Mr. Jeffrey T. Folden, P.E., DBIA
Chief, Innovative Contracting
MDOT State Highway Administration

December 20th, 2017

Subject: Request for Information for I-495/I-95 (Capital Beltway) Congestion Relief Improvements from the American Legion Bridge to the Woodrow Wilson Bridge and I-270 Congestion Relief Improvements from I-495 to I-70;

Dear Mr. Folden:

ROADIS USA HOLDING, LLC ("ROADIS USA") is pleased to provide this response to the Request for Information ("RFI") issued by the Maryland Department of Transportation ("MDOT") on September 21, 2017, regarding I-495/I-95 (Capital Beltway) Congestion Relief Improvements from the American Legion Bridge to the Woodrow Wilson Bridge ("I-495/I-95") and I-270 Congestion Relief Improvements from I-495 to I-70 ("I-270") (altogether, the "Project").

ROADIS USA and its parent company, ROADIS Transportation Holding, S.L.U. ("ROADIS HQ" or "ROADIS") bring together their expertise for the development, operation and management of infrastructure assets around the world. ROADIS HQ is a global leading investor in the infrastructure market worldwide.

We hope that after reviewing this submittal MDOT invites ROADIS USA to participate in a one-on-one meeting to discuss our responses and any questions MDOT may have about our team and our thoughts on the Project.

Please contact me by phone +1-317-454-8190 or email jmojeda@roadis.com if you have any questions. We look forward to your response.

Sincerely,

José M. Ojeda, C.E.O.
ROADIS USA HOLDING, LLC

A. General

1. Please describe your firm, its experience in relation to P3 projects, and its potential interest in relation to these potential congestion relief improvements.

Spanning over 1,000 miles of roads, employing over 2,000 individuals worldwide, and currently operating eight highway concessions in Brazil, India, Mexico, and Spain, ROADIS is a global leader in the financing, development, operation, and management of infrastructure assets. ROADIS is a wholly owned subsidiary of the Public Sector Pension Investment Board of Canada ("PSP"), and serves as its global transportation investment platform, mainly focused on acquiring, operating, and developing new road assets. ROADIS USA is a wholly-owned subsidiary of ROADIS HQ for US operations.

PSP is a Canadian Crown Corporation established by the Canadian Parliament under the Public Sector Pension Investment Board Act to invest the employer and employee net contributions received since April 1, 2000, from the pension plans of the Canadian Federal Public Service, the Canadian Forces and the Royal Canadian Mounted Police and, since March 1, 2007, from the pension plan of the Reserve Force. PSP is headquartered in Montreal, Quebec and employs over 700 professionals. As of March 31, 2017, PSP has consolidated net assets under management of over C$135.6 billion.

ROADIS USA is interested in becoming a long-term partner to MDOT in relation to the congestion relief projects described in the RFI.

As stated above, ROADIS has extensive experience in relation to P3 projects. The ROADIS USA team includes the former Director of the Colorado P3 agency, who delivered the highly successful U.S. 36 managed lane project—similar in many ways to the Project you propose. Included below are representative P3 projects built and currently being managed by ROADIS:

1) **Project Name:** CAMS Saltillo – Monterrey, Mexico

Length: 59 miles
Project status: Under operation
Key dates / Term: 2009 - 2054
Payment Mechanism: Real Toll
Role: Developer and equity investor (ROADIS)

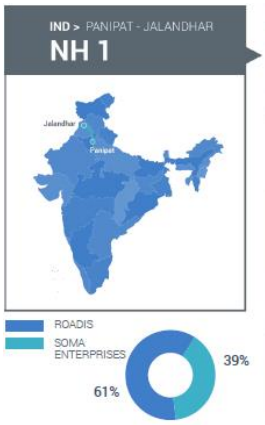
Description: CAMS is a four-lane highway, two in each direction, covering the Saltillo - Monterrey highway in addition to two lanes on the Saltillo Bypass.

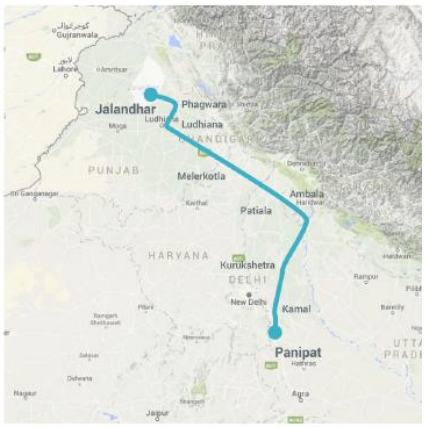
In Mexico, ROADIS manages a total of two pivotal highway corridors in Mexico (CAMS & COPEXA). Both of them are under operations since 2012. The 45-year concession for the Saltillo – Monterrey and Perote – Banderilla Xalapa highways, covering a total of 96 miles, includes two of the country's most strategic transportation assets. In 2014, ROADIS won the Project Finance Deal of the Year Award presented by the international publication World Finance, for the refinancing of the Saltillo - Monterrey highway, issuing over $300 million in project financing, an extraordinary breakthrough amount infused in the Mexican capital market.

Firm's responsibilities: ROADIS was a sponsor and equity investor in both projects and undertakes the O&M responsibility of both assets.

Key Challenges of the Project: Revenue risk; construction undertaken in live corridor; refinancing hurdles in the financing markets.

2) Project Name: NH 1, India





Length: 182 miles
Project status: Under operation
Key dates / Term: 2009 - 2024
Payment Mechanism: Real toll
Role: Developer and majority equity investor (ROADIS)

Description: The NH1 project consisted of the widening of a two-lane highway to three lanes in each direction. NH1 has been generating revenue since the commencement of its concession.

With 441 miles of highways under management, ROADIS is the largest European highway concession manager in India. ROADIS manages a total of four concessions in India, all operational (Panipat - Jalandhar (NH1), Varanasi – Aurangabad (NH2), Gujarat - Surat - Hazira (NH6) and Kishangarh - Beawar (NH8)).

Firm's responsibilities: ROADIS was co-sponsor and equity investor in the project.

Key Challenges of the Project: revenue risk; construction undertaken in live corridor; P3 framework.

3) Project Name: A4, Spain

Length: 40 miles
Project status: Under operation
Key dates / Term: 2011-2026
Payment Mechanism: Real toll
Role: Co-sponsor, developer and equity investor (ROADIS)

Description: Madrid stretch of A-4 ("Andalucia Highway") has four, three and two lane sections in each direction.

Firm's responsibilities: ROADIS was co-sponsor and equity investor in the project.

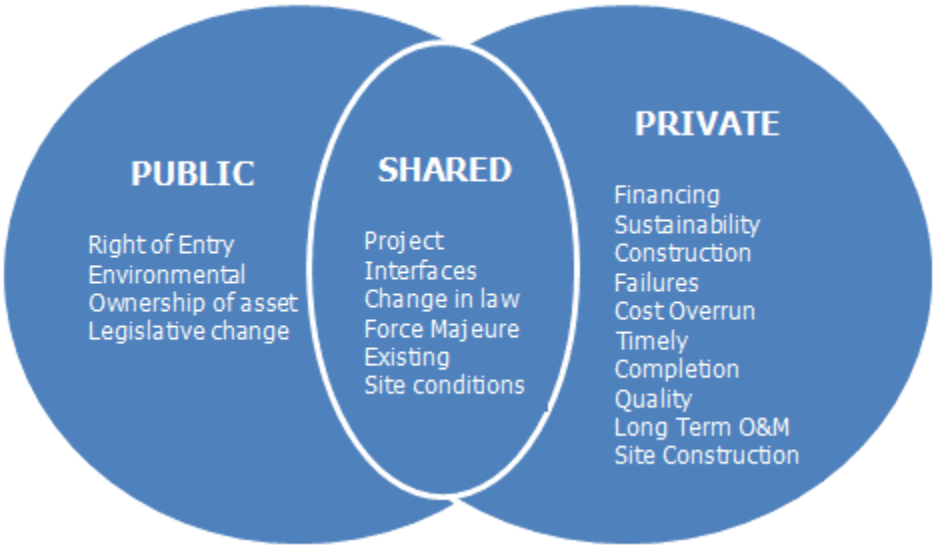
Key Challenges of the Project: Shadow Toll collection as revenue mechanism

2. What would be the benefits and risks to MDOT entering a P3 agreement for congestion relief improvements? What risks do you believe would best be retained by MDOT and what risks would be best transferred to the private sector? Please explain your reasoning.

We consider Public-Private Partnerships ("P3"s) critical to the development of U.S. infrastructure. The current infrastructure system is struggling to deal with congestion relief, population growth, capacity limitations, and changing work/life environments. While not all projects should be delivered as a P3, the Project has the initial scale, complexity and private interest to make it a strong candidate for MDOT to deliver it using an alternative delivery method.

By considering a P3 delivery method (more specifically Design-Build-Finance-Operate-Maintain ("DBFOM")), MDOT can expect significant innovation. It is important to provide the developer with maximum design flexibility, with Alternative Technical Concepts provisions that allow for innovation while protecting MDOT's vision for the project. This will provide the opportunity for MDOT to take full advantage of the experience and lessons learned offered by potential developers.

ROADIS USA believes key risks that should be addressed prior to the RFP phase are the right-of-way acquisition and NEPA risk. ROADIS USA believes that MDOT is better able to assume these key elements of the development of the project. Another key risk will be the calculation of an accurate construction cost. ROADIS USA believes it can adequately price the project and assess the optimal concession fee to MDOT if specific guidelines in regard to MDOTs expectations are provided. Please refer to the chart below detailing ROADIS USAs view as to an optimal risk sharing framework.



3. What, if any, advantages will MDOT potentially gain by entering an agreement in which operations and maintenance and lifecycle responsibility and/or traffic and revenue risk are transferred to the private sector? How do you assess the likely magnitude of such advantages? What are the potential offsetting disadvantages?

The direct benefit of this approach lies in assigning the developer with the responsibility for all operations and maintenance ("O&M") and lifecycle responsibilities. A demand or performance-based contract would shift MDOT's primary role in the project to oversight of performance standards. It will require fewer public resources, which can then be redirected to other projects. Since the risks have been shifted to the developer, the approach provides financial incentives to effect the best way to meet performance specifications, with a corresponding increase in efficient project delivery and road operation.

During the operations phase, the developer team will have the aligned incentive to adhere to the performance measures. The developer will include in its team the necessary asset management skills, expertise and plans to manage and monitor the risk of unanticipated capital expenditures specific to the project. The developer will have a dedicated risk-adjusted budget and maintenance reserves set for the life of the concession to ensure they make the necessary investments in the infrastructure to maintain the performance requirements and achieve the handback requirements, which include residual asset value and remaining design life. This will incentivize the developer to provide the best value design approach for achieving the long-term requirements, rather than the lowest cost.

MDOT's approach to transfer life-cycle risk and O&M scope will impact the price range, work efficiency and feasibility. The magnitude of such advantages would be assessed based on a specific scope of the Project.

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?

Approach #1: Developer is responsible for managing life-cycle risks and O&M for added congestion relief improvements only. It would be difficult to clearly distinguish responsibilities. For example, in the event of a closure/accident on the highway, it is unclear which entity must address issues related to the closure/accident. Additionally, highway interface locations would be difficult to manage with two maintenance teams involved, there will be potential conflicts in the interface maintenance that will affect both O&M areas and will be clearly less cost efficient while duplicating crews and equipment.

Approach #2: Developer is responsible for all life-cycle risks and O&M for the entire freeway. As stated in the previous question, under this approach MDOT's primary role in the project will be oversight to verify that performance criteria are being met. That will

require fewer public resources, which can be redirected to other projects. And since the risks have been shifted to the developer, it will have financial incentive to deliver a project that can be operated and maintained to high performance specifications. This option will benefit safety standards as it maximizes efficiency in terms of crews and equipment, especially relevant in winter season activities. We would clearly recommend this approach.

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?

A single solicitation may not be the most efficient way to procure both corridors and maximize the potential concession fee being paid out to MDOT. In addition, each road corridor may have different value maximization opportunities which may require that the commercial agreements be developed with individualized terms.

ROADIS USA believes that the most value to MDOT will result from separate procurements of the Capital Beltway and I-270. This would permit MDOT to maximize its concession fee by permitting the developers to optimize operational and construction costs, and will probably enable local companies to participate in the process. From a long-term O&M perspective, creating a multiplayer environment helps motivation on quality perception that will finally benefit the user.

B. Project Development

1. Do you believe your firm would be interested in submitting a detailed proposal for the development of any of the congestion relief improvements? Are there any particular concerns that may prevent your firm from getting engaged in the project development? How might these concerns be resolved?

Yes, our firm would be interested in submitting a detailed proposal for the development of any of the congestion relief improvements.

ROADIS USA believes high standard criteria, efficient communication and attractive payment mechanism should provide a good base to complete the project efficiently. Innovative safety solutions will be provided under the public-private agreement with reasonable price.

“Political Will” is a major factor for us to take into consideration. It is critical to get political support and public effort to gain approvals to proceed with such large scale, innovative projects. The Project needs an influential and respected “Champion”. In addition, ROADIS USA believes that MDOT maximization of the concession fee would be achieved by reducing the uncertainty surrounding the Right of Way and NEPA process.

2. At what stage of the NEPA and project development process would it be most beneficial to issue a RFQ: after establishment of the purpose and need, after determination of alternatives retained for detailed study, after selection of an MDOT preferred alternative, or after approval of the environmental document? At what stage would it be most beneficial to issue a RFP? Please discuss your reasoning.

It is suggested that the RFQ be issued either after determination of alternatives retained for detailed study or after selection of an MDOT preferred alternative. We also suggest that the RFP only be issued after approval of the environmental review. While ROADIS USA understands that unique circumstances may drive these timing decisions, we believe it is key for MDOT to reduce as much as possible the uncertainty surrounding the NEPA process.

3. What are the critical path items for the solicitation for these improvements and why?

The critical path items will be to have a solid legal ground based on ROW and NEPA being released under a clear Project Design and Operational scope as well as a clear Tolling framework in place that enables a clear and certain competitive process.

4. What is the minimum amount of time that your firm would require to develop and submit a response after the issuance of a potential RFQ?

We would require around 60 days to submit a response after the issuance of the potential RFQ.

5. What is the minimum amount of time that your firm would require to develop and submit a detailed proposal after the issuance of a potential RFP?

We would require a minimum of 120 days to prepare for technical and financial proposals after the issuance of a final RFP.

6. What information would your firm need in order to prepare a response to a potential RFP? What information should MDOT, the offeror, or others provide?

We would expect MDOT to share as much available information as possible on the Project, and for as long a historical period as possible. In general terms

- Initial pavement designs, any change of plans up to date and current pavement conditions related reports for developers. Designs and cost estimates of the improvements
- T&R – Any Traffic and Revenue related report (Historical and Forecast)
- O&M – Any Operation and Maintenance related report, specific requirements and current O&M data
- Financial – TIFIA and PABs term sheets (if applicable), draft financial terms, financial model if available.
- Legal – Draft P3 agreements
- Other – Reports prepared by advisors, NEPA report

7. What would you consider a reasonable stipend payment for unsuccessful proposers responding to a potential RFP? Please discuss how the stage of project development (purpose and need, alternatives retained for detailed study, preferred alternative, final environmental document, etc.) completed prior to RFP issuance would impact the stipend payment amount.

We suggest a stipend (on the order of +$2M depending on the nature of the procurement) to demonstrate commitment to the process, attract the developers, to defray some of the costs of proposal preparation and at the same time ensure ownership of the approach and ATCs created by both the winning and unsuccessful developers.

8. Would it be more beneficial for right-of-way acquisition activities to be transferred to the developer or should MDOT retain that risk? Please discuss your reasoning.

We suggest a more optimal distribution of risk would be achieved if MDOT keeps the right-of-way acquisition activities within public agencies since it is easier to do for using public resources rather than private developers.

In addition, eliminating the right-of-way risk from the proposal would maximize the concession fee. The developer would work closely with MDOT to innovate, optimize and reduce the potential right-of-way acquisition required to complete the project.

C. Technical Challenges

1. Based on your experience in the development of similar projects and characteristics of the I-495/I-95 and I-270 corridors, please explain the technical challenges, including minimization of right-of-way impacts, to providing congestion relief improvements. Please provide any recommendations for mitigating or overcoming those challenges that you would be willing to share.

We believe the congestion challenge is the one that needs to be first overcome, so that any innovative design concepts for the express lanes can be carefully evaluated during the early developing phase.

Technical challenges for similar projects include enforcement and maintenance of traffic flow. Since there is continuous traffic flow on the highway, the location of high resolution cameras and tolling collection points (if any) are important when reaching the design phase.

Construction Period will be a real challenge while this will impact the current capacity and needs to be analyzed carefully to achieve the most efficient work progress/congestion ratio

Finally, while not exactly a technical challenge, our experience is that early and intensive public discussion of and input on the purpose and need of the Project are critical. A public relations component of the development team—from the very beginning—is key.

2. Are there recommendations that you may be willing to share concerning the project scope or development strategies to reduce the upfront capital costs and/or the lifecycle costs of potential corridor congestion relief improvements?

All of the factors above will be mainly driven by the approach MDOT decides to procure the project. For instance, the elimination of NEPA and the right of-way acquisition risk would facilitate the implementation of an optimal capital structure and potentially reduce upfront construction costs. These are key drivers to the maximization of the concession fee.

The lifecycle costs would be mainly driven by MDOTs standard requirements. For instance, the reduction of any handback requirements would be beneficial for the concession, but not optimal for the future state of the road. Developers such as ROADIS USA will balance these elements to ensure maximization of the concession fee and maintain operational excellence for the project.

MDOT's approach to the transfer of life-cycle risk and O&M scope will also impact the price range, work efficiency and feasibility. ROADIS USA will definitely take it into

consideration when performing risks analyses, but other factors are important as well when we draw to the conclusion for an investment.

3. Please explain any technical solutions that you may be willing to share that may enhance the development of the potential congestion relief improvements. Identify risks associated with the solutions and, if possible, discuss estimated cost of the solutions.

Prior to developing on the preliminary analysis we have undertaken, a discussion with MDOT to better understand your ultimate needs would be beneficial and permit ROADIS USA to tailor a solution fulfilling all of MDOTs needs.

D. Contract Structure

1. What is your recommended approach for financing the capital cost of potential congestion relief improvements?

A mix of public and private funding might be beneficial to the Project. Regarding, financing, using TIFIA and PABs well-supported by toll revenues from the Project would decrease the financing costs of the Project.

2. Should MDOT set a concession term or allow proposers to establish a concession term as part of the response to a potential RFP? If MDOT were to set the concession term, what is a reasonable concession term and why?

We consider an appropriate minimum contract term should be based on an analysis of the potential revenue to be generated by the asset. The revenue should at least provide the developer enough time and funds to pay back debt as well as operate the highway with sufficient returns. A standard US market 50-year contract term may serve as a reference. Regarding a variable-length contract term, we will be open to consider this option depending on potential generated revenues.

3. Are there any contract terms you would recommend, such as Alternative Technical Concepts, Alternative Financial Concepts, contract balancing, pre-development agreements or progressive agreements, etc. to minimize risk to proposers, maximize opportunities for innovation, maximize a concession payment to MDOT, or are key to obtaining competition? Please discuss the benefit and risks of the recommended contract terms.

As described above, there is significant opportunity for innovation if MDOT focuses on performance standards during the procurement. It is essential to provide the developer with maximum design flexibility, with Alternative Technical Concepts provisions that allow for innovation while protecting MDOT's vision for the project. This will provide the opportunity for MDOT to take full advantage of the experience and lessons learned offered by the potential developers and encourage competition.

E. Miscellaneous

1. Are there any particular concerns with the information provided in this RFI? Please explain any concerns and provide any proposed solutions or mitigation to address those concerns.

The information provided in this RFI is reasonable and adequate for now, but we will be looking for more detailed information in the next phase of the Project.

2. Please provide any suggestion or comments on how MDOT can encourage participation by Minority Business Enterprise/Disadvantaged Business Enterprise firms and local workforce in the development of the congestion relief improvements.

MDOT could make more efforts on advertisement and held more public hearings/meetings to attract Minority Business Enterprise/Disadvantaged Business Enterprise ("MBE/DBE") firms and local workforce in the development of the congestion relief improvements. Also, MDOT should consider the inclusion not only of MBE/DBE requirements in the bidding documents, but also workforce development obligations.

3. What opportunities would you like to see for industry outreach related to these potential P3 opportunities?

We do not have a specific view on this element. We believe MDOT has taken the right steps in organizing an industry day and advertised efficiently the project.

4. Please provide any additional comments or questions you may have related to the information in this RFI.

We do not have additional comments related to the information in this RFI.