John laing
making infrastructure happen

December 20, 2017

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RE: Request for Information - 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

We appreciate the opportunity to submit a formal response to questions raised in the Request for Information ("RFI Response") for the I-495/I-95 (Capital Beltway) and I-270 Congestion Relief Improvements projects. John Laing Investments Limited and its affiliates ("John Laing") is an international infrastructure developer, investor and manager with a long history, strong reputation and a proven track record of delivering transportation, social and environmental infrastructure projects and assets across the globe.

In providing our RFI Response, we have relied on our experience delivering transportation infrastructure projects and the materials made available on the project website. Our experience on toll road projects and managed lanes facilities is extensive, including an equity interest in the recently closed I-66 Express project, where John Laing committed to an investment in excess of $150 million prior to Financial Close. Previously, John Laing acquired an interest in the I-77 HOT Lanes project in North Carolina.

Having recently attended the Industry Forum, John Laing is pleased to provide further feedback and reiterate our strong interest in the project. We would be delighted with an opportunity to speak directly with MDOT during the upcoming one-on-one process and thereafter, to participate in the procurement to the extent MDOT elects to progress with the DBFOM model.

We will file a formal request for the one-on-one sessions directly under separate email. Should you require any additional information in the meanwhile, please do not hesitate to contact myself or members of our team.

We look forward to hearing from you in the coming weeks.

Kind regards,

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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.

John Laing is specialist investor and developer of infrastructure projects procured through public-private partnerships (P3) along with renewable energy projects. John Laing Investments Limited and affiliates (collectively, "John Laing"), invest directly in Greenfield infrastructure projects. As an active manager, John Laing provides development and bid services for Greenfield projects or primary investments as well asset management services to mature Brownfield assets or secondary investments.

John Laing brings over four decades of investment experience with a long history, strong reputation and a proven track record of delivering transportation, social and environmental infrastructure and projects across the globe. Our core competency involves the origination and structuring of equity investment in large-scale, complex transportation infrastructure projects and arranging the most competitive public-private financing solution.

In the US, John Laing is involved in delivering five major transportation P3 projects, including: the recently opened Denver Eagle P3, the first DBFOM mass transit P3 in the US, along with three highway projects, all of which are still in construction, the I-4 Ultimate in Orlando, Florida, the I-77 Managed Lanes project in Charlotte, NC and the I-66 Express project in Fairfax County, VA -- the latter two are Managed Lanes project featuring real toll revenue risk transfer. In addition, John Laing is the lead equity investor and preferred proponent for the MBTA Automated Fare Collection (AFC) procurement.

Our transportation experience includes both availability-based and revenue-risk payment mechanisms. At present, we are actively delivering projects in the infrastructure and renewable energy sectors across the UK, continental Europe, Australia and New Zealand, as well as actively participating in several transport infrastructure procurements with leading consortia in the United States and Canada.

As a trusted partner to many industrial investors in the infrastructure sector, John Laing provides key services during both the bid and delivery phases of project development. Our investment team comprises professionals with deep experience in all facets of project financing, commercial contracting and technical project development and delivery. During project delivery, we provide project staffing services to the concessionaire at both the executive and board levels.

John Laing is an independent "balance sheet" investor, meaning all of our primary equity investments are financed from internal (balance sheet) resources. Our internal resources include: (1) cash and cash equivalent balances, (2) available balances on our committed corporate banking facilities (our group banking facilities) along with (3) cash distributions received from our portfolio of infrastructure assets and (4) the proceeds from realizations on the disposition of mature assets within our portfolio. Further, we actively manage such investments to ensure self-funding as a core element of our business strategy. In short, we are fully aligned with the public sector in terms of driving **Best Value** in the project financing.

In 2016, John Laing announced new equity commitments in an amount equivalent to $236 million on a global basis at an average effective exchange rate of $1.30 to £1.00. Our realizations totalled $190 million, whereas our cash yield on existing portfolio assets amounted to $45 million all at the aforementioned effective exchange rate.

At 30 June 2017, our investment portfolio (on balance sheet) was valued at $1.45 billion at the spot exchange rate and comprised a combination of primary investments, including 10 P3 and 8 renewable energy projects valued at $853 million and secondary investments, including 14 P3 and 10 renewable energy projects valued at $588 million.

In the year to date, 12 December 2017, John Laing has increased progressively its market presence with new equity commitments totalling in excess of $450 million alongside realizations at $400 million on a spot exchange of $1.34:1.00, both of which are ahead of initial expectation. Included in the $450 million equity commitment is the $150 million commitment John Laing has made to the **I-66 Express** project, which reached Financial Close in November 2017.

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.

John Laing would recommend a comprehensive, **Design-Build, Finance, Operate and Maintain** (DBFOM) contractual approach with **full toll revenue ("T&R") risk transfer** to the private sector for procuring the congestion relief improvements. By definition, the DBFOM procurement approach involves the transfer of other key risks, including financing, full construction cost, construction-scheduling and full lifecycle cost risks: all of which, in our view are appropriate for the private sector to bear.

Through the DBFOM contractual framework, the public sector secures fixed-price, turnkey project delivery with appropriate incentives for full lifecycle cost management. The integration of Design and Construction (D&C) and Operations and Maintenance (O&M) obligations maximizes the opportunity for an integrated consortium to develop seamless and innovative solutions to project delivery that serve to achieve the overarching project objective of maximizing **Best Value and Innovation**. Alternative forms of procurement without comprehensive integration of construction, operations and finance, including DB, DBF and DBOM, would not necessarily ensure appropriate optimization of risk transfer nor provide sufficient incentives to consider lifecycle cost in the design and construction solution.

Further, we would recommend **full T&R risk transfer**, including electronic toll collection (ETC), tolling regime formulation and intelligent transportation systems (ITS), in the procurement. Full T&R risk transfer on projects with a strong commercial business case, which by all appearances both I-495/I-95 and I-270 projects qualify, is most likely to achieve the key project goals: **(1) Traffic Congestion Relief** and **(2) Financing** featuring an **Upfront Financial Contribution** to MDOT, while providing highest probability for **net of zero public sector contribution** across the wider program.

In all managed lane projects in operation, express toll lanes provide choice for commuters and with dynamic tolling, optimal utilization of new capacity within the overall corridor. Furthermore, **conditions** on the **General Purpose lanes tend to improve**, as well. To give one example, on the Dallas network, North Tarrant Express (NTE) reports that **General Purpose lanes congestion** (as defined as time spent traveling at speeds below 50 mph) **is down from 29% to 9%**. As such, both express and general purpose lane users benefit from the enhanced capacity provided by the new, tolled capacity provided by the Express Toll Lanes.

By pairing a competitive bid process with T&R risk transfer, the public sector ensures the private sector has appropriate incentive to optimize its business case in all facets, including innovative technical and financial solutions as well as delivering the most efficient system improvements, including network connectivity and systems operation of the facility upon revenue service commencement.

In accepting revenue risk, the private sector partner will engage its own T&R advisors to aid in development of the business plan. Working in an integrated development team, in collaboration with the DB team, the private sector business case in many instances has provided incremental value above and beyond the "sell-side" business case. This private sector premium often emanates from Alternative Technical Concepts (ATC) designed to improve network connectivity, which often expands the "in-scope" portion of corridor traffic (i.e., potential corridor travels given the option to access either managed or

general purpose lane). Invariably, as the I-66 Express experience demonstrates, a competitive tender results in the private sector sharing this upside or premium benefit with the public sector.

In our experience, a Concessionaire led by dedicated equity investors serves three critical functions: (1) coordinating all aspects of project delivery and ensuring all consortium members and related sub-contracts are priced competitively and appropriately structured (2) arranging comprehensive project finance; and, (3) a single point of contact and accountability for the procuring authority. An independent equity member can act as the keystone in the consortium, integrating the various parties and delivering a competitive solution for the procuring authority, while achieving an acceptable return on the equity investment. Furthermore, the role of independent equity member, such as John Laing, provides further comfort to other financiers involved in the project financing, including PAB investors and TIFIA, by demonstrating such independent equity members have vetted all traffic and technical studies as well.

Clearly, MDOT, as the procuring authority, secures similar benefit of the independent equity investor and its drive for competitive tension across all work streams during bid and project development.

Thus, in our view, the P3/DBFOM contract format is the most optimal contractual structure to advance key project goals, including the desire to leverage private sector involvement, innovation and expertise, while providing significant congestion relief through additional capacity and with T&R risk transfer, while minimizing the project cost to the procuring authority.

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 section? How do you assess the likely magnitude of such advantages? What are the potential offsetting disadvantages?**

MDOT would benefit in multiple ways should it elect to transfer O&M and Traffic and Revenue (T&R) risk in the procurement to the private sector. Firstly, integrating O&M responsibilities with D&C provides maximum opportunity for private sector innovation through full lifecycle costs recognition and consideration during the D&C phase. Secondly, as mentioned earlier, the integration of construction and O&M responsibilities would yield synergistic benefits. Additionally, the competitive bid process and an effective pain-share/gain-share mechanism will promote optimization. Lastly, a full lifecycle assessment during the bid stage will give MDOT certainty of cost for future budget planning.

The transfer of T&R risk to the private sector results in the lowest funding requirement for the public sector and typically results in the greatest value for money. In addition, T&R risk transfer provides maximum incentive for the private sector to seek innovative technical and financial solutions to maximize toll revenue and resulting cash flow to equity. Finally, the risk of underperformance for whatever reason in T&R is borne by the private sector, which shields the taxpayer from such downside risk.

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?**

We understand clearly that MDOT intends to ensure the existing General Purpose lanes remain free to the traveling public in their current capacity and configuration. To the extent project civil scope includes reconstruction of a substantial portion of the entire freeway, including existing and future general purpose lanes then we would recommend including O&M as well as lifecycle responsibilities within the procurement. This project approach is consistent with several recent procurements and has received good support in the market and from procuring authorities.

If, however, existing roadways are not upgraded during the construction phase, transferring both O&M and lifecycle responsibilities create certain challenges for the private sector. Furthermore, concerns may arise in relation to latent defect risk, which may be difficult to price and result in additional risk provisioning, adding unnecessary cost to the project.

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?**

While a single solicitation may be feasible, the prospective scale may result in a limited number of submissions due to the balance sheet requirements, including required bonding capacity, for the Design-Build (DB) entity, whether a single entity or Joint Venture, within the consortium. In our view, there may be a limited number of potential DB contractors in the market able to secure such bonding as required to satisfy project financiers and credit rating agencies. Furthermore, we would anticipate potential financing capacity constraints, as well. Precedent transactions, as detailed below in **Section: d) Contract Structure (1)**, suggest an upper bound of approximately $750 million and noting further, an absolute availability cap on Private Activity Bond issuance under the USDOT allocation.

Further, we have seen over the past several project financings, solutions involving TIFIA Direct Loans in the capital structure (See hereafter our response to **Section (d) item (1)** for further detail), which by statute requires an Investment Grade Rating for senior-secured debt in nearly all instances. The credit rating agencies typically look to the DB Contractor and its ability to procure adequate performance security to satisfy specific credit considerations arising during the implementation phase. Thus, for a major procurement such as the congestion relief improvements, we would advise sizing the project scope at an appropriate scale to attract multiple consortia for competitive purposes, thereby ensuring maximum opportunity for both Best Value and Innovation in the procurement process.

In terms of appropriate scale of capital investment, we would note amongst the recent Managed Lanes projects procured through P3/DBFOM contracts, including the network expansions on North Tarrant Express (NTE) project, the average DB contract price is $1.5 billion. The average of total project uses of funds, including the DB contract price, interest during construction, development costs and related expenses for the seven managed lanes projects amounted to $2.1 billion.

The largest of the recent procurements and perhaps one of the more relevant is the I-66 Express project in Virginia, which featured a DB Contract Price of $2.23 billion with Total Uses of Funds amounting to $3.69 billion. While we do not necessarily believe the I-66 Express represents the upper bound of potential project size, we do believe there may be such an upper bound. Based on market precedent, there appears potentially to be an optimal size in the range of $2.0 to $3.0 billion.

As such, we recommend MDOT consider carefully the extent of individual project segments in terms of both likely DB Contract Price and Total Uses as it determines how best to segment the overall program.

It is worth noting that in all instances, except the I-66 Express, the projects involved some amount of public subsidy. In the I-66 Express case, the Concessionaire made an upfront contribution to the procuring authority (VDOT) and as such, we note the lower proportion of Total Uses of funds at 60.6% for the DB Contract Price as compared to the other precedents.

Table 1: DB Contract Prices and Total Uses of Funds for recent Managed Lanes P3 projects (millions)

Project Name	Capital Beltway	I-95/I-395	I-66 Express	IH-635/LBJ Express	North Tarrant Express	NTE Segment 3
Location	Northern Virginia	Northern Virginia	Northern Virginia	Dallas, TX	Fort Worth, TX	Fort Worth, TX
DB Price	**$1,347**	**$691**	**$2,232**	**$2,091**	**$1,456**	**$990**
% of Total Funding Uses	67.9%	75.2%	60.6%	74.8%	69.3%	73.3%
Total Funding Uses	**$1,983**	**$919**	**$3,685**	**$2,796**	**$2,101**	**$1,350**

Source: all information obtained from the final Official Statements for the respective Private Activity Bond issuance.

In terms of sequencing projects, we would recommend focusing on the portions of the overall network with the strongest commercial prospects first. Through this approach, we would expect to see the segments displaying the highest levels of congestion as having the strongest commercial prospects. This approach should enable MDOT to secure the maximum Upfront Capital Contribution from the initial packages. From there, MDOT would be in a better position to assess the extent of incremental capacity on the outer limits of for example the I-270, where a public subsidy maybe required. In a similar vein, there may be segments on I-495, which would not provide sufficient revenue at present to justify an Upfront Capital Contribution. Finally, by sequencing the improvements, MDOT will maximize the benefit of the new, dynamic toll capacity; thereby ensuring scarce capital dollars deliver maximum traffic relief on the most **Accelerated** basis possible.

In the end, we believe a sufficient number of contractors and competing consortia is essential for MDOT to achieve its project goals and ensure a competitive process to deliver the most optimal projects within the overall congestion relief improvements program. As such, we would recommend MDOT consider a procurement approach involving two (2) or more segments, and would argue that three (3) segments may be ideal in terms of size and scope with respect to the DB element. Furthermore, we would recommend a phased procurement approach targeting those segments experiencing the most extensive congestion first. Such a phased approach would ensure maximize benefit from congestion relief, while enabling a mores expedited environmental review process.

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?

As an independent developer and investor, John Laing would make every effort to participate in the procurement for the congestion relief improvements via a Design, Build, Finance, Operate and Maintain (DBFOM) contract under a P3 framework. If MDOT elects to procure the congestion relief improvements through a P3/DBFOM, John Laing would be very interested in submitting a detailed proposal as an equity member of a Consortium in partnership with an integrated DB Joint Venture.

Any uncertainties in regards to the procurement structure, in particular, whether MDOT elects to omit private financing and long-term O&M and/or elements of specific risk transfer potentially would reduce our appetite to participate. Further, a determination to procure the project through a single contract may limit the number of potential investors, making it potentially difficult to secure a role as an Equity Member in a consortium eligible to pursue a procurement of such scale.

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.**

Based on the information provided at the industry forum, we recommend a balanced approach, which at once recognizes the significant work undertaken already, while still enabling considerable flexibility in determining the preferred alternative for each corridor segment.

In terms of scoping, we would recommend MDOT focus on minimum thresholds, including such items as lane configuration along with minimum access and egress points along the alignment. From there, MDOT might secure based on such configuration and upon award, assist the preferred proponent with final approvals required because of approved ATC and AFC as needed.

With respect to sequencing NEPA and procurement, the Record of Decision ("ROD") is a critical path item. Industry will place a high value on receipt of the ROD before bid submission. Without a ROD in hand, bidders will be reluctant to incur significant bid costs (especially in the second half of an RFP). Suggest the ROD is scheduled no later than six months prior to proposal due dates. To the extent any delays are forecast, we would rather see a delay in issuance of the draft RFP than to issue the RFP as compared with an on-again off-again process.

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

We would recommend as a first step for MDOT to engage competent advisors, particularly financial, legal and technical. We understand from the Industry Forum, that such processes are underway already. We applaud MDOT for progressing this critical milestone well-ahead of release of the project RFQ.

We would recommend MDOT engage its advisory team ahead of the RFQ release and utilize the team as a key resource in developing both the RFQ and thereafter the RFP solicitations. Further, a competent advisory team will aid in review of submissions from industry in response to the RFQ. Moreover, a competent, highly experienced advisory team is critical for successful pursuit of the procurement during the RFP phase and beyond to Commercial and Financial Close.

Environmental and regulatory approvals certainly lie on the critical path, as well. The timing of final approvals for a preliminary plan should precede Commercial Close with approvals for final changes to accommodate any pre-approved ATC(s) to coincide with Financial Close.

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?**

One (1) to two (2) months is customary and adequate for development of Statements of Qualification (SOQ) in response to RFQ solicitations. Early engagement with the market through an Industry Forum

and RFI should provide sufficient time for teaming and partnering discussions ahead of RFQ issuance. The current sequence of events with early release of this RFI and the Industry Forum held on December 13th, along with the anticipated one-on-one meetings in January 2018 have provided such opportunities for early engagement amongst industry participants.

In most instances, RFQ requests seek feedback on the key entities within a consortium and their prior experience in delivering comparable projects through P3/DBFOM contracts. The objective is to establish a short-list of qualified, capable consortia gleaned from the wider respondent pool based on historical experience and current capacity. To the extent MDOT intends to solicit advice on the project itself during the RFQ phase, some additional time may be required to undertake due diligence and to ensure responsiveness to whatever additional information may be required in the RFQ stage.

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?

For a DBFOM with T&R risk transfer, we would recommend approximately seven (7) to ten (10) months from issuance of a draft RFP to the due date. This should provide adequate time to undertake necessary due diligence on the T&R risk, while providing sufficient time to develop a technical solution with detailed construction cost estimates. Further, the period would allow ample time to accommodate at least two (2) rounds of one-on-one meetings amongst MDOT and the short-listed consortia.

To facilitate maximum opportunity for technical and financial innovation, we would recommend MDOT provide complete information about the project, the existing right of way and any plans for competing corridor improvements at the earliest possible date.

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?

As a rule, the more information made available, the easier it will be to develop the most comprehensive RFP response. At minimum, we would request a comprehensive set of traffic data in time-series format. Further, we would request full access to the current and future major project investments in network and corridors under study.

In terms of inter-governmental relations, the industry will be interested to learn more about the role MDTA would play in the procurement and further clarification on any impediments, which may result in limitations on the concessionaire's full autonomy with respect to toll policy.

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.

In the event MDOT elects to procure the overall program on a sequential basis at an individual project scale consistent with market precedent, we would anticipate a stipend payment in the range of $1.0 to $2.0 million. Such stipend size presupposes a thoroughly vetted preferred project scope.

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.

In recent market precedents, we have seen right-of-way ("ROW") dealt with in both ways. To the extent, ROW is manageable in terms of scope and scale, it is sensible from a risk allocation perspective to

transfer such risk to the private sector. Managing the extent of takings against specific project parameters, such as interchanges and interfaces provides appropriate alignment.

Given the ultimate scope of takings, however, it is reasonable for the procuring authority to establish upper bounds for cost exposure and ROW extant.

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.**

From our perspective, it is important that much of the improvements occur within the existing footprint of the respective corridors. Requirements for substantial additions to general purpose lanes or auxiliary facilities would not only add incremental direct cost, but also has the potential to dramatically change the commercial dynamic. T&R studies become more problematic under this scenario, adding additional risk and potentially uncertainty, which must be compensated with higher equity risk premium.

Another key technical and commercial challenge emanates from inevitable interfaces with other tolling authorities and (potentially) corridor toll operators. At minimum, the future operator on the I-270 will interface with toll operations on the Inter-County Connector. From a corridor user's perspective, such interfaces should be seamless and the tolling systems interoperable. Some level of coordination will be required during the construction phase with continued interaction during operations as both parties inevitably upgrade systems over the term of the concession.

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?**

Limiting the project scope to the existing Right-of-Way (ROW) to the fullest extent possible will go a long way in ensuring to limit upfront capital costs. ROW is challenging in any context and all the more so in an urban environment, such as that which surrounds the identified corridors. As such, we would strongly encourage MDOT to limit to the fullest extent possible requirements to expand on the existing General Purpose lanes and auxiliary roadway in the procurement. The priority for ensuring both Best Value and innovation is to limit the new capacity to Express Toll Lanes to fullest extent possible.

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.**

While there are any number of specific technical solutions that may aid in the procurement, one significant component we find indispensable for successful delivery of a programmatic system of express toll lanes is an open-road, all-electronic tolling system, collectively the ETC/ITS program. Such systems designed to facilitate dynamic tolling through location-based or distance travel tolling would facilitate a seamless network of segments. By removing toll barriers and replacing them with an open-road system,

traffic relief is maximized by eliminating bottleneck effects at toll barriers, while enabling multiple owners across the broader congestion relief improvements program. With tolling policy and pricing management transferred to the private sector, the new capacity and its ultimate utilization is maximized through dynamic price optimization.

d) Contract Structure

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

We strongly recommend a private finance solution, including private equity coupled with either commercial bank loans or Private Activity Bonds (PAB) and a Direct Loan through the Transportation Infrastructure Finance and Innovation Act (TIFIA). Private Finance, by definition, imparts an incremental level of discipline into the DBFOM contractual arrangement. Other potential debt instruments include taxable bonds issued through a Private Placement and inflation-linked instruments, such as inflation-linked swaps. Finally, there may be an opportunity to explore various credit enhancement products, including those offered by monoline insurers to improve the credit rating of the project financing.

In developing a detailed plan of finance, John Laing would expect to undertake a competitive financing completion to identify the solution offering the most attractive combination of execution certainty, redundancy and low-cost amongst the various alternatives to ensure the best value for money. In our experience, a dual tranche financing featuring a long-term PAB issuance and a TIFIA Direct Loan provides an optimal debt financing solution for revenue risk transactions.

Precedent transactions as evidenced below in Table 2 confirm the preference for PAB and TIFIA.

Table 2: Capital Structure in recent Managed Lanes P3 projects (millions)

Project Name	Capital Beltway	I-95/I-395	I-66 Express	IH-635/LBJ Express	North Tarrant Express	NTE Segment 3
Location	Northern Virginia	Northern Virginia	Fairfax, VA	Dallas, TX	Fort Worth, TX	Fort Worth, TX
Senior Debt	**$589**	**$253**	**$737**	**$606**	**$400**	**$274**
PAB issuance	Yes	Yes	Yes	Yes	Yes	Yes
Subordinate Debt	**$589**	**$589**	**$1,226**	**$850**	**$650**	**$531**
TIFIA issuance	Yes	Yes	Yes	Yes	Yes	Yes
Private Equity	**$349**	**$264**	**$1,517**	**$665**	**$422**	**$430**
% of Total Capital	22.8%	23.9%	43.6%	31.3%	28.7%	34.8%
Total Capital	**$1,527**	**$1,106**	**$3,481**	**$2,121**	**$1,472**	**$1,23**

Source: all information obtained from the final Official Statements for the respective Private Activity Bond issuance.

PAB issuance offers attractive low cost, long-term financing due to the continued tax exempt status, which remains in place in the final draft of the Tax Cuts and Jobs Act agreed in conference. The 10-year "Par Call" customary in tax exempt issuance provides an element of optionality, which further enhances

the attractiveness of such debt. Finally, the municipal market is more inclined to offer long term debt as compared with the bank loan market offering a further advantage in terms of permanent financing.

The TIFIA Direct Loan program offers additional benefit to revenue risk transactions through specific structural features. These include: (1) interest capitalization during the construction phase and initial five (5) years of operations, mitigating the uncertainties in terms of initial patronage and the ramp-up process thereof -- effectively, an additional source of liquidity during ramp-up; and, (2) Graduated debt service and back-ended amortization with a mandatory and scheduled payment elements providing further buffer in the event of lower than expected patronage.

On precedent transactions, capital sources have tended to cluster at a scale below the level required to finance the indicated $7.6 billion capital budget for the congestion relief improvements.

On average, the senior debt quantum secured through PAB issuance has averaged just below $500 million with TIFIA loans contributing an additional $700 million in subordinate debt. Equity commitments have averaged just over $600 million resulting in an average **Private Capital Investment** quantum of **$1.82 billion**.

Not surprisingly, I-66 Express once again establishes a new precedent on the upper bound for total Private Capital investment at nearly $3.5 billion. While we do not necessarily see the I-66 Express structure as the upper bound of what may be achievable in each of the respect capital segments, we do believe an optimal **Private Capital Investment** would reside in the **$2.5 to $4.0 billion** range.

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?

To ensure a competitive process and not bias the procurement, John Laing would advise MDOT to establish a specific concession term as a base line. The ideal concession term should extend well beyond 35 years to take full advantage of TIFIA and Private Activity Bond investors' appetite for long duration. Furthermore, a long-term concession offers further benefit from an equity investor's perspective through transfer of asset control to enable capital investment depreciation, thus enhancing after-tax cash flow. Depending on the ultimate risk transfer, we would expect a concession term of 50 years or more with full T&R risk transfer. For an Availability Payment regime (which we do not consider as optimal for this program), we might expect to see a slightly shorter concession term of between 30 and 50 years.

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.

To achieve the full potential for innovation through P3 procurement, we would recommend MDOT incorporate Alternative Technical Concepts (ATC) into the procurement process. ATC(s) have the potential to bring innovation and best value to the procurement with such benefit accruing to MDOT and ultimately to the users of the new Express Toll Lanes.

Alternative Financial Concepts (AFC) may prove useful too, although we would caution MDOT to consider the implications of managing AFC(s) in the process.

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.

Nothing within the RFI is of particular concern. Between the information contained within the RFI and the information communicated at the Industry Forum, we are satisfied with the available information in respect of our response to the RFI itself.

One potential consideration at the RFQ/RFP stage, which warrants further clarification, is the desired treatment for High-Occupancy Vehicle (HOV) along with other exempt vehicles, such as public buses, and the expectation for extending access for each to the ETL facilities. In our experience, the private sector is capable of accepting and managing such risk, though there may be some merit in sharing the downside of subsidized or free HOV+3 access to the ETL based on recent precedent transactions.

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.

Once again, early outreach and effective coordination with industry is the best way to allow for engagement with and participation by Minority Business Enterprise/Disadvantaged Business Enterprise (MBE/DBE) firms. During both the RFQ and RFP phases, we would recommend MDOT at minimum host forums for MBE/DBE firms to introduce the project and the various opportunities with participating consortia. Web-based engagement can prove effective too, where MBE/DBE firms can interact with consortia to share and access sub-contracting opportunities.

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

The Industry Forum along with the participant list is a key step in terms of industry outreach. Furthermore, we would recommend MDOT engage with as many industry participants as possible in the one-on-one meetings to elicit a diversity of perspectives as the procurement takes shape.

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

No further questions or comments from us; we are delighted with the opportunity to provide feedback on this very exciting congestion improvement program and look forward to the next phase of the pursuit.