Governor Hogan Announces Widening of I-270, Capital Beltway (I-495), and Baltimore-Washington Parkway (MD 295)

$9 Billion Traffic Relief Plan, Largest Highway P3 in North America RFI Released Today

ANAPOLIS, MD – Delivering on his commitment to provide innovative transportation solutions for Maryland, Governor Larry Hogan today announced the administration’s plans to add four new lanes to I-270, the Capital Beltway (I-495), and the Baltimore-Washington Parkway (MD 295). The $9 billion Traffic Relief Plan for these three major state highways will reduce congestion for millions of drivers and mark the beginning of a historic and transformative effort to significantly improve the traffic conditions on some of Maryland’s most traveled roads and highways for years to come.

“These three massive, unprecedented projects to widen I-495, I-270, and MD 295 will be absolutely transformative, and they will help Maryland citizens go about their daily lives in a more efficient and safer manner,” said Governor Hogan. “Today, we are turning Maryland’s celebrated innovation into real action. These projects will substantially and dramatically improve our state highway system and traffic in the region.”

Joining the governor were Maryland Department of Transportation (MDOT) Secretary Pete K. Rahn, MDOT State Highway Administrator Greg Slater, Maryland Transportation Authority Executive Director Kevin Reigrut, as well as elected officials and community and business representatives from throughout the Baltimore-Washington region.

Today’s announcement officially begins the process to solicit the Public-Private Partnership (P3) industry for input and solutions to provide major congestion relief to these key transportation routes. With the total project estimated value at $9 billion, the P3 portion to add four new lanes on both I-495 and I-270 is the largest proposed P3 highway project in North America. The P3 will be seeking private developers to design, build, finance, operate, and maintain new lanes on I-495 between the American Legion Bridge and the Woodrow Wilson Bridge and on I-270 between I-495 and I-70. Once completed, the Traffic Relief Plan will deliver new express toll lanes, in addition to existing lanes, on I-495, I-270, and MD 295.
“Using innovation and partnering with some of the greatest minds in the world, Maryland is going to finally get some congestion relief by investing $9 billion in three of the most congested highways in the state,” said Secretary Rahn.

The first step to build new express toll lanes on MD 295 will begin with the transfer of MD 295 from the U.S. Department of the Interior to the Maryland Transportation Authority. Governor Hogan has already personally started this process during a recent meeting with Interior Secretary Ryan Zinke and has directed MDOT officials to move forward with the transfer negotiations. Following the transfer, the Maryland Transportation Authority would then build, operate, and maintain the new lanes and maintain existing lanes between Baltimore and Washington, D.C.

The Traffic Relief Plan announced today is critical to spurring increased economic development and restoring quality of life for countless Marylanders who have been negatively affected by years of traffic congestion. Maryland has the second-longest commuting times in the country, and the National Capital Region is the most congested region in the nation based on annual delay and congestion cost per auto-commuter. The statewide cost of congestion based on auto delay, truck delay, and wasted fuel and emissions was estimated at $2 billion in 2015. This is an increase of 22 percent from the $1.7 billion estimated cost of congestion in 2013. More than 98 percent of the weekday congestion cost was incurred in the Baltimore/Washington region.

In making this announcement today, Governor Hogan has directed MDOT to issue the Request for Information to the P3 industry and continue the transfer process with the U.S. Department of the Interior.

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We have a vision of a connected Maryland.

With trains running all day, every day, on a network that stretches from Elkton to Frederick and from Waldorf to Towson. Maryland can do it. For no more than the $8 billion cost of a single proposed highway widening, Maryland could build:

**The Baltimore Red Line**
- to create a connected Baltimore transit network

**Southern Maryland Light Rail**
- from the Branch Avenue Metro station to Waldorf and White Plains in Charles County

**2007 MARC Growth and Investment Plan**
- including trains every 15-20 minutes all day from Washington through Baltimore Penn Station to White Marsh,
- all-day two-way service from Washington to Frederick and to Camden Yards and from Baltimore to Aberdeen,
- and trains from Baltimore to Elkton and on into Delaware
I-495/I-95 and I-270 Congestion Relief Improvements Projects
Request for Information
Macquarie Capital (USA) Inc.

December 20, 2017
**Disadvantages of a P3:**

<table>
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<th>Disadvantage</th>
<th>Description</th>
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<tr>
<td>Longer bid period</td>
<td>Generally a longer bid period required than for a Design-Bid-Build process, as bidding teams require time to conduct their own design work, conduct traffic and revenue analysis, and arrange financing.</td>
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<td>Advisors</td>
<td>In addition to legal advisors, the authority will need to hire a financial/commercial advisor.</td>
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<td>Resources</td>
<td>The authority will need to dedicate resources to managing the bid process, including a series of “one-on-one” meetings with each team to review and discuss project specific issues. However, the trade-off for this is that the Authority will not need to dedicate as many resources during the construction and operation periods, because construction and operations risk will have been transferred to the Concessionaire.</td>
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4. **Would it be advantageous for MDOT to transfer the operations and maintenance and lifecycle responsibility for the entire freeway or just the added congestion relief improvements? What would be the advantages and disadvantages of transferring the operations and maintenance and lifecycle responsibility for the entire freeway?**

The private sector is typically prepared to manage any level of O&M scope, with the exception of certain functions that might be better left with the authority.

Transferring existing operations to the private sector may have certain advantages, including reducing interface issues between parties operating simultaneously on the road, more efficient management of the overall corridor by reducing the need for numerous parties to be independently managing the project, and allowing any rehabilitation needs can be undertaken simultaneously to works performed on the express lanes. In order to effectively transfer operations of existing assets, the private sector would typically require details on existing asset condition so as to effectively price any upfront rehabilitation requirements, as well as ongoing operations and asset maintenance.

However, transferring existing operations will have an adverse impact to the financing capacity for the project by increasing operating leverage and operating risk, thereby reducing the amount of upfront payments available to MDOT or reducing the scope of the project that can be funded by the private sector. In addition, this can result in a less efficient result if the existing assets have significant deferred maintenance.

5. **Would it be feasible to have a single solicitation for both corridors? If not, would you recommend any specific phasing for the solicitations including the corridor(s) and limits and why? What would your recommendation be for staggering multiple solicitations and why?**

We believe it would be most feasible to procure I-495 and I-270 as two separate projects due to the following considerations:

- Two projects should result in the optimal balance in terms of a manageable project size from a design-build perspective, and the availability of required debt and equity financing for the project;
- Allows project delivery for each of the two projects to be staggered;
- Allows for quick delivery of a congestion relief solution to the entirety of each corridor;
- Allows for a complete corridor solution, accounting for differing economics of different segments of a particular corridor in a single procurement;
- The traffic dynamics and demand drivers for the I-495 and I-270 are likely to be best assessed separately.

Given the capacity in the debt and equity financing markets, we do not see a need to further segment the project procurement, with the additional potential adverse impact to the competitive dynamics of awarding segments in phases as well as the slower build out of a congestion relief solution in each corridor.
MARYLAND DEPARTMENT OF TRANSPORTATION ("MDOT")

PROJECT
I-495 AND I-270 CONGESTION RELIEF IMPROVEMENTS PROGRAM

RESPONSE TO REQUEST FOR INFORMATION FOR I-495 AND I-270
CONGESTION RELIEF IMPROVEMENTS PROGRAM

December 20, 2017

RESPONDENT
MERIDIAM INFRASTRUCTURE NORTH AMERICA CORPORATION
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The specific project circumstances will best gauge whether it would be advantageous to transfer the operations and maintenance and lifecycle responsibility for the entire freeway or only the added portion. As described in the answers to questions a.2 and a.3, it is imperative to transfer such responsibility for the tolled managed lanes, as it is part of the overall service offering of the private sector partners. Whether the operations and maintenance and lifecycle responsibility for the General Purpose Lanes can and should be transferred to the private partner depends on, among other factors, whether

- the toll revenues can support the additional costs related to non-revenue generating assets;
- a consistent appearance and coherent operations and maintenance standards throughout the entire freeway are desired; and
- there is an expectation that MDOT’s crews continue to service these freeway lanes.

It should be noted, however, that transferring lifecycle responsibility for those portions of the freeway that have not been newly constructed or thoroughly rehabilitated during the project’s construction period will present challenges and may disadvantage the project’s business case.

5. Would it be feasible to have a single solicitation for both corridors? If not, would you recommend any specific phasing for the solicitations including the corridor(s) and limits and why? What would your recommendation be for staggering multiple solicitations and why?

Yes, it would be feasible to have a single solicitation for both corridors, however we also recommend phasing sections of the corridors to create feasible segments for private development. The private financing of a $7.6 billion infrastructure project under a DBFOM delivery model is unprecedented in the U.S., therefore we recommend dividing the project into three sections at approximately $2.5 billion each and each section would undergo its own financial closing. The most efficient and beneficial way to structure such a phased procurement is through a Comprehensive Development Agreement (CDA) approach, as has been used for some of the managed lanes projects in Texas, most notably the North Tarrant Expressway (NTE). TxDOT adopted the single solicitation approach for the three phases of this project and achieved significant cost savings and efficiencies gains.

The benefits of this approach are the ability to more seamlessly utilize private financing and to save procurement costs. It also reflects and addresses the fact that, given the large interdependency of the phases and the cost efficiency potential when operating more than one phase, follow-on solicitations for the second and third phase would have significantly limited competition, once the private partner for phase one has been chosen. For example, a solicitation for the Texas State Highway 183 managed lanes project (Middle Section), which connects to other toll road and managed lanes projects in the area, only attracted the incumbent.

A CDA approach may also allow MDOT to get the private partner involved at an earlier stage in the project development process, if such early involvement was desired. Additionally, some sections of the highway may require more upfront funding in comparison to other sections that are likely to more quickly generate revenue. Given this mix, phasing the development of the sections to account for funding needs would be the recommended approach.
Response to Request for Information

I-495/I-95 (Capital Beltway) Congestion relief improvements from the American Legion Bridge to the Woodrow Wilson Bridge

I-270 Congestion Relief Improvement from I-495 to I-70

Submitted by Transurban
December 20, 2017
Successful P3s deliver demonstrable long-term value. In Transurban’s Virginia P3 projects, we are responsible for both upfront construction costs as well as long-term operations and maintenance (O&M). Weighed against the Commonwealth’s capital investment on these projects, Virginia’s direct return on investment is twenty-nine times for the 495 Express Lanes and 110 times for the 95 Express Lanes.

Transferring O&M and revenue risk helps align the incentives of a long-term investor with those of the public partner. Optimizing revenue requires attracting customers by offering a high quality travel option that is dependable, safe and well maintained. As a long-term operator, Transurban helps balance high operational standards while minimizing costs to achieve performance objectives. We are incentivized to maintain our facilities to a high standard in order to attract and retain our customers.

Passing O&M and lifecycle costs to the private sector through a P3 agreement alleviates the state’s financial burden required for maintenance, allowing limited state dollars to be used for other priorities. To ensure roads are properly maintained, Transurban collaborates with its public partners to set long-term operational and asset condition standards throughout the life of its concessions.

From active traffic management to enforcement, Transurban designs and delivers tolling and traffic management systems that utilize the latest technologies to enhance the customer experience, improve road performance, minimize long-term operating costs and reduce revenue leakage. Beyond the initial system delivery, Transurban looks for innovative ways to test and deploy new technologies to prepare for the future of transportation. Transurban received several awards related to project innovation for I-95 and I-495, from organizations including the International Bridge, Tunnel and Turnpike Association (IBTTA), the National Council for Public-Private Partnerships (NCPPP), WTS and ITS-America.

**Ability to divide O&M responsibilities efficiently between general and express lanes**

States have used different approaches to allocating O&M obligations in P3 transactions, including covering only the express lanes or covering entire corridors including general purpose lanes. In Virginia, VDOT retains the maintenance of the general purpose lanes, and Transurban is only responsible for the maintenance of the Express Lanes. Through effective collaboration, Transurban was able to leverage VDOT’s extensive capabilities in operating and maintaining the general purpose lanes, and in providing snow removal for both the general purpose lanes and Express Lanes. This apportionment of responsibilities has worked well on the 495 and 95 Express Lanes and helps align interests by not allowing preferential treatment of the Express Lanes network during snow events.

### 3. Delivering projects on time and under budget

Transurban has a proven record of delivering projects on time and under budget. Both the 495 Express Lanes and 95 Express Lanes were delivered on time, under budget and with industry-leading safety records, and had a substantial economic impact in Virginia – creating more than 28,000 jobs during construction and generating $6.3 billion in economic activity.

**Experience with project phasing**

Phasing the Project would provide the following benefits in the context of the procurement process:

- Increased bidder participation (and better bidding terms) due to the lower uncertainty on permitting and development risks, particularly if National Environmental Policy Act (NEPA) documents are in place for each phase;
- Ability to accelerate delivery of those phases that have completed approvals;
- Ability to refine processes and apply lessons learned from the first phase(s);
- Ability to employ multiple contractors, thereby sustaining competitive tension across all elements of the program and allowing more regional and mid-size contractors to participate;
- Fewer issues with a single contractor’s constraints, such as bonding capacity, and workforce availability.
In addition, structuring the Project in multiple phases but as a single project would give MDOT greater flexibility to address the differences in project economics associated with different segments. Project sections will differ in demographics, right-of-way constraints and capacity and congestion levels. These variations affect overall project costs, timelines and revenues, and may diminish the economic viability of some segments. Less profitable sections may not attract sufficient competitive interest from the industry. However, a single concessionaire, coordinating delivery of all segments, could help mitigate this risk by balancing the more economically viable segments against the less viable portions. In addition, a single concessionaire will be able to generate economies of scale, which increases the likelihood that the Project can be fully completed without any public subsidies, and may even provide an upfront payment.

**Proven track record with proposal processes**

Transurban’s experience with complex projects provides the ability to complete a number of critical steps before finalizing a committed proposal, including:

- Forecasting traffic projections, evaluating proposed roadway configurations including new entry and exit points, and validating the overall financial feasibility of the project;
- Evaluating potential financing options with financial institutions;
- Developing preliminary phasing concepts and maintenance of traffic strategies;
- Performing preliminary survey and engineering design, including the evaluation of intersections and entry and exit points;
- Revising and enhancing the preliminary design to develop a final concept that addresses the major constructability issues; and
- Preparing detailed cost estimates.

It is important to ensure that the proposal process does not detract bidders from submitting committed proposals. Providing a stipend for unsuccessful bidders would help attract further interest to the project and can allow the state to retain intellectual capital rights to innovative concepts presented in unsuccessful proposals.

**Transurban’s long-term partnership approach**

Transurban focuses on an integrated network approach to support our government clients, customers and in the communities where we operate. Stakeholder engagement is critical in the development phase when setting the project scope and defining key commercial terms, such as tolling policy. Transurban works collaboratively with stakeholders to identify areas of concern early and agree on a solution that will save on time and costs. Once permits are obtained and the scope of work defined, modifications are limited to constraints established by existing permits. Changes in project scope outside of this limitation require further analysis.

Getting the most value for the life of the concession requires a partner whose incentives align with the state. Transurban’s business model as a long-term investor and operator best aligns private sector needs with public policy goals. We are able to avoid the challenges that can arise when firms are seeking only upfront construction profits or short-term financial gains, underwriting, or advisory fees. When the private partner’s focus is primarily on short-term gain, they will push for a risk allocation that is often not in the best interest of all stakeholders over the long term and can position the public-private partnership poorly for long-term success. In contrast, Transurban understands that long-term success is impossible if community and customer needs are not at the center of the process.

Long-term investors have aligned incentives with the public sector to maintain a high operational standard while minimizing costs. To attract and retain customers, Transurban ensures its projects are properly designed for optimum lifecycle, operability, mobility, and public benefit. This is even more critical when using managed lanes that have a free option adjacent to the Express Lanes. In this scenario, we are motivated to provide a travel option that provides a premium level of service.

As a long-term operator, Transurban is focused from day one on designing projects that will meet customer needs now and over time. We want our customers to be happy and continue to travel on our networks. Throughout the concession life, Transurban
NEPA APPROACH
Innovation, Creativity and Flexibility Focus Solutions:

Provides flexibility to use innovative contracting methods while minimizing or eliminating the need for re-evaluation of the environmental document.
Striving to focus NEPA commitments on functionality within footprint

- Allows multiple solutions
  - Creative solution that meets performance requirements within conditions
- Reduces or eliminates the need for re-evaluation
Selection of Preferred Alternate

- Emphasis on innovation and flexibility in the final solution
- Labeled as one feasible method of meeting project goals and operational benchmarks
- Flexible narrative built into the environmental documentation
Environmental document focuses on the Preferred Alternate’s footprint, environmental impacts, and ability to meet the project goals and operational benchmarks

- Improvements described generally
- Footprint and related impacts presented as focus of the document
- Described in terms of performance measures
- Flexibility narrative