

Maryland Department of Transportation

Response to Request for Information – Congestion Relief Improvements

December 20, 2017



PFM Financial
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December 20, 2017

Mr. Jeffrey T. Folden, P.E., DBIA
Chief, Innovative Contracting
MDOT State Highway Administration
Email address: l495_l270_P3@sha.state.md.us

Dear Mr. Folden,

pfm

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PFM Financial Advisors LLC ("PFMFA" or "PFM") is pleased to respond to the Maryland Department of Transportation's ("MDOT") Request for Information with respect to the Congestion Relief Improvements (CRI) for I-495 and I-270. PFMFA is an industry leader with functional expertise contributing to the financing of many complex transportation projects of similar size and scope to CRI. Over the past several years we have worked with issuers on diverse transportation improvements including the Alameda Corridor Transportation Authority (a 20-mile long rail cargo expressway that links the ports of Long Beach and Los Angeles), the Kentucky Public Transportation Infrastructure Authority's Downtown Crossing, the Bay Area Toll Authority (funder of the new San Francisco-Oakland Bay Bridge and other seismic retrofit projects), and the Chesapeake Bay Bridge-Tunnel District (presently in construction for a new parallel tunnel). The breadth of our experiences as a firm ensure that PFM can identify and correctly evaluate every possible avenue to create a financially feasible and market acceptable delivery plan for the CRI.

PFMFA requests to participate in a one-on-one meeting with MDOT in order to gain more information about MDOT's needs and to determine how the PFMFA team could assist MDOT in efficiently completing the CRI.

PFMFA is seeking to fulfill the role of financial advisor for the CRI. It is important for MDOT to have a strong financial advisor with vast experience engaged as early as possible to help maximize the success of a project of this complexity and scope. PFM is uniquely positioned to support MDOT given our role as the leading independent municipal advisor in the United States, our knowledge of MDOT as your financial advisor for the Consolidated Transportation Bonds and our work with the Maryland Ports Administration for the successful public-private partnership for the Seagirt Terminal. While the CRI is complex in terms of scope, execution and schedule, it will also be complex to finance given the nascence of managed lanes in the United States. PFM has extensive experience working with some of the largest transportation agencies in the US on multi-year financial plans that are based on traffic and revenue forecasts. In our role as an independent advisor, we evaluate the risks, costs, and benefits associated with all delivery options and gauge the appetite for those risks among private sector partners. We would perform analyses and provide advice, and ultimately assist MDOT through the completion of CRI, without predisposition to which development method is ultimately chosen. PFM has pioneered innovative financing structures for many of our clients for over 35 years. Our unparalleled breadth of knowledge of public funding for infrastructure provides us with a broad perspective on alternatives.

PFM has a team of unsurpassed experience that is available to assist MDOT:

David Miller, Managing Director, is head of PFM's national transportation finance practice and a leader in PFM's Public-Private Partnership ("P3") practice. David's services for major transportation clients involve many large and innovative financing efforts, including the Kentucky Public Transportation Infrastructure Authority for the Louisville Southern Indiana Ohio River Bridges project; the North Carolina Turnpike Authority's development and financing of five separate toll facility projects; Texas Department of Transportation (DOT) for the Grand Parkway project; and Chesapeake Bay Bridge and Tunnel District for its Thimble Shoal Tunnel project. David has extensively researched and used innovative financing programs, such as Transportation Infrastructure Financing and Innovation Act (TIFIA), P3 evaluation, "shadow tolls" for the Federal Highway Administration and revolving loan structures for state infrastructure banks (SIBs). His active transportation privatization and P3 efforts include engagements for Arizona DOT's South Mountain Freeway, the Jacksonville Port Authority, the Maryland Ports Administration (MPA) and the North Carolina DOT.

Milly Lee, Director, specializes in providing advisory services to transportation clients. She has served as the financial advisor to MDOT for your Consolidated Transportation Bonds and worked on the Seagirt Terminal P3 Project. In addition, she has served toll clients such as the Pennsylvania Turnpike Commission, the North Carolina Turnpike Authority, the Kentucky Public Transportation Infrastructure Authority and the Port Authority of New York and New Jersey. Ms. Lee serves as the day-to-day advisor for the Pennsylvania Turnpike Commission and has assisted the Commission with eight new money and refunding transactions totaling over \$2.8 billion since the beginning of 2016.

Mary Francoeur, Managing Director, joined PFM in 2016 with over 30 years in public finance as an issuer, ratings analyst, bond insurer and now municipal advisor. Mary has substantial credit experience with managed lanes projects, including reviewing for insurance SR-91 and Capital Beltway. She advised the Virginia Resources Authority on its Transportation Infrastructure Bank loan to Transurban for the I-395 HOT lanes loan.

Cristina Nieto, Director, who joined PFM in 2017 from Vinci, has over 10 years' experience developing and delivering Public Private Partnerships globally. Working at Cintra, Cristina was part of the team that implemented I-77 as the first P3 in the State of North Carolina (2015) and raised over \$300 million financing. She also worked on the \$1.5 billion North Tarrant Express Segments 3A / 3B (2013) project in Texas, securing up to \$805 million financing

Based upon our extensive experience in working with large, complex transportation agencies in forming optimal capital financing programs, our attendance at the industry forum and our review of the available planning documents with respect to the CRI, PFM has identified several challenges and opportunities for your consideration.

Project Delivery and Risk Allocations. Initial consideration of the project delivery method(s) will require determination of which, in fact, are viable given the project profile. PFM believes that the analysis of project delivery should be a logical step-by-step critical assessment of the financial and delivery risk of each component. We believe our proven, rigorous, objective, and market-accepted approach to be superior to that of other firms. Risk transfer should not be a point-in-time determination that will drive the entire program. Optimizing risk allocation should be an ongoing process throughout the project beginning with detailed financial and project modeling to

properly identify the potential cost of risks to careful counterparty evaluation of any contract. This determination of risk can best be completed through a structured project management approach, which PFM would apply.

Keys to Successful Project Delivery






Funding and Financing. MDOT has established a track record with managed lanes projects with the I-95 project. The CRI can provide an opportunity for self-supporting expansion.

Financing strategies will be built upon the procurement strategy: any procurement strategy that includes a “finance” component will be a combination of private equity and debt, while a procurement strategy that does not incorporate a “finance” component will be largely debt funded. There are several options for MDOT to access funding and/or financing; PFM will perform the comparative analyses that will enable MDOT to devise an optimal structure, informed by our breadth of experience with governmental organizations.

Importance of Planning and Modeling. The analyses that will underpin the plan will be critical to MDOT and will be key to achieving the public’s goals and objectives and will provide a yardstick to measure value.

A chart of our relevant experience as a firm is attached. Below we’ve included several brief case studies of toll revenue / managed lanes projects for which PFM has performed analysis:

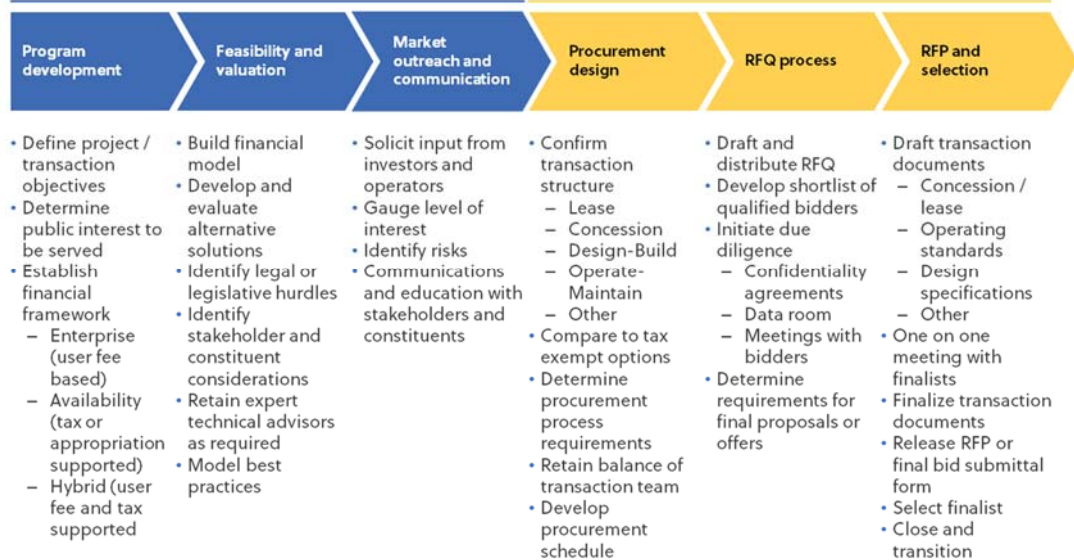
San Bernardino Association of Governments	
 <p>Work Period: 2011 - 2015 Location: San Diego, CA</p>	<p>Overview From 2011 through 2015 PFM worked with SANBAG evaluating the feasibility of constructing express lanes on I-10 and I-15 under both a public and P3 delivery.</p>
	<p>Major Project</p> <p><i>I-10 and I-15 ExpressLanes feasibility study</i></p> <ul style="list-style-type: none"> • Evaluated the feasibility of constructing ExpressLanes on I-10 and I-15 • Evaluated both public and P3 delivery options • Created financial models to analyze range of alternatives • Developed a financially feasible plan of finance funding both I-10 and I-15 • Integrated the ExpressLanes plan of finance with SANBAG’s long range financial plan to identify a maximum amount of local, State and federal funding available for both projects, as well as other projects in the plan, in addition to toll revenues • Developed a toll system financial plan that combines the toll revenue of all components of the projects and increased the overall funding capacity in comparison to standalone financings
	<p>Relevance to MDOT</p> <ul style="list-style-type: none"> • Development of financial planning models • Feasibility studies for both public and private delivery • Development of feasible plan of finance • Exploration of all available revenue sources • Integration within countywide expenditure plan

North Carolina DOT	
 <p>Work Period: 2013-Present Location: North Carolina</p>	<p>Overview PFM has performed extensive technical analysis and due diligence for NCTA/NCDOT in the process of creating financial feasibility plans for its toll projects.</p>
	<p>Project <i>I-77 HOT Lanes</i></p> <ul style="list-style-type: none"> • Toll Concession P3 managed lanes project procured by NCDOT • Funding provided by non-recourse toll revenue PABs, TIFIA loan, equity contribution and NCDOT upfront and operational (Developer Ratio Adjustment Mechanism “DRAM”) funds • PFM was engaged to review funding structured and financing documents as well as assist in negotiating pricing of the PABs • PFM also provided an independent review and verification of the concessionaire’s financing plan through creation of our own financial model
	<p>Relevance to MDOT</p> <ul style="list-style-type: none"> • HOT Lanes project • Pro-forma financing model • Use of TIFIA loans and PABs
Virginia DOT	
 <p>Work Period: 2016 Location: Virginia</p>	<p>Overview PFM reviewed P3 feasibility analysis conducted by KPMG and evaluated multiple financing scenarios for Virginia DOT regarding its I-66 Managed Lanes project.</p>
	<p>Project <i>I-66 Managed Lanes</i></p> <ul style="list-style-type: none"> • Comprised of high occupancy/toll lanes and associated facilities along the I-66 corridor • VDOT’s Office of Transportation P3 worked with KPMG to evaluate P3 feasibility • PFM was engaged to review KPMG’s work and develop public financing analyses • PFM developed financing scenarios including non-recourse toll revenue bonds, net pledge vs. gross with an O&M guaranty, TIFIA loan, Commonwealth credit enhancement of toll revenue bonds, and P3
	<p>Relevance to MDOT</p> <ul style="list-style-type: none"> • HOT lanes project • Review of P3 feasibility • Analyses of multiple financing options including toll revenue bonds, TIFIA loan, and P3

As a leader in public finance, PFMFA is prepared to help MDOT identify key project inputs and quantify risk assumptions for projects across various P3 delivery alternatives. We would create a detailed project finance and cash flow model and then compare the risk profiles and the financial impact for all procurement alternatives. The optimal solutions depend on MDOT’s financial, business and risk transfer goals. PFM is well qualified to provide a complete alternatives assessment. PFM would then assist MDOT throughout the procurement and financing process. The PFM approach to project delivery is synopsized in the following flow chart:

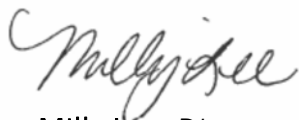
Analysis and valuation

Transaction development and execution



We look forward to the opportunity to discuss your plans and our expertise that will enable a successful execution of the program. Please reach out to either Milly Lee – leem@pfm.com - or Mary Francoeur – francoeurm@pfm.com. Our phone number is (212) 809.4212.

Sincerely,



Milly Lee, Director
PFM Financial Advisors LLC



Mary Francoeur, Managing Director
PFM Financial Advisors LLC

PUBLIC-PRIVATE PARTNERSHIPS EXPERIENCE						
	Evaluate Private Developer Proposals		Negotiate DBOM/ Development Agreement Program		Prepare Funding Alternatives Analysis	
	Project Revenue Bond Financing		Project TIFIA/ SIB Loan		Project Conduit/ Corporate-Backed Debt	
	P3 Asset Valuation/VFM					
Alameda Corridor Transportation Authority		◆	◆	◆		
Anaheim, City of		◆		◆		
Arizona DOT	◆	◆				◆
California High Speed Rail			◆			◆
Chesapeake Expressway Toll Road		◆	◆	◆	◆	◆
Chicago Skyway			◆			
Colorado Southeast Corridor Project	◆			◆		
Connecticut, State of - Highway System					◆	
Delaware DOT	◆		◆	◆	◆	
Florida DOT and High Speed Rail	◆	◆	◆			◆
Illinois Finance Authority (O'Hare Bypass Project)		◆		◆	◆	
Jacksonville Port Authority		◆	◆	◆	◆	◆
Las Vegas Monorail - Clark County RTC	◆	◆	◆			
Los Angeles to Pasadena Metro Blue Line	◆					
Maryland Ports Administration	◆	◆	◆	◆		◆
Massachusetts Turnpike Authority	◆					
Minnesota DOT	◆	◆	◆			◆
North Carolina State Ports Authority			◆			
North Carolina Turnpike Authority		◆	◆	◆	◆	◆
Osceola County, FL Expressway		◆	◆	◆		◆
Oregon DOT	◆					
Pennsylvania DOT / Pennsylvania Turnpike	◆		◆			◆
San Diego RTC				◆		◆
South Carolina DOT - Southern Connector	◆	◆	◆			
Texas Cotton Belt Commuter Rail			◆			◆
Transportation Corridor Agencies	◆	◆	◆	◆	◆	
Washington DOT New Partners Program	◆	◆				