



MDOT RFI I-495/I-95 (Capital Beltway) & I-270 Congestion Relief Improvements

Maryland Department of Transportation

December 20, 2017

Submitted by:

David Pennington, CFA
Managing Director || Power | Energy | Infrastructure
BMO Capital Markets
115 S Lasalle St, 35th Floor
Chicago, Illinois
60603



Information Requested

A. GENERAL

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

Response: BMO Capital Markets (“BMO CM”) is a leading, full-service North American-based financial services provider offering merger and acquisitions advisory services, corporate lending, project financing, securitization, treasury management, market risk management, equity, and debt underwriting, debt and equity research, and institutional sales and trading. BMO Capital Markets has approximately 2,400 professionals in 29 locations around the world, including 16 offices in North America. Our U.S. P3 team, based in Chicago, has over 20 years of experience advising both private sector and public sector clients on the successful execution and financing of P3 projects. Our work has encompassed numerous revenue risk transactions across North America with our scope including advising governments and private sector bidders, negotiated ratings, constructing financial models, structured borrowing platforms and placed debt with bank and bond lenders. We look forward to playing a similar role in this transaction.

Question: 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.

Response: Similar to many governments, the main benefit to MDOT would be risk transfer. P3s have been used in numerous jurisdictions to manage construction and operating risk for numerous different kinds of assets. Most governments now see P3s as being the primary vehicle to eliminate construction overrun risk. This process will also allow the revenue and tolling risk to also be transferred to the private sector to manage.

With significant existing expertise in this sector, the private sector toll developers have a proven track record of managing these risks. Even in situations where the financial outcome has been poor, a well-structured contract also allows a rebid to new interested investors (consider the recent processes for the Indiana Toll Road and Chicago Skyway).

A well-structured process also has the advantage of reducing the time to close and allowing the delivery of high priority projects while at the same time allowing access to top domestic and international developers in a highly competitive environment with a focus on innovation.

As a general rule in a P3, all the risks that the private sector can manage should be transferred to them. This would include construction costs and schedule risk, operating and handback risk, maintenance and lifecycle risk as well as financing and interest rate risk. The private sector should also be responsible for risks that they can’t control but for which they can obtain insurance.

The Government should retain the risks that they can control or manage including changes in local law, right of way acquisition, unexpected discoveries (including archeological and hazardous materials), loss of an ability to insure, legal rights to operate (lawsuit risk and contract risk) and policing risk.

The difficulty usually arises in the risks that neither side can control or insure for. One main area of contention in almost every P3 project is the sharing of costs and delays relayed to third party utilities (including rail roads), local municipality permitting delays, and changes in Federal law that affect the project. In most cases the best way to manage these risks is to transfer them to the private partner and have the Government cap the downside at a pre-agreed amount. A similar sharing is also typical for geotechnical risk where the risk is initially managed with detailed studies shared with all the proponents and a negotiation solution where any unexpected discovery costs

are shared between the two parties. This is particularly true in transactions with a significant tunneling risk where it is often difficult to get lenders to agree to a contract that has the risk wholly transferred. These sharing exercises are the main benefit of the RFP negotiation process. While many of these items can be fully transferred to the concessionaire, it is usually much more economical for the Government to retain the low probability, high cost downside risks. There is also a sharing mechanism for Force Majeure events that neither party was responsible for and were not covered by insurance.

In any type of revenue transaction, there is usually the request from proposers for a limitation on (and compensation for) competing facilities. With this risk entirely under the Government's control, consideration should be given on the level of limitation because a weak or low restriction will reduce the expected value and the associated up-front payment at financial close. A key value driver for toll roads is also credit risk. Maryland could increase their potential up-front payment by assuring that the concessionaire can make use of bill payment inducements.

2. **Question:** 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?

Response: We see the greatest advantage to MDOT as being a single integrated transaction that considers all the components as a single concept. The P3 will allow the designer, constructor and the operator to all have a single integrated, whole-life view when they bid the transaction. We believe that it is this unified approach that leads to both innovation and savings for MDOT the client. In a transaction with revenue risk there is an additional advantage to this approach where maximizing revenue is also considered in the context of what is need for construction and operations. As part of the preparation for the solicitation we would expect to see a preliminary value for money analysis that would lay out the tradeoff between the higher financing and procurement costs of a P3 versus the savings that will come from fixing both the operations and the construction costs. In many cases, the VfM reports indicate significant percentage savings over the public sector comparator. Including Traffic and Revenue risk reduces the political influence on those decisions and also assigns the management of the more complex express lane pricing structure to entities that have experience managing those risks.

3. **Question:** 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?

Response: We do not have a view on this question from a financial advisor perspective.

4. **Question:** 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?

Response: It is usually better for a P3 to be done as a single solicitation. The process allows the sharing of bid costs across the largest asset pool and the size is more likely to be attractive to the most innovative bidders. A single asset also allows the maximum integration and avoids having to structure a contract that considers the effect of delays by other developers. Typically there would also be an advantage to an integrated tolling system but that is largely mitigated by the need to have the toll system integrate with the Maryland Transportation Authority and E-Z Pass systems.

Our two concerns are the potential size of the transaction and the possibility of differing revenue risks. With initial estimates indicating a construction size of \$7 billion or more the number of potential bidders is small and even those bidders are likely to integrate into a few large, multi-investor teams. While this has some advantages for reducing completion risk, it is likely to reduce overall competition and potentially force some bidders that may have been more innovative to join

more conservative teams. The 'all at once' process also prevents the opportunity to use the success of the first contract to push for more aggressive terms in a subsequent contract. We also expect that the two corridors will not have the same level of traffic risk throughout. In some cases, the potential volume may be so low as to suggest that portion of the project is delayed or initially completed as an availability transaction. It may also mean that there is not two 'corridors' but two risk sections with the road segments closer to DC having more potent value and the segments farther away being financed on a different basis (or contract) because they have lower congestion and lower value.

B. PROJECT DEVELOPMENT

1. **Question:** 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?

Response: As we noted in the introduction, BMO plays an advisory role to the participants in these types of transactions. We do not invest or play a principal role in the bidding. We are an active supplier of short term debt capital to fund substantial completion payments or to support DBF type structures.

Our primary concern, which is generally similar to our clients, is closing risk. Our fees are typically structured such that the majority of our compensation is paid at financial close. We struggle to work on projects where there is a high risk that an agreement will not be reached.

Generally we resolve these concerns before making a judgement about the level of political support that a project has. Indicators of this support include the retention of experienced legal, technical and financial advisors. We also like to see early and ongoing participation at all the branches of government that have input on the decision. Significant closing risks are created where the executive branch has been supportive but the legislative branch has not participated and still retain the right to approve the project prior to financial close.

While there are contractual ways to manage around incomplete right of way, legal, environmental and funding hurdles, there is also a process of review that bidders undertake to identify whether those risks in aggregate will be sufficient to stall a project.

2. **Question:** 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.

Response: As we have noted, to get the most innovative and competitive bidders at the RFQ stage it is important for them to understand the key features of the project including size, construction difficulty and revenue risk. With the final NEPA document having an effect on each of these items, there will be inefficiencies from having it incomplete.

At the other end of the process it is difficult to attract lenders (including TIFIA and PABs lenders) to a project financing, particularly one with revenue risk, if timing is subject to a NEPA process that is incomplete. On this basis, we would expect that the NEPA would need to be complete before financial close.

In reviewing the items that are complete and the items that are still in process we would make the following comments. We would suggest that the decision between a single transaction and multiple segments be made prior to the release of the RFQ. The preferred alternative right-of-way should be provided to bidders with the first draft of the RFP and the process should include an extension of time if the environmental process leads to a significant change in the preferred

alternative. We would also recommend that although the NEPA completion is likely required at financial close, to assure a competitive bid process it should be complete prior to the release of the final RFP. The timing between RFQ and final RFP is typically 9 -12 months. If the finalization of the NEPA process is expected to take longer than that, then we would recommend delaying the release of the RFQ or risk having to select from a smaller group of potential bidders. If the delay in the NEPA slows the right-of-way acquisition, that delay should be no longer than the time required to do design work before construction. Even with compensation, lenders will be uncomfortable with a significant NEPA driven delay that is already known at financial close.

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

Response: See Response to Question B2

4. **Question:** 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?

Response: While we would potentially only be a participant in an RFP process, our experience has been that a good RFQ response can be prepared and submitted in 60 days and an adequate response in 30 days.

The most important factor to meet an RFQ deadline is the teaming process. Most P3 projects involve a cohesive team of multiple equity investors, contractors, O&M providers and advisors. These teams are typically formed based on early indications from the Government (through industry discussions and RFIs like this one) that a potential procurement is on the horizon. The basis for the formation of these teams is an understanding of the key features of the project. Similar to our prior comments, if there is confusion about the key features of the project then teaming will often be delayed until there is more clarity. If this clarity doesn't come until the RFQ is released then the RFQ response process will need to include additional time to complete the teaming exercise - likely adding 1 to 2 months to the typical period of time.

5. **Question:** 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?

Response: The preparation of an RFP is a dynamic process that includes frequent discussions and input from the bidders to assure the best balance of risk transfer and the cost of risk transfer. In our experience from the release of the first RFP draft to the issuance of the final RFP these discussions typically take 6 – 9 months. Once the final RFP is released, from a financial perspective a minimum of 60 days is needed to complete financial modelling and lender technical advisor reports, obtain ratings, finalize lender commitments and get equity investment approvals needed to provide a committed bid.

6. **Question:** 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?

Response: We do not have a view on this question from a financial advisor perspective.

7. **Question:** 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.

Response: We do not have a view on this question from a financial advisor perspective.

8. **Question:** 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.

Response: It would be very difficult to obtain ratings and finance a project where right-of-way risk had been fully transferred to the developer. We have seen the situation where Government risks

have been managed by the concessionaire, so a process where the concessionaire managed the process of right of way acquisition process with their own staff would not be an unusual concept. The difficulty would arise if the concessionaire was also responsible for a parcel not being available on time and having responsibility for managing the cost and schedule risk of that event. As we noted in question a2 there is often a sharing mechanism built into contracts for low probability, high cost items that the Government wants to transfer to the Concessionaire. We believe that a right-of-way risk transfer would be achievable with a cap on the downside risk and the process built into the performance penalty mechanism.

C. TECHNICAL CHALLENGES

1. **Question:** 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.

Response: We do not have a view on this question from a financial advisor perspective.

2. **Question:** 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?

Response: We do not have a view on this question from a financial advisor perspective.

3. **Question:** 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.

Response: We do not have a view on this question from a financial advisor perspective.

D. CONTRACTUAL STRUCTURE

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

Response: In the United States, for greenfield revenue risk roads, the financing structure is fairly standardized at this point. The lowest cost of debt comes from the TIFIA loan program and USDOT sponsored Private Activity Bonds. Both of these structures require the senior debt to be investment grade rated by at least one of the rating agencies. This rating process defines the split between debt financing and equity financing and will be informed by the outcome of a traffic study prepared by the lenders technical advisor. The equity financing will typically be provided by the consortium that owns the developer. The number of investors and size of the equity investment will usually be established at the RFQ stage based on the expected size of the construction. If TIFIA and PABs are not available or insufficient in size, we would expect the financing to include a combination of long –term bank facilities and insurance company targeted private placements. While the sub-investment grade market is a potential alternative, its relative cost is usually too high to make it an economic alternative. There may be some benefit to using this market to substitute subordinated debt for equity but that structure is also unusual, especially when TIFIA financing is also utilized.

2. **Question:** 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?

Response: We believe that considerable inefficiencies would result if concession term was left to the RFP process. It should be included, at least in general terms in the RFQ process. Typically, the term is one of the items that is established based on the shadow model developed by the Government's financial advisor as part of the RFQ preparation process. An overly short term would make the cost of capital very expensive because of the minimal amortization and as we note below an overly long term provides little additional value to the State. The type of investor (developer) will be very sensitive to the form of the transaction and concession term will be a key feature. By not identifying the key features prior to RFQ bid, the Government risks short-listing firms that will not be the most competitive bidders on the final RFP.

In our experience a typical concession term for an availability payment transaction would be 30 years plus the construction period. This is typically the case because it is difficult to obtain cost competitive project financing at terms greater than 40 years. Lenders also demand a relatively short 'tail' (the time between the last principal payment and the end of the concession) in availability transactions.

The term is typically longer in a revenue transaction. This is often the case because the maximum value is often obtained with a refinancing that increases the quantum of debt as the traffic and revenue grows over time. The risk of traffic growth also requires a longer tail which compresses the amortization period in a project with a shorter concession. On the other hand, for terms greater than 60 years, there is little additional value to the authority because the NPV of those cash flows are so small and discounted at an equity rate of return. On this basis, we would expect to see a term of 40 – 60 years for a revenue transaction.

3. **Question:** 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.

Response: One of the key benefits of P3s is the ability to take advantage of bidder's innovations. We would recommend a process that allowed for both technical and financial innovations to be considered.

When considering other contractual concepts our recommendation would depend on the objectives of the State. There are a number of ways to reduce traffic risk to the concessionaire and reducing traffic risk would allow the concessionaire to pay a higher upfront amount (by allowing them to borrow additional amounts above those needed for construction). One method of doing this is to provide the concessionaire with a 'floor' revenue in the early years of the project if the traffic ramp-up takes longer than expected. This would increase the amount payable to the state but at the expense of the state taking on a greater portion of the traffic risk. The next policy question is whether the objective is to maximize the upfront amount or uses it to reduce tolls.

The State should also consider if their objective is to maximize the upfront amount, or the NPV of payments to them. In other toll road examples we have seen a revenue sharing mechanism above certain traffic levels. In that type of structure the State may receive a smaller upfront payment but the upfront of all the payments may be higher. Similar sharing structures that will drive the equity investor's view of value include debt refinancing gain sharing as well as the form of termination compensation (market or book based).

In some cases the State may want to reduce the value of the concession to get something else of benefit. One example of this is a performance penalty structure where the concessionaire has to 'pay' for closing existing lanes or causing traffic congestion during peak periods. Under this scenario they would potentially have to do work in a more costly way but the State would benefit from reduced complaints from the public about construction triggered traffic jams.

E. MISCELLANEOUS

1. **Question:** 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.

Response: The information and transparency provide in this RFI and in the recent industry session has been very helpful to considering this opportunity. We would encourage MDOT to provide updates as additional approvals are obtained or decisions on the structure of the transaction are completed.

2. **Question:** 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.

Response: We do not have a view on this question from a financial advisor perspective.

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

Response: We do not have any additional views on this question.

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

Response: While we have noted some structural and contractual features that we will improve on the process, we strongly believe that the proposed P3 methodology will provide the best outcome for this procurement. We are encouraged to see Maryland considering the use of P3s to provide timing, innovation and cost benefit to the taxpayers and commuters in the state.