prior to tolling being implemented, single occupancy vehicles were not allowed on this section of I-66 during the morning and evening rush hours and had to utilize alternative routes. While the I-66 Inside the Beltway project has experienced public opposition due to high toll rates, high toll rates can be generally attributed to the significant free usage of I-66 by HOVs with 2 or more occupants. While headlines have shown toll rates over \$40 on I-66 Inside the Beltway, during the first 6 months of operation, only 0.28% of all toll payers paid more than \$40.



## ANNUAL VEHICLE HOURS OF DELAY



<sup>7</sup> GWP (2017)

<sup>8</sup> MDOT SHA, "2017 Maryland State Highway Mobility Report," 2017

<sup>9</sup> MWCOC (2016)

<sup>10</sup> MDOT SHA (2017)

<sup>11</sup> MDOT SHA (2017)

<sup>12</sup> Department of Legislative Services (DLS), "J00H01 Maryland Transit Administration FY 2019 Operating Budget Analysis", 2018

<sup>13</sup> Transurban, "Benefits of 495 and 95 Express Lanes Extend to Regular Lanes as Drivers Experience Reduced Travel Time and Increased Lane Speeds," May 12, 2015

## INTRODUCTION & P3 RATIONALE

The toll rates for the first six months of operation for I-66 Inside the Beltway averaged \$8.49 for eastbound trips and \$4.60 for westbound trips. Since tolling has been implemented on I-66 Inside the Beltway, speeds have increased when compared to same time the prior year and the parallel routes have not experienced degraded operations since the implementation of tolling on I-66 Inside the Beltway<sup>14</sup>.

Should a priced managed lanes alternative be selected as the preferred alternative, the P3 Program will take a fundamentally different approach to tolling than the I-66 Inside the Beltway project by adding new, tolled capacity while maintaining existing, free lanes. The P3 Program will seek a solution that addresses the need for congestion relief while reducing the potential to drive up toll rates. The National Capital Region **Transportation Planning Board ("TPB")**, the Region's Metropolitan Planning Organization, has endorsed an initiative to expand the existing priced managed lane system that already connects I-95, I-495 and I-66 in Virginia to I-495 and I-270 in the State of Maryland. This initiative is included in the TPB's long-range plan, Visualize 2045<sup>15</sup>. Preliminary estimates of construction costs for expanding the priced managed lane system into a portion of the Program Corridor are approximately \$9 - 11 billion (in 2017 dollars).

Achieving public benefits and generating revenue from the P3 Program is not expected to be possible without completion of very large phases of road – building mile-by-mile will not produce benefits until a phase of independent utility is complete. As such, financing or significant funding is needed in order to advance the program in a meaningful way. Using a P3, the Reporting Agencies would be able to deliver a priced managed lanes solution across the Program Corridor over the nearer term and transfer the risk of toll revenue performance while bringing equity capital to provide coverage for private debt.

If MDOT SHA were to fund the project and re-allocate its entire capital plan expansion budget (\$1.4 billion over the next six years<sup>16</sup>), it would not be able to deliver and operate a similar priced managed lanes facility for more than 25 years – leaving no additional funding available for other expansion projects across the State of Maryland during that time.

In order to raise such funding from MDTA Facilities Projects Revenue bonds, legislatively enacted debt limits would need to be expanded significantly. At the end of FY2019, MDTA will have \$1.6 billion in bonds outstanding<sup>17</sup>. With a current limit of just over \$2.3 billion, additional debt capacity is only approximately \$772 million. While MDTA debt capacity will increase to \$3.0 billion in FY 2021, MDTA has other significant projects underway – including the \$768 million replacement of the Nice Bridge and \$1.1 billion expansion of the I-95 Express Toll Lanes – and could not pursue another project of this size.

**Consolidated Transportation Bonds ("CTBs")** are not a viable solution to finance the project because MDOT statute imposes a debt limit on CTBs issued and only \$1.1 billion of capacity is expected to remain by the end of FY2019<sup>18</sup>. Under the State of Maryland's debt affordability analysis, using CTBs to finance the P3 Program would also likely degrade coverage ratios outside of benchmarks and reduce debt capacity for all other important needs like schools and other State facilities. As such, the Reporting Agencies view a P3 as the only financially viable way for the State to meet its Program Goals in the near term.

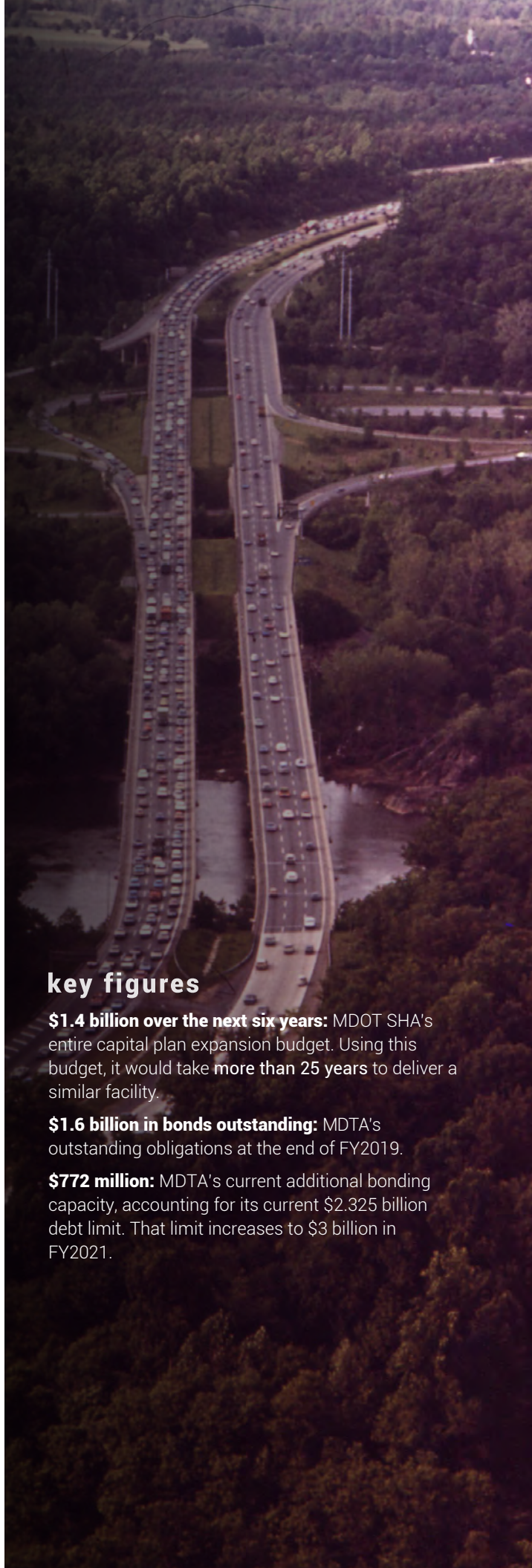
14 Virginia Department of Transportation, "I-66 Inside the Beltway 6 month Performance Review", July 2018

15 MWCOC, "Visualize 2045 Draft," September 2018

16 MDOT, "FY2019 to FY 2024 Consolidated Transportation Program DRAFT", 2018; MDOT SHA Major Projects Six-Year Total

17 Maryland Transportation Authority (MDTA), "July 2018 Financial Forecast," July 2018

18 Department of Budget and Management (DBM), "Maryland Fiscal 2019 Budget Overview, J00 – MDOT," 2018



## key figures

**\$1.4 billion over the next six years:** MDOT SHA's entire capital plan expansion budget. Using this budget, it would take **more than 25 years** to deliver a similar facility.

**\$1.6 billion in bonds outstanding:** MDTA's outstanding obligations at the end of FY2019.

**\$772 million:** MDTA's current additional bonding capacity, accounting for its current \$2.325 billion debt limit. That limit increases to \$3 billion in FY2021.

# #3

## P3 OVERVIEW & ANALYSIS

### STRUCTURE

#### DEVELOPER RESPONSIBILITIES

The Reporting Agencies propose conducting multiple competitive solicitations for long-term revenue-risk concession agreements with developers. In return for designing, building, financing, operating and maintaining the P3 Program for the term of the Agreement, the private developer would be entitled to a portion of the toll revenues from the facility. As part of finalizing the Agreement, the developer would separately enter into agreements with various parties including a design-build contractor to build the facility outlined in the agreement, as well as debt and equity providers to provide funding secured against toll revenues. Under such a structure, the State of Maryland continues to own the facility and retains certain rights and enforcement mechanisms over the life of the Agreement.

The basic organization of the revenue risk concession is shown below with the developer represented in the center:

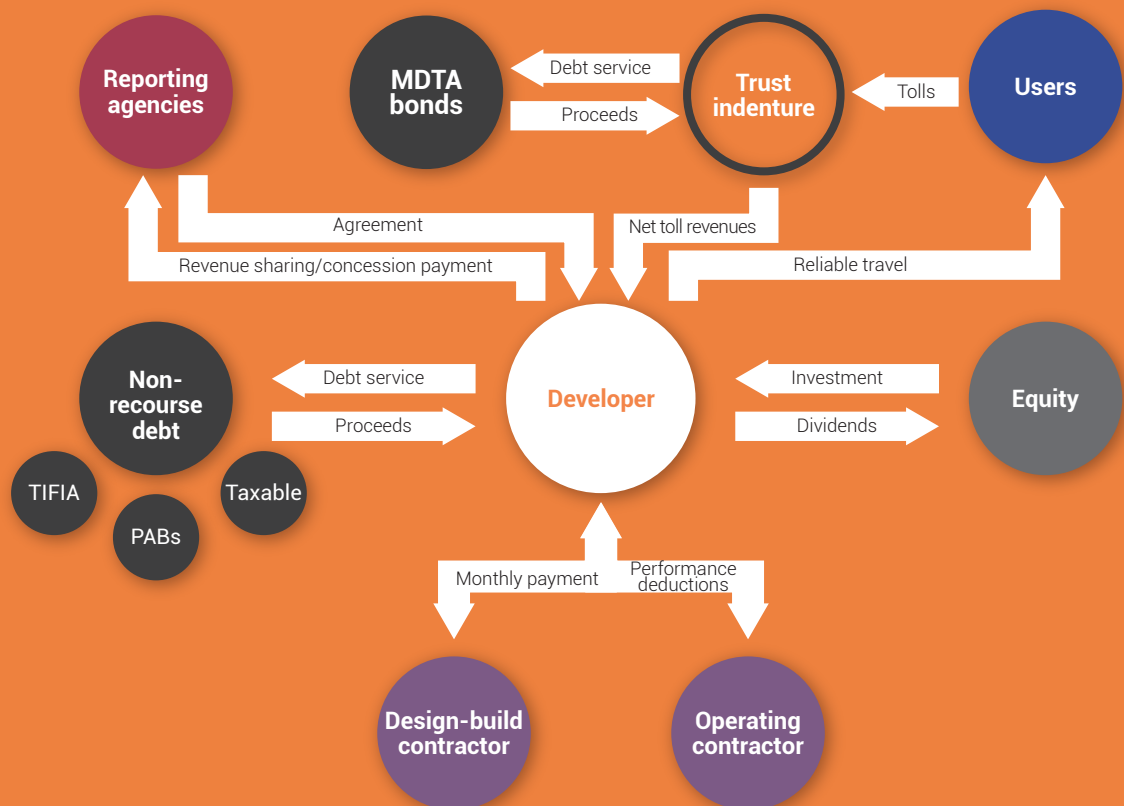


Figure 4: Notional P3 Structure



Each Agreement will include detailed, output-driven technical specifications and performance requirements dictating the work to be completed throughout the term of the Agreement and the condition of the priced managed lanes facility at the end of the term (hand-back conditions). Such Agreement will include specific remedies for the State of Maryland in case of the private developer's non-performance of contractual obligations, such as liquidated damages and ultimately default leading to early termination and the developer's loss of investment. Lastly, any Agreement will likely include a windfall gain provision to return revenue to the State in the case that revenues generated are significantly greater than forecasted. Depending upon the ultimate scope of the P3 Program, the competitiveness of the solicitation and the developer's view of the facility's potential toll revenue, there is a possibility that the State could receive an upfront payment at the time of financial closing for the Agreement or multiple payments over the life of the Agreement.

**Agreements will be structured to optimally allocate risks and accommodate the following key elements:**

- **Tolling** – Toll rates will be set under the authority of MDTA in accordance with all statutory requirements. Similar to the Intercounty Connector and I-95 Express Toll Lanes, tolls will be collected via E-ZPass and video tolling at highway speeds. The toll rate setting process will follow the process prescribed in the Transportation Article §4-312, which includes at least 45 days of legislative notification of proposed toll rate setting, public hearings in any counties in which the toll rate setting will occur, a public comment period, posting of proposed rates on the MDTA's website, and proper notice of the Board meeting at which the vote will take place. Toll rates will change throughout the day to manage congestion and enable reliable trip times.
- **Financing** – The developer will finance its construction responsibilities under the P3 Program through debt and equity that have no recourse to the Reporting Agencies, nor to the State of Maryland. Developer debt may include a combination of a **Transportation Infrastructure Finance and Innovation Act ("TIFIA")** loan, taxable debt (bank or private placement) or **Private Activity Bonds ("PABs")**. As described above, MDTA is expected to create a separate trust indenture and issue one or more series of bonds to pay certain costs incurred in connection with the P3 Program as well. Any bonds issued by MDTA will be repaid solely from toll revenues from a facility prior to the repayment of debt incurred directly by the developer and the developer's equity investment.
- **Operations & Maintenance (O&M) Approach** – The developer will operate and maintain the facility over the life of the Agreement. Depending on the economics of the Agreement and expected toll revenues, the developer may also operate and maintain other associated aspects of the Program Corridor. The developer will be expected to meet pre-defined technical performance specifications, and O&M standards throughout the term of the Agreement.
- **Sequencing** – The P3 Program will be sequenced by the Reporting Agencies to maximize competition and effectively deliver congestion relief and the P3 Program at a high value to the State of Maryland.
- **Length of Agreement** – The Agreements will be for approximately 50 years and the actual length will be determined by the financial characteristics of each phase.

# VALUE OF PROPOSED P3

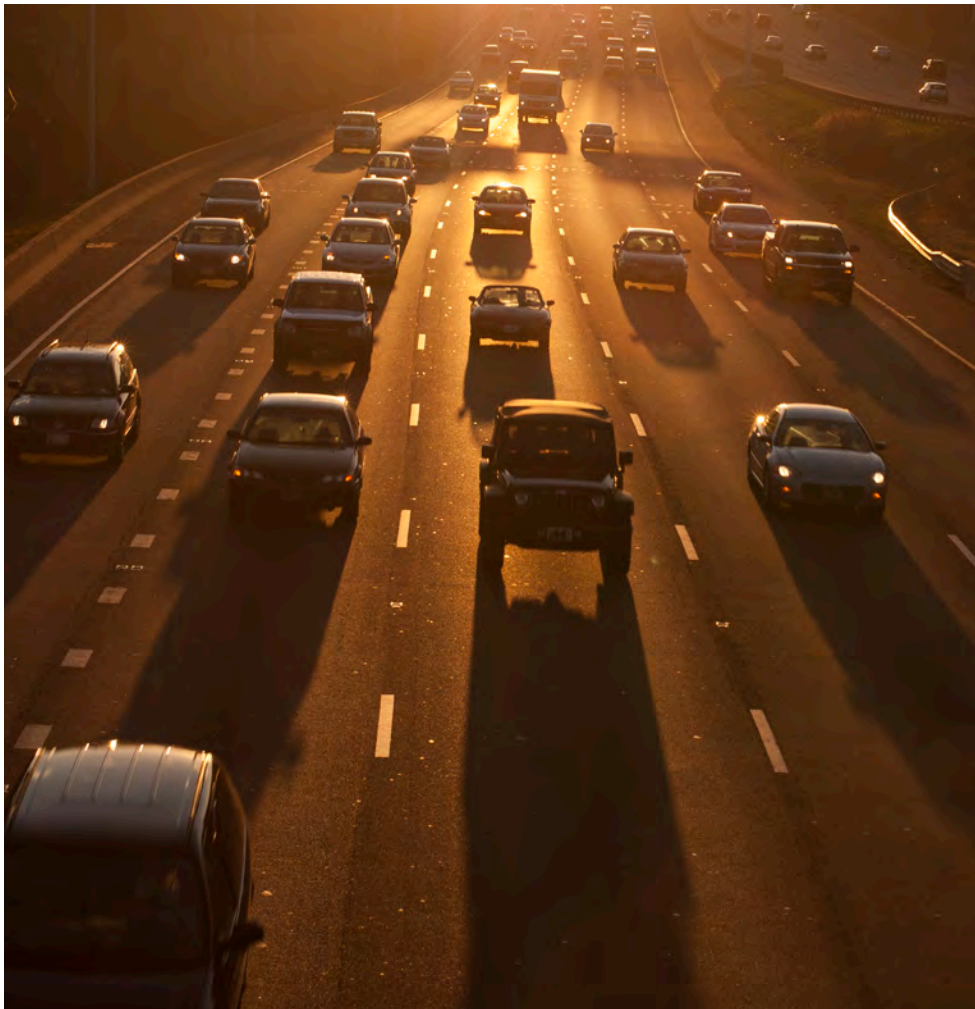
## P3 CONSTRUCTION VALUE

The P3 Program is anticipated to provide an investment in the State of Maryland's transportation infrastructure that will result in, in addition to traffic relief, smoother pavement and upgraded bridges, freeing up traditional funding for other improvements. Preliminary estimates of the value of the P3 Program's investment is \$9 - 11 billion (in 2017 dollars).

## P3 O&M VALUE

The Agreement(s) will obligate the developer(s) to satisfy maintenance performance requirements and conduct major capital maintenance including the obligation to hand back the facility in accordance with pre-determined standards and residual useful life. In addition, the developer will be required to provide traffic management services throughout the term of the Agreement. Specific performance standards will be part of the Agreement for each of these elements. The cost of operations and maintenance is estimated at approximately \$80 million annually (in nominal dollars).

The P3 Program is anticipated to require whole-life delivery of construction, maintenance and operations services for a period of approximately 50 years for each phase of the program. The total value of those obligations that will be transferred to private developer(s), including financing that is non-recourse to the State of Maryland, is anticipated to total more than \$16 billion (in nominal dollars). The portion of the financing from MDTA will be limited recourse to MDTA.



**The most fundamental value of P3 delivery, in this instance, is that it enables the feasibility of the P3 Program. There are no public plans for funding, or financing this P3 Program absent P3 delivery. The value of the proposed P3 Program will be realized in numerous ways, including the following:**



**ONE** Approximately \$9 - 11 billion investment (in 2017 dollars) of new transportation infrastructure that will be owned by the State of Maryland in addition to the subsequent routine and lifecycle maintenance work and certain operations performed by the developer;



**TWO** Thousands of direct jobs required to build the proposed facility;



**THREE** Numerous direct and indirect economic benefits including more efficient movement of people and commerce in the region and the related enablement of continued economic growth in the corridor; and



**FOUR** Transfer of significant risks from the State of Maryland to the private developers.

Item 1 is addressed at the top left and items 2, 3 and 4 are addressed in more detail on pages 13-16.

## BENEFITS AND RISKS

The following key benefits and risks demonstrate additional value of P3 delivery for the P3 Program.

BENEFITS	RISKS AND MITIGATIONS
<b>P3 Feature: Program Feasibility and Accelerated Delivery</b>	
Without a P3, there is no congestion relief in the near term on the Program Corridor. Deploying private capital will not only significantly expedite delivery, it will make the improvements feasible.	<b>Risk:</b> Priced managed lanes construction is not funded and congestion relief to the Region is not provided.
The private financing will be non-recourse to the State, so it will not impact the State's debt capacity. A small portion of the financing will be limited recourse to MDTA – within MDTA debt limits and subject to repayment solely from the facility's revenues and not any other MDTA revenue.	<b>Mitigation:</b> Agreements enable the State to deploy private capital to build, operate and maintain the facility. In order to win a competitive solicitation, highly-qualified firms will apply their resources, experience and innovative ideas to optimize the value to the State.
<b>P3 Feature: Whole Lifecycle Planning and Cost Optimization</b>	
The developer's long-term obligations for operations and maintenance will align its interests with the State's, and incentivize the developer to apply innovative construction, operations and maintenance methods that are focused on lifecycle efficiencies.	<b>Risk:</b> Facility performs poorly in operations.
	<b>Mitigation:</b> The Reporting Agencies will require adherence to performance based technical specifications throughout the term of the Agreement(s) and enforce provisions by applying damages against the developer as necessary. Those contractual requirements will align the developer's financial interest with public objectives and ensure adequate incentives to comply with performance standards.
<b>P3 Feature: Risk Transfer</b>	
An Agreement of this type will allocate many responsibilities that would otherwise be the responsibility of the Reporting Agencies to a private developer in terms of funding, financing, coordination and management.	<b>Risk:</b> Financial Close is not achieved.
Under the Agreement, the Reporting Agencies will transfer major risks to the private sector, including but not limited to:	<b>Mitigation:</b> Solicitation process ensures qualified developers with experience financing complex transactions will be shortlisted and that contractors will have adequate performance and payment security capacity. The developer's lenders will require investment grade credit ratings and/or bank commitments (depending on the type of financing proposed) and equity commitments. The Reporting Agencies will also require substantial proposal security in the form of proposal and closing bonds or letters of credit. All of these requirements will protect the State's interests during the solicitation and properly incentivize proposers to not withdraw their proposals and properly incentivize the successful proposer to achieve financial close in a timely manner.
<b>Financing:</b> The developer will have the primary responsibility for the timing and process associated with raising financing through debt and equity.	
<b>Funding:</b> The proposed Agreements also will shift funding responsibility to the developer, in that they will have the risk for toll revenues that will be used to pay back the equity, debt and financing costs. This means that, unlike an availability payment P3 structure, the developer's debt is non-recourse to the State.	
<b>Operating and Maintenance Cost Inflation:</b> The private developer will bear the risk of inflation for its long-term operations and maintenance obligations.	<b>Risk:</b> O&M costs may increase above expectations.
	<b>Mitigation:</b> The contractual waterfall of the use of net revenues (net of MDTA debt service) will prioritize operations and maintenance before debt service and distributions to equity investors. Lenders will require reserve accounts for debt and major maintenance, as well as forward-looking maintenance plans.
<b>Traffic and Revenue:</b> All project financing is non-recourse to the State, and a majority of the debt will be incurred by the private developer and will not impact the State's debt limitations. Debt and equity investors will be at risk for traffic and revenue.	<b>Risk:</b> Traffic and revenue are lower than expected.
In the case that revenue collections outperform estimates, the Reporting Agencies will include contractual provisions for sharing excess revenues (net of MDTA debt service).	<b>Mitigation:</b> Credit rating agencies will rely on independent technical and traffic advisors to review each proposers' cost and revenue projections, and their project management and delivery plans. Lenders will require reserve accounts as noted above.
	The proposed facility will be owned by the State of Maryland, but the revenue risk will be retained by the developer(s), with a small portion borne by the repayment of the bonds issued by MDTA. Bonds issued by MDTA will have the first call on project revenues.

BENEFITS		RISKS AND MITIGATIONS	
P3 Feature: Program Feasibility and Accelerated Delivery			
<b>Integration:</b> The developer has overall responsibility for managing all activities, and addressing issues that arise among parties throughout the finance, design-build, operations and maintenance. That integration responsibility would otherwise belong to the State of Maryland if all aspects were procured separately.		<b>Risk:</b> Tolling commencement is delayed due to construction delays or poor transition from construction to operations.  <b>Mitigation:</b> Having a developer team that has experience working together and the necessary financial capacity and technical experience is necessary to minimize risk of delay.  The P3 structure includes multiple levels of review from the Reporting Agencies as well as investors and lenders to provide a higher level of confidence that the project can be delivered on-budget and on-schedule.	
P3 Feature: Innovation and Efficiency			
The solicitation and the Agreement will be structured to provide the developer with the flexibility to design and construct cost-effective solutions that uniquely address the Program requirements, and are subject to compliance with the NEPA documents.		<b>Risk:</b> Facility does not serve traffic efficiently.  <b>Mitigation:</b> The developer will have to carefully design and build within the right-of-way and environmental constraints and still provide the access to and egress from the system that will enable customers to realize the value of the facility – adequate travel time savings and reliability.  The Reporting Agencies will provide technical requirements for quality, safety and operation of the facility that allow for innovative approaches.	
P3 Feature: Schedule and Cost Control			
The State and the developer's incentives are aligned to having the Program Corridor completed and opened to traffic as soon as possible. The developer's agreement with its contractor is likely to include a fixed-price, date-certain contract with liquidated damages from the design-build entity to pay for any lost tolls related to a delay.		<b>Risk:</b> Costs are higher than expected and schedule overruns.  <b>Mitigation:</b> The Reporting Agencies will retain ownership and inspection rights throughout the term of the Agreement.  The Agreement will incentivize the private developer to achieve efficient and timely construction completion in order to begin operations and begin retaining toll revenues. Lenders will have oversight responsibilities and step-in rights in the event that the project developer(s) do not satisfy contractual obligations for proper construction, operations and maintenance. Lenders' requirements for repayment of debt and maintenance of reserve accounts will allow for prudent financial management.	



Deploying private capital will not only significantly expedite P3 Program delivery; **it will make it feasible.**

# #4

## LOOKING AHEAD

(POTENTIAL WORKFORCE, ECONOMIC DEVELOPMENT, AND ENVIRONMENTAL IMPLICATIONS)

Consistent with the Program Goals and the completion of the NEPA process, delivery of the P3 Program is expected to have positive implications for the workforce, economy and environment.

### POTENTIAL WORKFORCE IMPLICATIONS

The P3 Program will create substantial local employment opportunities during construction with an estimated \$9 - 11 billion (in 2017 dollars) in capital costs. A portion of these expenditures will be direct labor working to build the new facility. The most recent studies conducted by the Council of Economic Advisors suggests that each \$1 billion in construction expenditure creates 13,000 job-years<sup>19</sup>, including direct, indirect and induced employment.

A positive side effect of such volume of hiring is the necessary training of skilled workers to meet this demand for tradespeople, supervisors, engineers, inspectors, etc. As part of the solicitation, the Reporting Agencies will include specific requirements related to the identification, training and mentoring of new workers by the private sector. This will ensure fairness in hiring practices and compliance with State and federal requirements for fair labor practices and wages, such as the Davis-Bacon Act and goals for minority, disadvantaged and/or small business (MBE/DBE/SBE) participation.



<sup>19</sup> Federal Highway Administration (FHWA), "Employment Impacts of Highway Infrastructure Investment," 2018.

As part of the P3 Program, MDOT is creating a new partnership structure that will ensure minority, small business and women workers, as well as DBEs, have fair access to jobs and contracts. The benefits to Maryland communities and businesses will include: a new on-the-job training program including outreach efforts targeting people interested in on the job training opportunities; apprenticeship opportunities; and incentives for companies to keep workers on for the duration of the project. This new program will change people's lives by helping them gain the skills and experience necessary to succeed in today's economy.

The P3 Program, in addition to creating new jobs, is not anticipated to reduce or eliminate any current State jobs.

Every \$1 billion = **13,000**  
spent in construction **JOB-YEARS**  
Source: FHWA, 2018.

## POTENTIAL ECONOMIC DEVELOPMENT IMPLICATIONS

Similar to workforce implications, the significant amount of construction expenditures will have an impact on the region's economy, specifically due to the local nature of construction. Regional firms will have to supply construction goods, regional subcontractors will be used to do much of the construction and workers in the region will be hired to deliver the P3 Program. A large proportion of the dollars spent in building the P3 Program will stay in the State, promoting economic development during construction and beyond. For example, the I-495 Express Lanes P3 project in Virginia generated \$3.5 billion in economic activity through the first five years of operations<sup>20</sup>.

Reducing commute times in the Region will also improve general worker productivity and reduce freight travel times, allowing for more efficiency and the potential for increased economic output. More broadly the Program Corridor is part of the Region's transportation system that enables the efficient movement of people, goods and services. As the Program Corridor includes key conduits in the system, ensuring that congestion issues are addressed and solved is a signal to businesses about the health and desirability of the Region's economy – workers and companies will want to stay and move to the Region.

## POTENTIAL ENVIRONMENTAL IMPLICATIONS

The Reporting Agencies recognize the unique and important community and environmental resources along the Program Corridor. The Reporting Agencies are actively engaging the citizens, businesses, federal, State and local agencies along the Program Corridor in the MLS. Environmental and planning studies will provide information to objectively evaluate the potential impacts and benefits of the identified solution. Based on the assessment of potential impacts to natural, cultural and socioeconomic resources, the facility will be designed to completely avoid, minimize to the extent feasible, or mitigate impacts if complete avoidance is not possible. MDOT is required to follow through on all commitments outlined in the Final Environmental Impact Statement/Record of Decision ("FEIS/ROD"). These commitments will be included in any P3 Agreement along with performance requirements to evaluate and provide further avoidance and minimization efforts. More detailed discussion on environmental screening analysis approach is included in the appendix.

Montgomery and Prince George's counties are designated nonattainment areas for 8-hour ozone levels in 2018<sup>21</sup>, a key driver of which is traffic idling. By reducing highway congestion, the P3 Program is expected to reduce traffic idling and emissions of pollutants contributing to ground-level ozone in the Region.

Studies have shown that roadway congestion, characterized by slower speeds and increased acceleration/deceleration leads to higher concentrations of other harmful air pollutants such as carbon monoxide, nitrogen oxides and volatile organic compounds especially near the roadway<sup>22</sup>. With the relief provided by the P3 Program, Maryland is seeking to decrease the number of congested areas and thereby reduce these dangerous pollutant concentrations and their negative effects on local communities, improving air quality and quality of life.

20 Transurban, "Press Release: Transurban Celebrates 5-Year Anniversary of 495 Express Lanes With \$5,000 in Free Travel Giveaways, \$10,000 Community Grant," November 17, 2017

21 Environmental Protection Agency (EPA), "Current Nonattainment Counties for All Criteria Pollutants," August 31, 2018

22 See: K. Zhang et al./Atmospheric Environment 45 (2011) 1929-1939. "Vehicle emissions in congestion: Comparison of work zone, rush hour and free-flow conditions."

As part of the P3 Program, MDOT is creating a new partnership structure with the MBE/DBE community including on-the-job training programs, apprenticeships and incentives for contractors to keep workers on the job for the duration of each phase.

# #5

## PRELIMINARY INFORMATION

(DEBT AFFORDABILITY, SUMMARY OF PROPOSED SOLICITATION PROCESS,  
DIVISION II EXEMPTION STATEMENT)

### PRELIMINARY DEBT AFFORDABILITY

One of the key functions of the proposed P3 Program is to transfer (i) substantially all of the financing risk and (ii) all of the revenue risk to the developer(s) to support the financial feasibility of the project. Without the transfer of these key functions, congestion relief would not be possible. Any debt incurred by a developer, even if borrowed from a federal credit program such as TIFIA or issued as Private Activity Bonds through a conduit issuer, will be non-recourse to the State. Additionally, neither of the Reporting Agencies will be expected to make any regular payment of State funds to the developer(s). As with any commercially viable P3, however, the Reporting Agencies will hold contingent liabilities of termination compensation and compensation events as part of the Agreement(s). As such, and in light of prior analyses of P3 projects in the State, it is anticipated that the P3 Program will have no impact on the State's debt capacity. The Reporting Agencies have consulted with the Department of Budget and Management ("DBM") and they have agreed with this assessment.

MDTA is expected to issue one or more series of bonds within its statutory bonding authority. Those bonds will be subject to repayment solely from the tolls derived from a specific new facility and will not impact the debt coverage of MDTA's outstanding bonds. These bonds will, however, be subject to MDTA's statutory debt limit of \$3.0 billion (debt limit increases to \$3.0 billion from \$2.325 billion in FY 2021).





## PRELIMINARY SUMMARY OF PROPOSED SOLICITATION PROCESS

The Reporting Agencies will implement a robust, transparent, and fair competitive solicitation process for the P3 Program. The solicitation process for the P3 Program will include multiple P3 solicitations for developers to deliver independently useful portions of the P3 Program. As outlined in the Code of Maryland Regulations 11.01.17 and 11.07.06, the Reporting Agencies may use a multistep solicitation process for any such solicitation(s), which may include, but will not be limited to, the following:

### i. Industry Outreach

Although not part of a formal solicitation, the Reporting Agencies anticipate communicating with prospective developers to inform them of proposed scope, schedule, solicitation and contracting approaches, and possibly to obtain their opinions on issues that may have material impacts on the success of the P3 Program, in each case prior to the commencement of a formal solicitation. MDOT, on behalf of itself and MDTA, has already undertaken equitable and non-discriminatory, preliminary outreach to the industry, including a request for information ("RFI") released in September 2017 and an industry forum held in December 2017. A summary of responses to the 2017 request for information are included as an attachment to this report and individual responses are posted on the P3 Program website. A further industry forum is scheduled for December 13, 2018, with one-on-one discussions taking place on December 13 and 14, 2018. Additional outreach may take the form of group meetings and/or formal or informal one-on-one discussions.

Information about the proposed scope and schedule of prospective solicitations enables interested parties to consider the required qualifications and enables teams to form in advance of a Request for Qualifications ("RFQ") being released. Such activities promote competition and are in the public interest.

### ii. Request for Qualifications

- Issue an RFQ which provides the criteria on which teams will be assessed and qualified to continue in the solicitation and, asks respondents to provide information about their specific abilities and/or potential approaches in relation to the P3 Program
- Respond to questions from prospective respondents regarding the contents of the RFQ
- Issue amendments to the RFQ, if needed
- Receive and evaluate Statements of Qualifications ("SOQs") from teams responding to the RFQ
- Develop a shortlist of the most highly qualified teams to continue in the solicitation process and to submit proposals in response to a Request for Proposals ("RFP")

### iii. Request for Proposals

- Issue a draft "RFP" to shortlisted teams (the "Shortlist"), identifying the proposal process, rules, evaluation criteria and requirements, reference documents, the draft details of the Agreement and the technical specifications to be incorporated into the Agreement
- Conduct industry review meetings to receive feedback and discuss changes to the draft RFP
- Revise the draft RFP, as appropriate
- Develop and distribute a final RFP, and any addendums, to the Shortlist
- Receive proposals in response to the final RFP and evaluate them in accordance with the evaluation criteria in the final RFP
- Request best and final offers as necessary
- Identify a best value private entity
- Finalize terms with the best value private entity
- Identify further best value private entity if the apparent best value private entity's negotiations fail
- Execute an Agreement with the final selected best value private entity

PRELIMINARY INFORMATION

Subject to the P3 regulations, the solicitation process for the P3 Program will include multiple solicitations for multiple developers for various phases of the P3 Program.

The P3 Program would be expected to reach the following milestone schedule for the initial solicitation:

MILESTONE	DATE
Industry forum held for potential teaming partners	December 2018
BPW approval of P3 Designation	February 2019
RFQ released to industry	April 2019
Shortlist of qualified teams announced	Q2 2019
Draft RFP released to shortlisted teams	Q3 2019
Final RFP released to shortlisted teams	Q1 2020
Technical/Financial proposals due	Q3 2020
Selection of preferred bidder	Q3 2020
BPW approval of P3 Agreement(s)	Q4 2020
P3 Agreement(s) executed	Q4 2020
Financial close target	Q4 2020

Any best value private entity(s) will be selected based on (i) a proposer’s ability to demonstrate its solution meets or exceeds the evaluation criteria of each P3 Program RFP and (ii) that its proposal is most advantageous to the Reporting Agencies when compared to other proposals. The evaluation of all proposers will be performed in accordance with COMAR 11.01.17.09 and COMAR 11.07.06.09 (Evaluation, Negotiation, and Award) and the criteria evaluated will be based, among other evaluation criteria, on the Program Goals. After selection of any best value private entity, the Reporting Agencies and such best value private entity will finalize the Agreement, by making conforming changes, as well as incorporating any accepted innovative concepts and modifications necessary to conform to the best value private entity’s financing solution. Once the Agreement is finalized, in accordance with State Finance and Procurement Article § 10A-203, such Agreement must be reviewed as required by statute then ultimately approved by the Board of Public Works prior to its execution and implementation. A final Agreement report will accompany any such Agreement submitted under State Finance and Procurement Article § 10A-203. Once the Reporting Agencies have received Board of Public Works approval, it will proceed with executing the Agreement and all other relevant project and financing documentation with the best value private entity.

DIVISION II EXEMPTION STATEMENT

The Reporting Agencies intend to use the exemption from Division II of the State Finance and Procurement Article as set forth in the State Finance and Procurement Article § 11-203(b) (h) of the Annotated Code of Maryland.



# #6 ATTACHMENTS

1. Outline of the Environmental Screening Analysis of the Environmental Issues for the I-495 & I-270 Public-Private Partnership Program
2. Summary of RFI Responses
3. List of links to public documents
4. Resolutions from Reporting Agencies



**A Report to the Comptroller of Maryland,  
the State Treasurer, the Budget Committees,  
and  
the Department of Legislative Services  
regarding**

**An Outline of the Environmental Screening Analysis  
of the Environmental Issues**

**for the**

**I-495 & I-270 Public-Private Partnership Program  
(2018 Joint Chairmen's Report, Page 50)**

**December 2018**

**The Maryland Department of Transportation and  
Maryland Transportation Authority**

# I-495 and I-270 Public-Private Partnership Program

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## INTRODUCTION

The Maryland General Assembly Joint Chairmen's Report (JCR) on the Fiscal 2019 State Operating Budget and the State Capital Budget and Related Recommendations requires a reporting agency to prepare an outline of the environmental screening analysis for a public-private partnership ("P3") before an official designation can be requested. The JCR on page 50 specifically states that:

*"It is the intent of the General Assembly that, at least 45 days before requesting the official designation of a public-private partnership under Section 10A-201 (c) of the State Finance and Procurement Article, the reporting agency for a transportation facilities project, as defined in Section 4-101(h) of the Transportation Article, shall submit an outline of the environmental screening analysis of environmental issues to be examined in the draft environmental impact statement, to the Comptroller of Maryland, the State Treasurer, the budget committees, and the Department of Legislative Services, in accordance with § 2-1246 of the State Government Article."*

This document presents the approach for the environmental screening analysis of environmental issues to be examined in the draft environmental impact statements for a potential P3 for the I-495 and I-270 P3 Program ("P3 Program").

The screening approach is in accordance with the National Environmental Policy Act of 1969 (NEPA) and provisions of the Fixing America's Surface Transportation (FAST) Act, as well as Council on Environmental Quality (CEQ) regulations (40 CFR §§ 1500-1508) which address the basic NEPA decision making framework and Federal Highway Administration (FHWA) guidance in (23 CFR § 771.105).

The P3 Program and the first environmental study, known as the I-495 & I-270 Managed Lanes Study (the "MLS"), are being developed concurrently. The Study limits will extend from south of the American Legion Bridge in Virginia clockwise along I-495 in Maryland to west of MD 5 and along I-270 from I-495 to I-370, including the east and west I-270 spurs. Subsequent environmental studies under the P3 Program, not included in the first study limits, are anticipated to extend along I-270 from I-370 north to I-70 beginning in 2019 and along I-495 to Woodrow Wilson Bridge in conjunction with any coordination with Virginia Department of Transportation. All studies will follow the same NEPA environmental process.

At a high level, the NEPA environmental process for each study will follow the steps listed below:

- Scoping
- Purpose and Need (1)
- Preliminary Range of Alternatives
- Initial Screening of Alternatives (2)
- Alternatives Retained for Detailed Study
- Alternatives Analysis and Environmental Screening (3)
- Recommended Preferred Alternative

# I-495 and I-270 Public-Private Partnership Program

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- Draft Environmental Impact Statement (DEIS)
- Selected Alternative (in the Final Environmental Impact Statement/Record of Decision [FEIS/ROD])

Three of the steps are considered screening and are outlined below in more detail: (1) Purpose and Need, (2) Initial Screening of Alternatives, and (3) Alternatives Analysis and Environmental Screening. Throughout the screening process the resource agencies and public have numerous opportunities to provide input on the studies, including input on the alternatives and identification of potential impacts of alternatives. Specifically, for each of the studies in the P3 Program, agency and public input will be received through monthly Interagency Working Group meetings, Public Scoping Open Houses, public meetings on the preliminary range of alternatives and alternatives retained for detailed study, and the DEIS Public Hearings.

## SCREENING ANALYSIS

### 1. Purpose and Need

During the initial phase of the NEPA study, the initial thoughts of the State as project owner regarding the Purpose and Need for the study are identified. This phase is an essential first step as it defines why the study is being initiated and what is to be accomplished by the study. During the development of the Purpose and Need statement the State encourages evaluation of the proposed Purpose and Need, establishes the foundation for the study, forms a basis for the development of alternatives to be considered in an environmental impact statement (EIS), and begins to define the criteria for screening the alternatives. Per FHWA, "A clear, well-justified Purpose and Need section explains to the public and decision makers that the expenditure of funds is necessary and worthwhile and that the priority the project is being given relative to other needed highway projects is warranted."

For the MLS, the Purpose and Need statement is developed through a comprehensive process that included the examination of past studies, a review of existing regional plans, and an analysis of the environmental and socioeconomic conditions of the region. The purpose of the MLS is to develop a travel demand management solution that addresses congestion, improves trip reliability on I-495 and I-270 within the study limits and enhances existing and planned multimodal mobility and connectivity. The study will address the need to accommodate existing traffic and long-term traffic growth, enhance trip reliability, provide additional roadway travel choices, accommodate homeland security, and improve the movement of goods and services. The study includes the goals of financial viability for any proposed improvements and completing the improvements in an environmentally responsible manner. The agencies and public had the opportunity to comment on the proposed Purpose and Need through the interagency meetings, the public scoping open houses and the alternatives workshops.

### 2. Initial Screening of Alternatives

The CEQ regulations require a "rigorous and objective" evaluation of reasonable alternatives. The initial evaluation of preliminary alternatives will consider the ability of

# I-495 and I-270 Public-Private Partnership Program

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those alternatives to meet the stated Purpose and Need. An alternative can be deemed “unreasonable” and be dismissed from further detailed evaluation if it does not meet the Purpose and Need, or after consideration of other factors such as cost, environmental impacts and engineering considerations.

For the MLS, the preliminary range of alternatives considered in the initial screening is a compilation of alternatives from previous studies and new options that include management strategies and various modes. The preliminary alternatives take into account consultation with the FHWA, input from other federal, State, local and regulatory agencies, and public input received during the scoping phase of the study.

The initial screening phase involves evaluating each preliminary alternative for factors that will render the alternative *infeasible* or *unreasonable*. For example, an alternative would be considered unreasonable if it does not adequately meet the Purpose and Need. A preliminary analysis of traffic, reliability, and safety are some of the criteria that will be used to determine whether the preliminary alternatives meet the Purpose and Need. The list of alternatives that pass the initial screening move forward in the process for more detailed analysis and will be identified as the Alternatives Retained for Detailed Study (ARDS).

### 3. Alternatives Analysis and Environmental Screening

The retained alternatives from the initial screening will be developed in more detail to better understand and identify the extent of the footprint needed to construct the improvements. Additionally, detailed technical studies will be conducted on the environmental resources within the study area to determine potential effects of each of the retained alternatives. The resources considered in the environmental screening of the ARDS include but are not limited to: community resources, private property, environmental justice populations, park land, historic properties and archeological resources, wetlands, streams, forests, noise, air quality, and hazardous materials.

The screening of alternatives will take into consideration the identified needs as well as financial viability, environmental effects, and input from the public and resource agencies. The result of the environmental screening and alternatives analysis will be the identification of the recommended preferred alternative. The alternatives analysis and environmental screening process will be documented in the Environmental Resources Technical Reports and the DEIS.

### ENVIRONMENTAL SCREENING PROCESS PARALLEL WITH P3 SOLICITATION

According to FHWA guidelines: “in developing a P3 project, a project sponsor needs to consider the private sector's interests in the project, such as potential return on investment; otherwise, the NEPA process may result in the selection of an alternative that meets environmental requirements but is infeasible as a P3 project. Thus, potential P3 project sponsors should consider the perspective of potential private investors early in the NEPA process and may decide to issue a Request for Proposal (RFP) prior to the conclusion of

# I-495 and I-270 Public-Private Partnership Program

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the NEPA process

([https://www.fhwa.dot.gov/ipd/p3/toolkit/publications/guidebooks/fhwa\\_review/](https://www.fhwa.dot.gov/ipd/p3/toolkit/publications/guidebooks/fhwa_review/)).

The environmental screening process and the P3 solicitation process can occur on a parallel schedule, but special oversight is required. The environmental screening process must be separate from the P3 solicitation process as to not predetermine a preferred alternative that would favor a P3 concessionaire. However, the environmental screening process also needs to consider issues P3 related such as, a tolling determination in project Purpose and Need, the assessment of environmental effects of changed traffic patterns, and the effects on low-income and minority populations.

While a P3 agreement may be awarded prior to the conclusion of the NEPA process, federal regulations limit the involvement of private developers in the environmental review process (40 CFR 1506.1 and 23 CFR 636.109). Prior to NEPA completion, a private developer cannot complete the final design, proceed with construction, or take any other action that may bias the public sponsor toward a particular alternative (23 CFR 636.109(b)) (see the "Civil Rights & Other Federal Requirements" chapter for additional information regarding ROW acquisition).

([https://www.fhwa.dot.gov/ipd/p3/toolkit/publications/guidebooks/fhwa\\_review/](https://www.fhwa.dot.gov/ipd/p3/toolkit/publications/guidebooks/fhwa_review/)).



# RFI RESPONSES REVIEW EXECUTIVE SUMMARY

January 8, 2018

## **EXECUTIVE SUMMARY**

On September 21, 2017 the Maryland Department of Transportation (“MDOT”) released a Request for Information (“RFI”) for the I-495/I-95 (Capital Beltway) Congestion Relief Improvements from the American Legion Bridge to the Woodrow Wilson Bridge, and the I-270 Congestion Relief Improvements from I-495 to I-70.

The RFI’s purpose was to engage the private sector to gain input on key questions as well as to start the process of team building and information exchange; all in order to drive awareness, gain experiences and insights from the private sector, begin a bilateral conversation with interested parties, commence the “teaming” process, and to gauge the “risk appetite” from the private sector.

The information requested was broken into 5 (five) distinct sections, each with its own series of questions so as to delve deeper into specific topics and risk factors. The Information Requested Section consisted of the following Sections:

- General (5 main questions);
- Project Development (7 main questions);
- Technical Challenges (3 main questions);
- Contract Structure (3 main questions); and
- Miscellaneous (4 main questions).

Each Section, main question and sub-set questions in various queries sought to gain insights on all aspects of what would constitute a successful P3 Program, including Design, Construction, Finance, Operations and Maintenance. This approach provided an additional depth to the responses, as well as underscored the integrated delivery approach that MDOT is seeking.

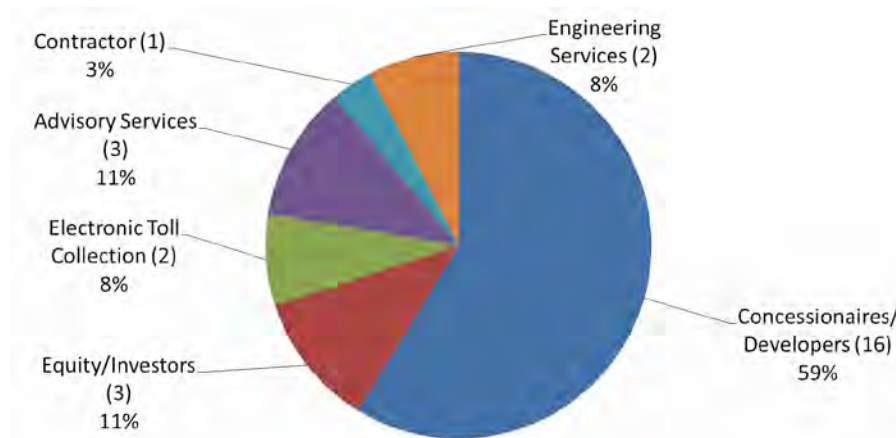
The Responses were due on December 20, 2017. The due date was preceded by an Industry Forum Day on December 13, 2017, which drew over 300 attendees.

MDOT received an overwhelming positive response with 27 (twenty-seven) Responses to the RFI.

An analysis of the RFI’s was completed on January 5, 2018 by AECOM and provided in an Excel Matrix and a Summary PowerPoint. The following portions of this Executive Summary serve to articulate the key results, messages and information contained within the Responses.

## RFI RESPONSE KEY DATA POINTS:

27 (twenty-seven) Responses were received, and represented all sectors of the P3 marketplace. Due to the complexity of the Program, a heavy concentration of the Respondents derived from the “Concessionaire/Developer” portion of the industry, but Engineering, Construction, Advisory, Toll Collection, and Financial/Debt/Equity were also represented in the responses (See Figure ES-1).



**Figure ES-1: RFI Respondents (Market Sector Breakdown)**

In addition to the market sector diversity, the RFI Responses also represented a geographical/international diversity in that Responses were inclusive of local, national and international experiences, and included firms from the following countries (Germany, Italy, Netherlands, United Kingdom, Australia, Canada, France, USA, South Korea, Spain, and Israel) (See Figure ES-2).



**Figure ES-2: Countries Represented by the RFI Respondents**

## **KEY MESSAGES:**

The Responses delivered a series of “Key Messages” that were both aligned with the “RFI Information Requested”, as well as representing other key points of interest and relevance. The Key Messages are summarized as follows:

- The Respondents overwhelmingly expressed a great interest in the Project(s), with 70% expressing interest in submitting a detailed proposal;
- The majority of the Respondents (59%) were Developers/Concessionaires that had many P3 services (Design/Construction/O&M/Financing) within their organizations;
- The vast majority of the Respondents (67%) appeared to agree on Contract Term of a minimum length of 30 years, with a few expressing a significantly longer term (50 years-Plus);
- Respondents appeared to see value in having a complete project including O&M duties of the new lanes, but expressed some concerns on including the existing General Purpose Lanes due to the “Latent Defect” Risk aspect and an a variety of other unknowns including compensation for this risk transfer;
- Both the D&C (design and construction) and O&M (operations and maintenance) responsibilities and requirements need to be clearly defined, measurable and achievable, including non-conformance events and performance criteria;
- 54% of the Respondents expressed a specific target desire for a Stipend (generally within the range of \$1 million to \$3 million) for unsuccessful Bidders, it is clear that all seek this bid compensation instrument to be made available;
- Nearly all Responses indicated the expectation of 2-step Procurement Process (RFQ and RFP); with a RFQ Response Time of about 2 months, and a RFP Response Time of about 9 months;
- Alternate Technical Concepts (ATC) and Alternate Financial Concepts (AFC) need to be included in the procurement process; and the process must be well-defined, commercially confidential, and fairly evaluated;
- MBE/DBE participation, engagement and definition will need to commenced early in the process and be well-structured. The Respondents expressed that this outreach should be facilitated through MDOT;
- Some Respondents noted that to be most effective, the MBE/DBE participation could be included in the overall scoring/best value selection assuming scoring is clear and transparent; and
- Responses had a mixed result to the number of Projects (1, 2 or more), but indicated that a logical project split-out/division/segmentation would help increase competition, as well as increase the ability to finance the specific Project(s), assuming the projects would be staggered.

### **KEY RISK FACTORS:**

The analysis of the results included a breakdown of the responses to seek areas where “Key Risk Factors” developed or were articulated in a similar manner or pattern. These Key Risk Factors will become essential points to mitigate in the structuring of the Business and Commercial Terms of the RFQ and more importantly the RFP and Project Agreement. The Key Risk Factors analysis resulted in the following, divided into “Risks Clusters”:

### **PROJECT CHARACTERISTICS:**

- Respondents seek a clearly defined scope, schedule and size(s) of the Project(s);
- Overall Project/Political/Community support was an overwhelming concern from Respondents since this can often stall or cancel these types of Projects;

### **NEPA PERMITTING AND CLEARANCE:**

- Respondents expressed that MDOT will need to define and gain some sort of approval of the Preferred Alternative at RFQ release;
- Respondents expressed that MDOT will need to secure and have in-place the NEPA ROD (Record of Decision) at the time of RFP release;

### **ROW ACQUISITION:**

- Respondents sought to have MDOT be responsible for the cost and schedule risk for the ROW acquisition;

### **EXISTING ASSET CONDITION:**

- Concerns were expressed by Respondents on the availability of existing asset condition information, both historical and present; which could be used to determine life cycle costs and existing asset condition/needs;

### **TRAFFIC & REVENUE (T&R) INFORMATION:**

- Respondents sought to have MDOT provide an Investment Grade T&R Study early in the process;
- Concern was raised by Respondents related to the unknown risks of ties of the T&R Study to payment mechanism and tolling regime;
- The other expressed risk was that a lack of a T&R Study could result in rating agency exposure to a lowering of revenue acceptance;

### **PROJECT STAFFING/ADVISORS COMMITMENT:**

- Concerns were expressed by Respondents that MDOT needs to assign appropriate project staffing and have that in-place for the solicitation and delivery of this type of Project; and
- Concerns were expressed by Respondents that project advisors must be experienced in this type of transaction, and all must be “in-place” prior to developing the RFQ (Procurement, Technical, Legal, Financial and Traffic/Tolling Advisors).

### **CONCLUSION:**

The RFI process has been very useful and productive. One key take away from the process is that industry is looking for continued engagement as the Program is developed. The scheduled industry one-on-one meetings will provide further insight into the Industry's interests and concerns associated with this project. Also, close coordination between the NEPA effort and the procurement effort are key to the success of this project.

# List of Links to Public Documents

I-495 & I-270 P3 Program Presolicitation Report

All accessed on 11/14/2018

Description	URL
I-495 & I-270 P3 Program website	<a href="http://www.495-270-p3.com">www.495-270-p3.com</a>
Greater Washington Partnership "Advancing our Region: Preface to a Blueprint for Regional Mobility"	<a href="http://www.greaterwashingtonpartnership.com/wp-content/uploads/2017/09/Preface-to-a-Blueprint-for-Regional-Mobility-Report_Final.pdf">http://www.greaterwashingtonpartnership.com/wp-content/uploads/2017/09/Preface-to-a-Blueprint-for-Regional-Mobility-Report_Final.pdf</a>
MDOT SHA "2017 Annual Average Daily Traffic Maps"	<a href="https://www.roads.maryland.gov/Traffic_Volume_Maps/Traffic_Volume_Maps.pdf">https://www.roads.maryland.gov/Traffic_Volume_Maps/Traffic_Volume_Maps.pdf</a>
MWCOG "2016 CLRP Amendment Report"	<a href="http://www1.mwcog.org/clrp/resources/2016/2016AmendmentReport.pdf">http://www1.mwcog.org/clrp/resources/2016/2016AmendmentReport.pdf</a>
MDOT SHA "2017 State Highway Mobility Report"	<a href="https://www.roads.maryland.gov/OPPEN/2017_Mobility_Report.pdf">https://www.roads.maryland.gov/OPPEN/2017_Mobility_Report.pdf</a>
DLS "J00H01 Maryland Transit Administration FY 2019 Operating Budget Analysis"	<a href="http://mgaleg.maryland.gov/pubs/budgetfiscal/2019fy-budget-docs-operating-j00h01-mdot-maryland-transit-administration.pdf">http://mgaleg.maryland.gov/pubs/budgetfiscal/2019fy-budget-docs-operating-j00h01-mdot-maryland-transit-administration.pdf</a>
Transurban "Press Release: Benefits of 495 and 95 Express Lanes Extend to Regular Lanes as Drivers Experience Reduced Travel Time and Increased Lane Speeds"	<a href="https://www.expresslanes.com/press-release/1755">https://www.expresslanes.com/press-release/1755</a> (cached)
MWCOG "Visualize 2045 Draft"	<a href="https://www.mwcog.org/assets/1/28/Visualize_2045_September_2018_Draft_for_Public_Comment_-_single-page_version.pdf">https://www.mwcog.org/assets/1/28/Visualize_2045_September_2018_Draft_for_Public_Comment_-_single-page_version.pdf</a>
MDOT "FY2019 to FY2024 Consolidated Transportation Program DRAFT"	<a href="http://www.mdot.maryland.gov/newMDOT/Planning/CTP/CTP_19_24_Draft/Documents/CTP_FY2019-2024.pdf">http://www.mdot.maryland.gov/newMDOT/Planning/CTP/CTP_19_24_Draft/Documents/CTP_FY2019-2024.pdf</a>
MDTA "July 2018 Financial Forecast"	<a href="http://mdta.maryland.gov/sites/default/files/Files/Financial_Forecast/2018-09-Financial%20Forecast.pdf">http://mdta.maryland.gov/sites/default/files/Files/Financial_Forecast/2018-09-Financial%20Forecast.pdf</a>
DBM "Maryland Fiscal 2019 Budget Overview"	<a href="https://dbm.maryland.gov/budget/Documents/operbudget/2019/Proposed/Volume1.pdf">https://dbm.maryland.gov/budget/Documents/operbudget/2019/Proposed/Volume1.pdf</a>
FHWA "Employment Impacts of Highway Infrastructure Investment"	<a href="https://www.fhwa.dot.gov/policy/otps/pubs/impacts/">https://www.fhwa.dot.gov/policy/otps/pubs/impacts/</a>
Transurban "Press Release: Transurban Celebrates 5-Year Anniversary of 495 Express Lanes With \$5,000 in Free Travel Giveaways, \$10,000 Community Grant"	<a href="https://www.transurban.com/news/celebrating-5-years-of-a-better-beltway">https://www.transurban.com/news/celebrating-5-years-of-a-better-beltway</a>
EPA "Current Nonattainment Counties for All Criteria Pollutants"	<a href="https://www3.epa.gov/airquality/greenbook/ancl.html">https://www3.epa.gov/airquality/greenbook/ancl.html</a>
VDOT "I-66 Inside the Beltway 6-month Performance"	<a href="http://66expresslanes.org/documents/66_inside_6_month_performance_july_2018.pdf">http://66expresslanes.org/documents/66_inside_6_month_performance_july_2018.pdf</a>

**MARYLAND TRANSPORTATION AUTHORITY**  
**RESOLUTION No. 18-04**

**A RESOLUTION TO CLASSIFY THE I-495/I-270 PROJECT AS  
A TRANSPORTATION FACILITIES PROJECT UNDER CERTAIN CONDITIONS  
AND TO APPROVE THE DRAFT PUBLIC-PRIVATE PARTNERSHIP PRE-  
SOLICITATION REPORT**

**WHEREAS**, the Maryland Transportation Authority, an agency of the State of Maryland (the "MDTA") is authorized and empowered under Section 4-101 through 4-405 of the Transportation Article of the Annotated Code of Maryland (the "Act") to finance, construct, operate, maintain, and repair "transportation facilities projects" (as defined in the Act) to issue revenue bonds and to perform any actions necessary or convenient to carry out the powers granted in the Act; and

**WHEREAS**, the Maryland Department of Transportation ("MDOT") through The Secretary's Office and the Maryland State Highway Administration has partnered to develop a proposed Public-Private Partnership (a "P3") for the construction of new price managed lanes for Interstate 495 and Interstate 270 to provide additional capacity and congestion relief (the "Project"); and

**WHEREAS**, it is anticipated that in accordance with COMAR 11.07.06.02 MDTA will partner with MDOT in the P3 for the Project as a Reporting Agency using its resources and tolling authority, which will require MDTA to assume a leasehold interest in the Project, issue revenue bonds, and declare the Project as a Transportation Facilities Project under the Act; and

**WHEREAS**, as a partner with MDOT in the P3, MDTA desires to provide concurrence and approval of the draft P3 Pre-Solicitation Report pending finalization by the Secretary in accordance with COMAR 11.07.06.07.

**NOW, THEREFORE, BE IT RESOLVED BY THE MARYLAND TRANSPORTATION AUTHORITY**, as follows:

**Section 1.** The MDTA hereby confirms its intent to classify the Project as a transportation facilities project pursuant to the Act conditioned upon the successful execution of a P3 Agreement and acquisition of the necessary leasehold interest in the property by the MDTA.

**Section 2.** The MDTA hereby confirms its intent to provide resources and assistance, including the issuance of revenue bonds, for the Project and to serve as partner for the P3.

**Section 3.** The MDTA hereby expresses its approval of the draft P3 Pre-Solicitation Report, which will be submitted to the Comptroller, State Treasurer, Senate Budget and Taxation Committee, House Ways and Means Committee, House Appropriations Committee, and Department of Legislative Services for review in accordance with the State Finance and Procurement Article, Section 10A-201(a) of the Annotated Code of Maryland. After expiration of the required review period and consideration of all comments, the P3 Pre-Solicitation Report will be submitted to the Maryland Board of Public Works for approval.

**Section 4.** This Resolution shall be operative, effective, and valid upon its passage by the MDTA.

Dated: 11/29/18

**WITNESS:**

**MARYLAND TRANSPORTATION AUTHORITY**



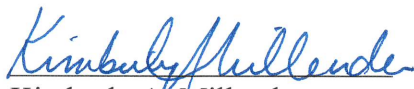
Kevin C. Reigut  
Executive Director



Pete K. Rahn  
Chairman

JAMES F. PORTS, JR. ACTING CHAIRMAN  
FOR PETE RAHN

Approved as to form and  
legal sufficiency:



Kimberly A. Millender  
Assistant Attorney General

November 21, 2018

Mr. R. Earl Lewis, Jr.  
Chair P3 Steering Committing

Re: I-495 & I-270 P3 Program

I have received the recommendation, that both Maryland Department of Transportation and Maryland Transportation Authority (MDTA) P3 Steering Committees have unanimously approved the Pre-Solicitation Report for the I-495 & I-270 P3 Program – and commend their hard work, and that of the State Highway Administration's P3 Office.

I concur with this recommendation that the Pre-Solicitation Report depicts a successful pathway forward to address the congestion that has plagued our capital region and can be delivered at no net cost to the state.

This report may now be advanced for P3 Designation in accordance with State Finance and Procurement Article 10A-201.

Sincerely,

  
Pete K. Rahn  
Secretary

Board Chair, MDTA