Presolicitation Report to the Maryland General Assembly

Senate Budget and Taxation Committee,

House Appropriations Committee,

and the

House Ways and Means Committee

As required in
§ 10A-201 of the State Finance and Procurement Article

August 2013

The Secretary's Office
The Maryland Department of Transportation

ES. Executive Summary

In accordance with State Finance and Procurement Article §10A-201, the Maryland Department of Transportation (MDOT), on behalf of the Maryland Transit Administration (MTA), submits this public-private partnership (P3) presolicitation report for the Purple Line Light Rail Transit project (the Purple Line) to the Comptroller, the State Treasurer, the budget committees, and the Department of Legislative Services (DLS).

The proposed P3 solicitation for the project will be structured using a Design-Build-Finance-Operate-Maintain (DBFOM) delivery model. Implementing this P3 structure for the Purple Line will involve a long-term, performance-based agreement between MDOT/MTA and a private entity in which appropriate risks and benefits can be allocated in a cost-effective manner between the contractual partners. The private entity, also referred to as the concessionaire, will be responsible for key aspects of final design, construction, financing, operations, and maintenance of the Purple Line asset over an operating period of approximately 30 years. MDOT/MTA would retain ownership of the asset and remain ultimately accountable for the Purple Line and its public function. The concessionaire would be paid using an availability payment structure, which would be directly linked to the long-term performance of the Purple Line measured on a frequent basis. In an availability payment P3, the public agency pays the concessionaire milestone or construction progress payments during the construction period and regularly-scheduled payments, called availability payments, during the operating period of the P3 agreement. These payments to the concessionaire would be paid from a combination of sources including Maryland's Transportation Trust Fund (TTF) appropriations, federal grants, and local government contributions. MDOT/MTA would make deductions from these payments if the concessionaire does not meet pre-determined performance targets. This project delivery approach has been found to be advantageous for the Purple Line for the following reasons:

- **Operational factors:** The Purple Line is a natural stand-alone asset and the P3 approach will also increase the likelihood of consistently excellent, highly responsive service.
- **Risk transfer efficiencies:** The P3 will integrate various project elements into a single agreement that clearly outlines the optimal allocation of project risk between the public and private partners.
- **Whole life-cycle planning and cost optimization:** The P3 will provide greater incentive to make investment decisions that are optimized over the life of the asset.
- **Schedule discipline:** A P3 agreement structure focused on asset availability will provide strong incentives for the concessionaire to maintain schedule discipline during asset delivery.
- **Enhanced opportunities for innovation:** The P3 will provide the private sector with opportunities and incentives to propose state-of-the-art enhancements to the asset design and delivery approach that could benefit long-term operating and maintenance performance.
- **Potential financial value:** Due to the operational benefits, risk transfer efficiencies, life-cycle planning, scheduling discipline, and innovation opportunities of the P3 approach,

there is potential for long-term financial savings relative to a traditional project delivery approach.

MDOT and MTA have taken a series of steps over the past two years leading up to the decision to use a P3 delivery method for the Purple Line, including a thorough consideration of key project delivery risks and mitigation strategies. It has been concluded that delivery of the Purple Line using a DBFOM approach is consistent with project goals and the State's P3 policies. A Purple Line P3 project delivery team, led by executives from MDOT and MTA and supported by technical, legal, and financial advisory experts, is prepared to commence a robust, transparent, and fair competitive solicitation process for the selection of a Purple Line private partner. The solicitation process will be consistent with the framework outlined in COMAR 11.01.17 (MDOT's P3 Regulations) and will be submitted to the Board of Public Works (BPW) for approval before issuing a public notice of solicitation, currently anticipated for fall 2013.

1. Introduction

1.1 Purple Line Light Rail Transit Project Overview

The Purple Line is a 16-mile light rail transit line extending from Bethesda in Montgomery County to New Carrollton in Prince George's County. The project, estimated to cost $2.2 billion if delivered conventionally, has been planned so that it will:

- Improve connectivity and access to existing activity centers and planned development;
- Increase service for transit-dependent populations, connecting with Amtrak, MARC, and Metro;
- Provide faster and more reliable transit for the region's east-west travel market;
- Strengthen and revitalize communities in the corridor, which are projected to grow by more than 20 percent in the next 20 years;
- Support local, regional, and state policies and adopted master plans; and
- Increase potential for transit oriented development (TOD) at existing and proposed stations in the corridor as identified in local land use plans.

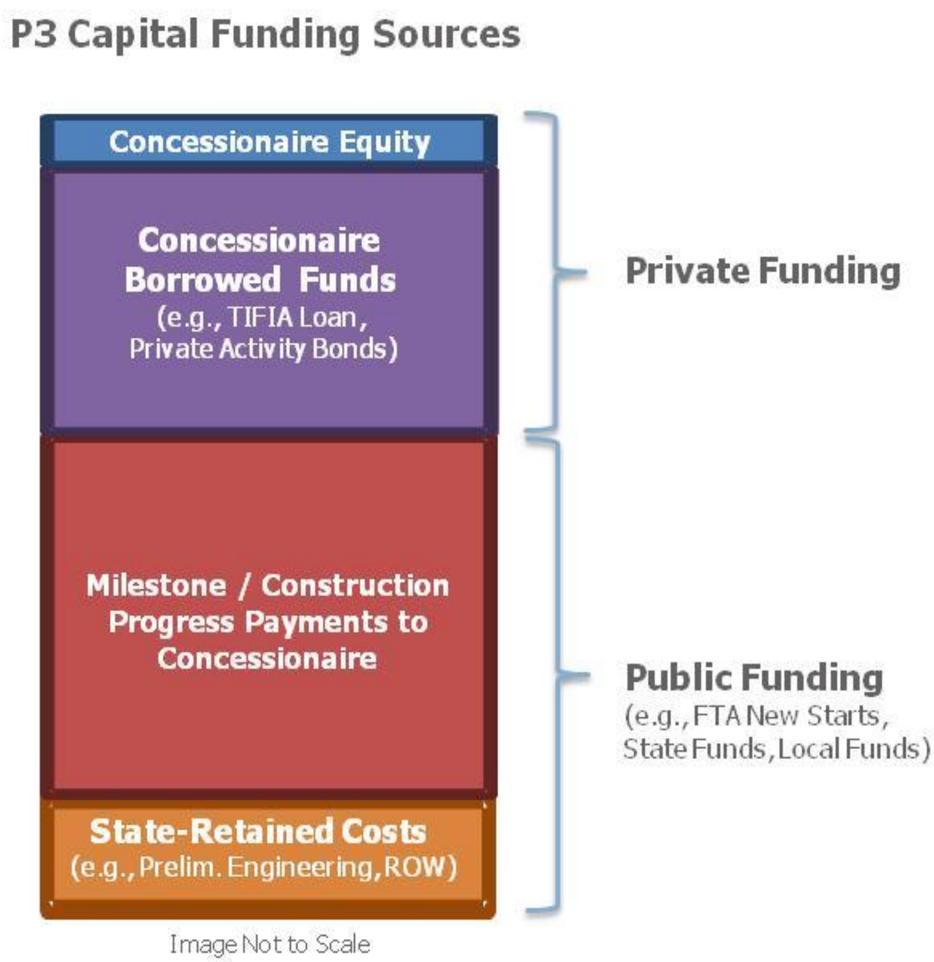
The Purple Line is a key transportation priority for the State of Maryland. The project's construction will bring jobs to Maryland companies and citizens and, once complete, provide for reliable transit connectivity between Bethesda and New Carrollton. Furthermore, it is an important part of the Smart, Green and Growing Initiative and meets Maryland's five long-term transportation goals. The five long term goals are:

1. Quality of service
2. Safety and security
3. System preservation and performance
4. Environmental stewardship
5. Connectivity for daily living

1.2 P3 Structure Proposed for the Purple Line

MDOT, on behalf of MTA, intends to pursue a P3 for the Purple Line using a DBFOM structure. This delivery method fits the State's legal definition of a P3 in that it is a long-term, performance-based agreement between MDOT/MTA and a private entity in which appropriate risks and benefits would be allocated in a cost-effective manner between the contractual partners. The private entity, also known as the concessionaire, would perform functions normally undertaken by the government, but MDOT and MTA remain ultimately accountable for the Purple Line and its public function. MDOT/MTA would retain ownership in the Purple Line and, through the P3 agreement, the concessionaire would take on additional responsibilities in determining how it is financed, developed, constructed, operated, and maintained over its life-cycle.

The Purple Line P3 project delivery team, led by executives from MDOT and MTA and supported by external subject-matter experts, is prepared to commence a robust, transparent, and fair competitive solicitation process for the selection of a Purple Line concessionaire. The concessionaire will finance a portion of the construction through a combination of equity and debt, potentially including a United States Department of Transportation (USDOT) Transportation Infrastructure Finance and Innovation Act (TIFIA) loan and/or Private Activity Bonds (PABs). The concessionaire will also be responsible for key aspects of design completion, construction, operation, and maintenance of the Purple Line at a specified level of service and will subsequently hand back the asset at a pre-defined level of condition and service. In return, MDOT/MTA will make payments to the concessionaire. These payments will consist of milestone or construction progress payments during construction and annual service payments, called availability payments, during the operating period of the P3 agreement. Deductions may be made from these payments if the concessionaire does not meet pre-determined asset completion or performance targets. The payments to the concessionaire will be paid from a combination of sources including TTF revenue appropriations, Federal Transit Administration (FTA) New Starts grants, and local government contributions.



Such an approach will ensure successful delivery of the Purple Line, creating greater opportunities for innovation and efficiency. By also holding the concessionaire responsible for long-term operations and maintenance, as well as handback condition, there is incentive for the concessionaire to manage risks and deliver an asset that is well-operated and maintained over the long-term.

A description of the preliminary financing structure (including a more detailed explanation of milestone, construction progress, and availability payments) is presented in Section 5, and the preliminary P3 agreement structure is presented in Section 6 of this presolicitation report.

2. Benefits of P3 Delivery Method

A P3 due diligence effort considered a wide range of policy, operational, and financial factors in assessing whether to use a P3 delivery method for the Purple Line instead of a traditional project delivery method. This analytical process is described in greater detail in Section 4 of this presolicitation report. Based on the findings of these analyses, the following factors support the use of a P3 delivery method for the Purple Line:

1. **Operational factors:** The Purple Line is a natural stand-alone operation. There is no operator in the Washington region which might operate the Purple Line. Other transit and rail providers in the Washington area, such as the Washington Metropolitan Area Transit Authority (WMATA), have not expressed interest in operating and maintaining the light rail system. The distance of the project from MTA's Baltimore operations means stand-alone administrative, supervisory, and maintenance operation would need to be created if the MTA were to operate the Purple Line.

   Since the concessionaire incentives of a P3 agreement are strongly linked to asset performance, a DBFOM approach will also increase the likelihood of achieving enhanced service delivery and performance on the Purple Line. Through the use of single contract accountability and strict payment deductions for non-performance, the following types of benefits could be consistently achieved:

   - Strong, reliable on-time performance of the service.
   - Safe and clean stations and vehicles.
   - Enhanced customer service.

2. **Risk transfer efficiencies:** A DBFOM approach integrates various project elements into a single P3 agreement that clearly outlines the optimal allocation of project risk between the public agency and the concessionaire. For instance, under a traditional project delivery approach, MDOT/MTA faces the full responsibilities and related risks of insufficient coordination and integration among the multiple project delivery contracts. This is mitigated by the P3 approach, which consolidates a range of project responsibilities to a single legal entity (the concessionaire), effectively transferring more coordination and integration risk to the concessionaire. Such risk transfer results in a lower overall risk of schedule delays and, as a result, a lower risk to MDOT/MTA of cost overruns. For instance, if there is a construction delay not caused by certain well-

defined public actions (so, for example, not including a public request to expand the scope of the project), the concessionaire assumes the cost impact of the schedule delay. Similar risk transfer efficiencies will be achieved for the operations and maintenance of the asset.

3. **Whole life-cycle planning and cost optimization:** In a DBFOM, the concessionaire that designs and constructs the project will also be responsible for operations and maintenance over the long-term. The concessionaire is also contractually responsible for handing the project back to MDOT/MTA at a pre-defined level of service and quality. Consequently, the concessionaire will have greater financial incentive to make investment decisions that are optimized over the life of the project rather than the incentives contractors have with traditional delivery methods.
4. **Schedule discipline:** A P3 agreement structure focused on asset availability provides clear incentives for the concessionaire to maintain schedule discipline during construction. As detailed in Section 5 of this presolicitation report, the concessionaire is paid through a combination of milestone payments or construction progress payments during the construction period and availability payments during the operations period. The structure of these payments and the schedule on which they are released will create incentives for the concessionaire, especially the equity partners, to enforce strict construction schedule adherence.
5. **Enhanced opportunities for innovation:** In a P3 arrangement, in contrast with traditional project delivery methods, the concessionaire is required to provide project assets and services according to performance-based specifications. The P3 agreement's technical provisions describes "what" is to be built but does not, for most of the work, specify the means and methods on "how" to build it. As a result, the concessionaire is afforded flexibility in how it meets the "what" performance requirements. This approach provides private sector proposers with opportunities and incentives to seek approval to use alternative methods of design, construction, operations, and maintenance practices that could improve long-term asset performance. The multi-phase P3 solicitation process envisioned for the Purple Line will be structured to encourage this private sector innovation, while adhering to mitigation commitments made by MTA in the context of the National Environmental Policy Act (NEPA).
6. **Potential financial value:** It is estimated that a P3 approach could result in significant life-cycle costs savings for the Purple Line. The MTA evaluated a wide range of delivery alternatives for the Purple Line project. A Value-for Money (VfM) analysis was conducted to compare the value to the State of delivering the project under a 35-year DBFOM concession against a traditional design-bid-build (DBB) approach. More precisely, the VfM aimed to answer whether the value of cost savings achievable under a DBFOM through risk transfer, risk mitigation, and life-cycle cost efficiencies is greater than the cost of capital required by investors. To do so, the VfM compares the risk-adjusted costs to the State over a 35-year period under traditional DBB contract with MTA operations using pay-as-you-go state and federal funds (known as Public Sector Comparator or PSC) with the expected costs to the State if the project were delivered

under a DBFOM option, plus any State-retained direct costs and risks. The DBFOM option includes pay-as-you-go state and federal funds, tax-exempt debt, subsidized federal loan, and private equity. The analysis concluded that the DBFOM alternative can offer up to 20 percent in cost savings to the State compared to the PSC, given the current scope definition, level of detail of the cost estimate and risk assessment as of May 2012 and the assumptions presented in this synopsis.

Alternate PSC scenarios based on design-build (DB) solicitation with various public financing options were also analyzed. Potential cost savings for these options ranged from 8 to 16 percent of the PSC alternative. None of these alternatives were as potentially cost effective as the DBFOM solicitation.

It is important to note that the VfM does not predict that the construction cost of the project will be 20% less than traditional estimate. The potential net present value of the savings of up to 20% is for the entire project, over its life, including operations and maintenance, and is compared to what the project might have otherwise cost if implemented in a traditional method.

Financial value from a P3 delivery method for the Purple Line could be derived from many of the factors already enumerated above, including operational benefits, risk transfer efficiencies, life-cycle planning, schedule discipline, and innovation opportunities. Despite the higher cost of private financing, MDOT expects the efficiencies gained by transferring risk and the whole life-cycle responsibilities to the concessionaire will make the project less expensive than if it were delivered using traditional methods. Additional factors influencing the long-term financial benefits of a P3 may include:

- **An efficient management structure during the operating period.** The concessionaire will be responsible for most key elements of Purple Line operations and maintenance and will be incentivized to propose an efficient management approach. As long as all contractual performance requirements are met, the concessionaire will have the flexibility to streamline its management structure as necessary as well as recruit highly qualified employees. MTA will not be required to significantly increase its staffing to perform monitoring and oversight activities during the concession period.
- **Vehicle manufacturer's expertise in maintaining the vehicles.** In a P3, the company that manufactures the rail vehicles typically will be part of the concessionaire's team and remain active in vehicle integration and maintenance throughout the concession term. With traditional delivery methods, in-house, on-site expertise from the vehicle designer and manufacturer is generally not available to the staff maintaining the vehicles.

Additionally, from a financial perspective, the Purple Line is a good size for a P3—large and complex enough that it has potential for innovation and cost savings and it will benefit from assigning long-term responsibility to a single concessionaire, but not too large that it deters proposers or requires cost-prohibitive availability payments.

3. Risk Mitigation and Other Considerations

3.1 Mitigation of Risks to the State

While a P3 has potential for many benefits on the Purple Line and it can help the State transfer more risk to private partners than would be possible with traditional delivery methods, the P3 approach cannot eliminate all risk from a project. MDOT/MTA recognizes risks exist in all large infrastructure projects, and is actively managing risks with the use of risk management plans and risk mitigation measures. It is important to recognize that the P3 approach still requires compliance with all federal and state laws and regulations. The key risk mitigation measures planned for a Purple Line P3 are as follows:

- **Emphasize performance criteria:** Leaving insufficient flexibility in the Request for Proposal's (RFP's) requirements, particularly the technical provisions, is a risk to the value of the P3, as over-specification would limit the ability of the private entities to innovate. To mitigate this risk, MDOT/MTA intends to incorporate the widespread use of performance criteria (rather than specify a rigid design for every single detail). Performance specifications maintain the focus on the State's desired outcomes (the "what") while providing additional flexibility in the details used to achieve the outcomes (the "how"). Performance criteria can be used without changing the general parameters of the project (e.g., the use of light rail technology, general alignment, number of stations).
- **Set realistic requirements for the concessionaire:** As with other project delivery methods, imposing excessive contractual burdens on the concessionaire would ultimately result in higher costs for the State. To mitigate this risk, MDOT/MTA intends to strike a balance in defining the concessionaire's obligations and responsibilities so that they are consistent with market and industry standards. Because of the long-term nature of the contract, the private concessionaire is a partner in the requirements and processes.
- **Maintain clear and effective communications to support the following:**
    - **Schedule:** Examples of potential delays include the State not delivering right of way (ROW) parcels to the concessionaire on-schedule or a third-party (e.g., utility company) not providing timely actions or reasonable cooperation to the concessionaire. These risks exist under any project delivery method, but the potential cost of delays may be somewhat larger if they impact the concessionaire's critical path. Property acquisition risk will be retained by the State and MDOT/MTA is responsible for timely completion of necessary third-party agreements. To mitigate these risks, MDOT/MTA has developed a ROW acquisition plan, has identified relevant third-parties, and has started to enter into required agreements.
    - **Stakeholder Expectations:** MDOT/MTA has been working closely with stakeholders throughout the project development process in an effort to address

stakeholder requests and concerns early. The concessionaire will be required to follow the relevant stakeholder agreements. While the P3 agreement will include a process for MDOT/MTA to direct the concessionaire to make changes, the process can be time-consuming and add costs that MDOT/MTA will be accountable for outside the P3 agreement. Further, while traditional construction contractors are concerned about their impact on communities, a concessionaire is concerned about both the current impacts as well as their future relationship with stakeholders. The concessionaire becomes part of the communities for the entire length of the concession period.

- **Market Interest:** Strong market competition during the P3 bidding process is necessary to achieve the best value for the State. For this reason, MDOT/MTA seeks to encourage and support strong market interest throughout all stages of the solicitation process. Private entities often spend $10 million or more of their own funds in preparing a P3 proposal for a project like the Purple Line, which is considerably more than the cost of proposals for traditional project delivery methods. As such, private entities generally are more cautious about investing their funds in a proposal if they perceive potential for a solicitation to be cancelled. Therefore, it is important for the State to generate interest in the project, consider industry precedent when preparing the P3 agreement provisions, and address key policy issues (for example, BPW approval) upfront in the solicitation process.

3.2 Workforce, Economic Development, and Environmental Considerations

3.2.1 Workforce/Labor Considerations

MDOT/MTA seeks to maximize the economic benefit of the project both in the near-term (design and construction) and in the long-term (operations and maintenance). MTA estimates that the Purple Line will create more than 7,000 direct and indirect construction jobs. More than 2,600 of those jobs will be created just in the category of laborer and the nine most likely skilled trades to be used on the Purple Line. Thousands more jobs will be filled by construction foremen and supervisors, architects, engineers and related positions, administrative personnel, inspectors, etc. It can be expected that with other major transportation projects occurring simultaneously in the Maryland/D.C./Virginia area, there may be a shortage of skilled tradespeople at any given time during the construction period. In order to address this particular challenge, MDOT/MTA intends to evaluate (along with many other factors) a concessionaire’s proposed approach to labor stability and efficiency.

In implementing the Purple Line Economic Empowerment Program, MDOT/MTA has identified the following policy objectives:

- Workforce diversity reflective of the region in which the project is being constructed
- Workforce development that builds the skills of area residents for positions throughout the life of the project and beyond

- Maximum use of local and small businesses
- Maximum use of disadvantaged businesses enterprises
- Labor stability and the prevention of labor disputes
- Apprenticeship and hiring opportunities

Delivering the Purple Line as a P3 provides the concessionaire with the opportunity to balance and calibrate these objectives over a multi-year period. At each step of the solicitation process, proposers will be required to respond to the issues above in a more specific manner. During the Request for Qualifications (RFQ) phase, a proposer might be asked to identify their successes and challenges on previous projects in the areas of labor, workforce and local/small businesses; the RFP might identify specific goals to be met and ask for the proposer's plan to achieve those goals; and, upon commercial close, the final P3 agreement might outline certain commitments regarding appropriate phases of the project (design, construction, operations/maintenance).

3.2.2 Disadvantaged Business Utilization

As a recipient of federal funds for the Maryland-National Capital Purple Line, MTA must comply with 49 CFR Part 26. This program encourages the use of Disadvantaged Business Enterprises (DBE) on federally-funded projects. The selected concessionaire will be expected to take all necessary and appropriate steps to provide DBEs with fair and reasonable opportunities for meaningful and substantial participation in the P3 Agreement.

MDOT/MTA is considering DBE and Small Business Enterprise (SBE) utilization goals as appropriate for each phase of the project and in a manner consistent with 49 CFR 26. MTA and the selected concessionaire will work with local business development organizations to identify needs and certification assistance programs for DBE and SBE capacity where a shortage of firms might exist, educate firms regarding the P3 project delivery method, and market contracting opportunities. Throughout the life of the project, required compliance procedures will be in place to ensure that the concessionaire is meeting the State's policy objectives.

3.2.3 Project Labor Agreement considerations

Presidential Executive Order 13502 provides that "In awarding any contract in connection with a large-scale construction project, or obligating funds pursuant to such a contract, executive agencies may, on a project-by-project basis, require the use of a project labor agreement by a contractor where use of such an agreement will (i) advance the Federal Government's interest in achieving economy and efficiency in Federal procurement, producing labor-management stability, and ensuring compliance with laws and regulations governing safety and health, equal employment opportunity, labor and employment standards, and other matters, and (ii) be consistent with law." MTA is currently conducting an analysis of considerations in determining the use and extent of a Project Labor Agreement on the Purple Line.

3.2.4 Federal labor considerations

Since federal transit funding, in the form of an FTA New Starts grant, will be used for the Purple Line, it will be important for project delivery to be consistent with key federal labor provisions including, but not limited to:

- Section 13(c) is included in the Federal Transit Law, and is located at Section 5333(b) of Title 49 of the U.S. Code (49 U.S.C. § 5333(b)). As a general rule, Section 13(c) protects transit employees who may be affected by Federal transit funding.

- Under 49 U.S.C. Section 5333(a), Davis-Bacon Act prevailing wage protections apply to laborers and mechanics employed on FTA assisted construction projects. The Davis-Bacon Act requires contractors to pay wages to laborers and mechanics at a rate not less than the minimum wages specified in a wage determination made by the Secretary of Labor. The Davis-Bacon Act also requires contractors to pay wages not less than once a week. State laws may also govern the payment of wages on construction projects.

3.2.5 Economic development considerations

The Purple Line is expected to support economic development in both Montgomery County and Prince George's County. The corridor is already densely developed but opportunities for new development remain, and there are several plans for new development around proposed Purple Line stations. By improving connectivity and accessibility in the corridor, the Purple Line will have a positive economic impact for Maryland's residents and businesses. In general terms, the choice of project delivery method typically does not have an effect on the extent of economic development generated by a project. However, by supporting the timely and efficient delivery of the Purple Line, a P3 can help ensure that project-related economic development benefits begin accruing as soon as possible.

3.2.6 Environmental considerations

- In accordance with State Finance and Procurement Article § 10A-105, the Purple Line shall comply with the following provisions, to the extent that the provisions are applicable:
    - § 3–602.1 of State Finance and Procurement (Green Building); and
    - The Environmental Article.
- MDOT/MTA will maintain control over all environmental issues related to the Purple Line asset, both during construction and for the duration of the P3 agreement.
- MDOT/MTA will complete the NEPA process, which will conclude before the Purple Line RFP is issued. The concessionaire will be required to comply with all federal, state, and local environmental requirements. If a proposed innovation requires additional environmental reviews, the concessionaire assumes this risk.

3.2.7 Local government considerations

MDOT/MTA expects that local governments will contribute a share of the construction cost of the Purple Line, in support of in-kind contributions, milestone payments, construction progress payments, and availability payments. The precise level of contribution is currently under negotiation through Memoranda of Understanding (MOUs) and will be reflected in the Consolidated Transportation Program (CTP), as appropriate.

4. Steps to Reach P3 Project Delivery Decision

MDOT/MTA has taken a series of steps over the past two years leading up to the decision to use a P3 delivery method for the Purple Line. The key steps in this process, which include the application of domestic and international best practices in evaluating alternative project delivery and financing methods, are as follows.

- As part of the regular project planning process, in 2011 MDOT/MTA began a preliminary investigation of potential delivery options available for the Purple Line. The investigation was performed with consultant support. The options considered ranged from traditional delivery methods such as DBB to a DBFOM P3 approach. Research on domestic and international experience with P3s, along with a qualitative assessment of the Purple Line, suggested P3 alternatives merited further consideration.
- As a next step, MDOT/MTA prepared a quantitative VfM analysis for the Purple Line. While never used as the sole consideration in whether a project should pursue a P3, it is common for public agencies to perform a VfM analysis when considering P3 delivery for a project and is considered a best practice by the USDOT. As described earlier, a VfM analysis considers both the design and construction costs, as well as the long-term cost of a project (operations, maintenance, and capital replacement), and compares the net present value of the project as a P3 versus traditional public delivery of a project. Traditional public delivery includes a DBB approach for design and construction and then separately and apart, operations, maintenance, and capital replacement of project elements. All of these separate components of the DBB approach require at least one separate contract each. The Purple Line VfM analysis found that further consideration of P3 alternatives could be warranted for the Purple Line.
- In November 2012, MDOT/MTA held an internal workshop to assess the State's qualitative goals for delivering the Red Line and Purple Line projects. A P3 approach was found to be supportive of the State's delivery goals for the Purple Line.
- In December 2012, MDOT/MTA held a Red Line and Purple Line Project Delivery workshop where independent, outside experts and members of the project team discussed the practical implications of alternative delivery methods, as well as the advantages and disadvantages of delivery options in the context of each particular project. This workshop included senior staff from MDOT and MTA, as well as outside industry experts on transit project delivery representing public agencies across the country. The independent experts represented project delivery experience at Los Angeles Metro, Amtrak, New Jersey Transit, Metropolitan Washington Airports Authority (Metrorail Silver Line), and the Denver Regional Transit District. A key finding

of this workshop, including the general assessment by the independent experts from other public agencies, was that Purple Line would be a good candidate for a P3.

- On April 7, 2013, Governor O'Malley signed into law a new framework for P3s in Maryland. Spearheaded by Lt. Governor Brown, the law greatly increased the transparency and predictability associated with Maryland's P3 process and among other items, required that a detailed presolicitation report be submitted to the BPW, Treasurer, Comptroller, and Legislature regarding the merits of pursuing a project as a P3.
- On April 9, 2013, MDOT/MTA requested information from the transportation industry regarding project delivery and financing for the Purple Line and Red Line projects. This request is commonly known as a Request for Information (RFI). MDOT/MTA received responses from 44 companies (including Maryland MBE firms) representing potential investors, designers, construction contractors, vehicle manufacturers, and operations and maintenance providers. Responses to the RFI were due on May 8, 2013.
- On May 15, 2013, MDOT/MTA held a Purple Line industry forum, which was attended by approximately 300 people. The forum was comprised of two components: (1) presentations made by MTA and MDOT officials and (2) one-on-one meetings requested by the private sector so that they could provide information and ask questions regarding the project. The presentations can be found at www.industryforum.purplelinemd.com.
- Feedback received from the RFI and Industry Forum indicated strong marketplace interest in a Purple Line P3. The key factors include the size of the project, opportunities for innovation and value, operational independence from the MTA core system, the status of the project in the NEPA process, Maryland's strong financial management, and Maryland's commitment to the project.
- In July 2013, MDOT adopted COMAR 11.01.17: Public-Private Partnership Program (MDOT P3 Regulations) that formally establish an MDOT P3 Program, as well as describe and provide a process for the development, solicitation, evaluation, award, and delivery of P3s in the Department's Program. These were developed in accordance with the agency P3 regulation requirements outlined in Ch. 5, Acts of 2013, State Finance and Procurement Article § 10A-103.
- In July 2013, MDOT completed the P3 screening process for the Purple Line outlined in the P3 regulations. This process included both high-level and detailed-level screening elements, as well as formal approval by the Secretary to submit a presolicitation report.

5. Proposed Financial Structure and Concepts

5.1 Availability Payment Structure

5.1.1 Overview of the Availability Payment Concept

In an availability payment P3, the concessionaire is responsible for key aspects of design, construction, operations, and maintenance of the asset, as well as financing a portion of construction. In return, the public agency pays the concessionaire milestone/construction progress payments during the construction period and annual availability payments during the operating period of the P3 agreement. The public agency makes deductions from these payments if the concessionaire does not meet pre-determined performance targets. In addition, the concessionaire may be required to fund project needs during the operating period if performance metrics are not met.

In general, availability payments are used for:

- Projects that require public subsidy;
- Projects for which the public agency wishes to retain the project-related revenues; or
- Projects for which the public agency chooses to retain the risk of revenues being less than forecasted.

Because transit assets, like the Purple Line, have operating, maintenance, and capital replacement costs that are higher than the fare revenues generated by the asset, transit assets require additional public funding during the operating period, regardless of the project delivery method.

When each proposer submits its proposal in response to the competitive RFP for an availability payment P3, a key part of each proposer's bid are the amounts for the availability payments. The annual availability payments amounts proposed are based on anticipated costs during the construction and operating periods (including capital replacement and handback requirements). To fund its portion of the project costs, the concessionaire borrows funds and contributes its own equity (cash). The concessionaire repays its borrowed funds and cash investments with a portion of payments it receives from MDOT/MTA. The payments to the concessionaire would be paid by MDOT/MTA from a combination of public sources, including TTF revenues, grants such as FTA New Starts, and local government contributions.

To provide better value for the public, the public entity typically provides the concessionaire with a portion of the funding needed for construction, as long as the concessionaire demonstrates adequate construction progress. This public funding during construction is often referred to as "milestone payments" or "construction progress payments". This approach helps reduce not only the total amount the private entity must finance, which reduces the size of the availability payments, but also the concessionaire's interest costs during construction on the borrowed funds. In a DBFOM with availability payments, the public agency always holds the concessionaire responsible for financing a portion of construction, as the use of private financing ensures the private partner has "skin in the game" and greater incentives for optimizing whole life-cycle costs from early in their design and construction activities.

The public agency retains legal ownership of the asset throughout the P3 agreement period. Most availability payment agreements have a 25- to 35-year operating period. At the end of the agreement, the concessionaire is required to hand back the asset to the public agency in a pre-determined condition. The public agency can then re-compete for a new contractual arrangement or use public employees to operate and maintain the project going forward.

5.1.2 Anticipated Use of AP Structure for the Purple Line

MDOT/MTA intends to use an availability payment P3 approach for the Purple Line. The availability payments will be subject to performance deductions, which will provide strong incentives for the concessionaire to deliver high quality service. MDOT/MTA will retain ownership of the Purple Line throughout the life of the P3 agreement and the assets will be handed back to MDOT/MTA at the end of the operating period.

With the P3 approach on the Purple Line, MDOT/MTA will retain certain responsibilities. As is typical in many P3s, MDOT, as the public owner, will complete certain environmental documentation, acquire right of way, provide public sector quality assurance and oversight, collect fares, and provide security. It can also specify the general appearance of stations and other project elements, although providing proposers with more design flexibility tends to increase the potential for innovation and cost savings. Section 6 of this presolicitation report presents the preliminary concept of the general agreement terms and allocation of responsibilities.

When the concessionaire either demonstrates that specific construction tasks are completed or satisfactory construction progress has been made, MDOT/MTA intends to provide public funding to the concessionaire in the form of either milestone or construction progress payments, or a combination of the two. If milestone payments are used, the payment only occurs after a specific deliverable has been completed. If construction progress payments are used, these are based on regular percentage payments throughout the construction period. In either case, these payments will help fund a portion of the concessionaire's construction costs. The next section of this presolicitation report presents the anticipated funding sources for these construction-related payments.

In the currently anticipated P3 approach, MDOT/MTA intends to fund the availability payments with revenues from the TTF. The availability payments would be subject in each year to appropriation by the Maryland General Assembly. Section 5.2.4 of this presolicitation report presents additional details on the currently anticipated approach to the availability payments.

MDOT/MTA currently intends to hold the concessionaire responsible for operating and maintaining the project for approximately 30 years after construction is complete. The contract will include terms that allow the State to terminate it before the end of the P3 agreement time period (e.g., in the event the concessionaire does not meet the minimum performance requirements or for convenience of the State).

5.2 Anticipated Funding Sources

Project development and construction costs can be categorized as either costs that are retained by MDOT/MTA or those that are anticipated to be part of the P3 contract. For those that are part of the P3 contract, the costs will be paid by MDOT/MTA making milestone/construction progress payments and the concessionaire privately funding the balance (which will be ultimately repaid by MDOT/MTA using the availability payments).

5.2.1 State-retained Costs During Development and Construction

MDOT/MTA has already funded the costs of Purple Line project planning, preliminary engineering, and most of the federal environmental documentation. MDOT/MTA anticipates it will incur additional costs for Purple Line project development, including costs for the completion of the federal environmental documentation, the P3 solicitation process, right of way acquisition, and public sector quality assurance and oversight during construction. These are all considered state-retained costs. To date MDOT/MTA has used funding from the TTF and a $3 million FTA New Starts earmark for these costs. For the remainder of the state-retained costs, MDOT/MTA anticipates using funding from the TTF, a portion of the anticipated FTA New Starts grants, and local government contributions.

5.2.2 Milestone/Construction Progress Payments to the Concessionaire

MDOT/MTA will provide the concessionaire with milestone /construction progress payments as the concessionaire demonstrates adequate construction progress and potentially for a period of time after construction is complete. MDOT/MTA intends to use a variety of funding sources for these payments, including TTF revenues, FTA New Starts grant funding, and local government funding contributions.

5.2.3 Private Funding Provided by the Concessionaire

The concessionaire's funding is derived from two basic sources: private equity (cash) and borrowed funds. The concessionaire borrows funds from third parties (i.e., entities other than the State) and commits to repay the borrowed funds with revenue from the availability payments. In availability payment P3s, it is common for the concessionaire to borrow 80-90 percent of its funding while providing its own equity for the remainder of the private funding.

It is currently anticipated the concessionaire would raise borrowed funds from two sources: a TIFIA direct loan and/or tax-exempt private activity bonds (PABs). TIFIA loans are direct loans from the USDOT that offer flexible repayment terms and lower than private sector borrowing costs. Because of these attractive features, most transportation P3s seek TIFIA loans from the USDOT. MDOT/MTA recently submitted a TIFIA Letter of Interest to the USDOT in an effort to secure a formal invitation for the eventual concessionaire to apply for a TIFIA direct loan.

Of the $2.2 billion capital cost for the Purple Line, MDOT/MTA currently anticipates private funding will be in the range of $400 million to $900 million. MDOT/MTA will determine a narrower range of required private investment in the Purple Line before release of any final solicitation documents. Ultimately, both the private equity and the concessionaire's borrowed funds are repaid by public funds, either through initial milestone payments, construction progress payments, or a combination of both, and later through availability payments. These public funds include a combination of sources including TTF revenues, grant funding such as FTA New Starts, and local government contributions.

5.2.4 Preliminary Analysis on Debt Affordability

MDOT/MTA, in consultation with the Department of Budget and Management (DBM), has performed a preliminary analysis of whether the Purple Line P3 availability payment structure might have an impact on the State's tax-supported debt (also known as capital debt affordability). During this process, MDOT/MTA has also sought advice from the State Treasurer's Office, the Comptroller's Office, and the Department of Legislative Services (DLS). Based on the preliminary concept for the Purple Line P3 financial structure and preliminary financial analyses performed by MDOT/MTA, there is strong rationale to expect that the Purple Line P3 transaction will not have an impact on the State's capital debt affordability. An explanation of this preliminary assessment is presented in this section. MDOT/MTA will be requesting that the State's Capital Debt Affordability Committee (CDAC) make a formal determination on this issue.

MDOT/MTA currently intends to pay the Purple Line concessionaire during the operating period through the use of availability payments. These payments would be from funds appropriated from the TTF. Although the appropriated funds are not limited to any particular source of MDOT/MTA revenues, it is intended that MTA operating revenues, which currently generate approximately $140 million per year, would be the source of revenue associated with Purple Line availability payments. With the recent legislative mandate for future MTA fare increases, baseline ridership forecasts for the MTA system, and additional fare revenues generated by the Purple Line, MTA operating revenues are anticipated to exceed $200 million by the first full year of Purple Line operations in 2021. MDOT/MTA is considering a range of potential financing structures, but none of the options currently under consideration would result in Purple Line availability payments exceeding MTA operating revenues.

As described earlier, the Purple Line availability payments, which are agreed to in the P3 agreement, are structured to repay the private concessionaire based on project performance. In turn, the private concessionaire uses the availability payments to repay its borrowed capital (i.e. debt service), operating and maintenance costs, and other authorized uses and expenses.

Even though the project debt will be held by the private partner, MDOT/MTA recognizes a portion of its availability payments will ultimately be used for borrowed capital repayment. Accordingly, MDOT/MTA intends to classify the portion of the availability payments used for the concessionaire's debt service as non-traditional MDOT debt. These payments would not be included in the State's tax-supported debt calculations because the intended funding source for the payments (MTA operating revenues) is not a State tax. MDOT/MTA will be requesting that the CDAC make a formal determination on this issue. Additionally, based on the currently anticipated financing, the forecasted fare revenues generated by the Purple Line are estimated to be on average greater than the concessionaire's debt service. Therefore, even though MTA would collect and account for the Purple Line fare revenues, the MTA revenues generated by the project are sufficient to cover the borrowed capital repayment share of the availability payment.

MDOT has previously undertaken three similar transactions that are categorized as MDOT non-traditional debt, but not included in the capital debt affordability calculations. These include certificates of participation for renovations to facilities at Baltimore/Washington International Thurgood Marshall Airport (BWI Airport); construction of the parking garage at the BWI Airport Rail Station; and construction of a warehouse at the Port of Baltimore. Similar to the Purple Line concept, for each of those transactions, the debt service was paid by an annual operating appropriation and a non-tax revenue source served as a backup pledge.

6. Preliminary Contract Concepts/Working Assumptions

6.1 Term Length (Range of Years)

MDOT/MTA is currently estimating a 35-year contract, including approximately five years of construction and thirty years of operations. Based on refinements throughout the solicitation process, it is possible that the operating period could be modified within the range of 25 to 35 years.

6.2 Performance Measures Concept

A detailed set of operational performance measures will be developed and included in the solicitation documents. The contract will ultimately include many performance measures, but anticipated performance measures are generally expected within the following general categories:

- On-time performance (e.g., whether trains depart and arrive at specified time points within an acceptable number of minutes)
- Availability of rail vehicles (e.g., whether vehicles required for specified level of service are ready)
- Quality of passenger environment (e.g., cleanliness of cars and stations, reliability of escalators/elevators, vehicle temperature, lighting)
- Availability of stations (e.g., removal of snow and ice, standing water on pedestrian paths, ADA access)
- Safety (e.g., safety procedures compliance, accident prevention)

6.3 Setting Fares

MDOT/MTA will retain responsibility for setting fares on the Purple Line.

6.4 Revenue Collection

It is anticipated that a public entity will perform the fare collection function for the Purple Line. This entity might be the MTA, or possibly MDOT contracting with a third-party such as WMATA.

6.5 Asset Ownership

MDOT/MTA will retain ownership of the Purple Line throughout the life of the contract and all the assets will be handed back to MDOT/MTA at the end of the contract.

6.6 Long-term Operations and Maintenance

- The Concessionaire will be responsible for operations and maintenance of the Purple Line for approximately 30 years.
- At the end of the concession, the MDOT/MTA will have the ability to rebid the contract (where the existing concessionaire would have to re-compete). Alternatively, the MDOT/MTA could decide to have MTA assume responsibilities for operating and maintaining the Purple Line.

7. Proposed Schedule of Activities

7.1 Project Milestones

The construction of the Purple Line is currently anticipated to include the following key milestones:

- ROW acquisition is expected to begin in late 2013.
- Construction is expected to begin in summer 2015.
- Construction is expected to be complete in summer 2020.

7.2 Solicitation Milestones

In accordance with State Finance and Procurement Article § 11-203, standard State procurement does not apply to P3s. MDOT/MTA intends to use the exemption from Division II as set forth in State Finance and Procurement Article § 11-203. As such, MDOT/MTA will develop a robust, transparent, and fair competitive solicitation process for the Purple Line. As outlined in the MDOT P3 Regulations, MDOT/MTA may use a multi-step solicitation process that includes, but is not limited to, some or all of the following steps:

- Issuance of an RFQ
- Pre-proposal conference
- Issuance of a draft RFP
- Industry review meetings
- Issuance of a final RFP

The determination to utilize some or all of the solicitation steps will be case-specific. Key steps in the proposed Purple Line P3 solicitation are presented in the following table:

Milestone	Date	Achieved?
RFI Issued	Apr-13	√

Milestone	Date	Achieved?
Industry Forum Held	May-13	√
RFQ Issued	Fall 2013	
Shortlist Issued	Winter 2013	
Draft RFP Issued	Winter 2013/2014	
Industry Review Meetings	Winter 2013/2014	
Final RFP Issued	Spring 2014	
Preferred Concessionaire Announced	Winter 2014/2015	
Commercial Close	Winter 2014/2015	
Financial Close	Spring 2015	

7.3 Federal Milestones

The Purple Line has completed multiple steps in the federal review processes, although key milestones remain. The federal environmental review is expected to conclude with a Record of Decision in fall 2013. From a funding and financing perspective, MDOT/MTA is currently seeking a formal invitation from the USDOT TIFIA office by the spring 2014 for the eventual Purple Line concessionaire to apply for a TIFIA direct loan. MDOT/MTA is also working toward signing a Full Funding Grant Agreement (FFGA) with FTA in spring 2015 for the multi-year commitment of FTA New Starts funds to the project. Key milestones in the federal review processes are presented in the following table:

Milestone	Date	Achieved?
Alternatives Analysis/Draft EIS Published	Oct-08	√
Locally Preferred Alternative (LPA) Selected	Aug-09	√
FTA Permission to Enter New Starts PE Phase	Oct-11	√
Record of Decision (ROD)	Fall 2013	
Funding Recommendation in President's Budget	Spring 2014	
Formal Invitation to Apply for TIFIA	Spring 2014	
FTA New Starts Full Funding Grant Agreement	Spring 2015	

8. Next Steps

Ch. 5, Acts of 2013 confirmed MDOT's legal authority to undertake a P3 for the Purple Line and outlined a clear, transparent process for solicitation oversight. The submission of this presolicitation report is the first official step in this process. During late summer/early fall of 2013, MDOT/MTA will work towards completion of the following additional tasks in support of the anticipated solicitation process.

- Request that the 2013 Report of the Capital Debt Affordability Committee (CDAC) include a formal assessment of whether the Purple Line P3, as currently conceived, would have an impact on State capital debt affordability.
- In accordance with State Finance and Procurement Article §10A-201, will seek formal P3 designation and approval of the P3 solicitation process from the Board of Public Works (BPW) after the presolicitation report review period.

MDOT/MTA will submit a request for designation and approval to the BPW that includes:

- A copy of this presolicitation report
- A description of the process for soliciting, evaluating, selecting, and awarding the P3
- A preliminary solicitation schedule
- An outline of the organization and contents of the planned public notice of solicitation
- A summary of the key terms of the proposed P3 agreement
- Comments received from the Treasurer, Comptroller, or Legislature during the review period

Following the BPW's formal P3 designation and approval of the solicitation process, MDOT/MTA will proceed with the competitive P3 solicitation to select a concessionaire for the Purple Line. The first step in the solicitation will be to publish an RFQ, which is currently anticipated to occur in fall 2013. In the RFQ, MDOT/MTA intends to provide a general summary of the anticipated solicitation process and selection criteria. It is typical to select up to four highly qualified concessionaires (typically comprised of teams) for a shortlist that will be invited to submit proposals. A description of the anticipated solicitation steps is presented in Section 7 of this presolicitation report.

8.1 Process for Providing Periodic Updates to Legislature

In accordance with §10A-104 of the State Finance and Procurement Article, MDOT is required to provide annual P3 updates in the following manner:

- A report to the budget committees concerning each existing P3 in which MDOT is involved, by January 1.
- All existing P3s shall be listed in the CTP.

Updates for the Purple Line will be included in both the annual report to the budget committees and the CTP for the duration of the contract.

9. Conclusion

For the Purple Line, a DBFOM approach will help achieve the specific project delivery goals while supporting broader policy, operational, and financial benefits. MDOT/MTA, assisted by a team of expert consultants, conducted a series of analyses, workshops, and other due diligence steps before reaching this project delivery decision. A thorough assessment of potential risks and benefits has been completed, forming the basis for risk mitigation and value optimization strategies moving forward. An availability payment structure will help ensure both the timely completion of Purple Line construction and high-quality asset performance for the duration of the P3 agreement. In consultation with DBM, a preliminary assessment of debt affordability has been completed and the transaction is currently not expected to have an impact on the State's capital debt affordability. Solicitation steps and draft agreement terms have been outlined and will be refined over the next few months, in anticipation of a public notice of solicitation in fall 2013. Through implementation of the proposed P3 approach for the Purple Line, the State will demonstrate its commitment to efficient use of limited public resources and will be a national leader in innovative project delivery.

Attachments

Attached as part of this presolicitation report are the following documents related to the steps undertaken to reach a project delivery decision for the Purple Line.

1. MDOT P3 screening process documents: In accordance with COMAR 11.01.17 (MDOT's P3 Regulations), MDOT/MTA completed a full P3 screening process for the Purple Line, including both high-level screening and detailed-level screening. The attached documents related to the P3 screening process include:
    - Public-private Partnership Candidate Concept Application for the Purple Line P3 concept
    - P3 steering committee high-level screening documentation for the Purple Line P3 concept
    - Letter from the Secretary of Transportation to MTA's Office of Planning Director approving advancement of the Purple Line P3 concept to detailed-level screening
    - Letter from MTA's Office of Planning Director to the Secretary of Transportation indicating the completion and submission of Purple Line detailed-level screening information, analyses, and documentation, as well as requesting written approval to advance to the submission of a presolicitation report
    - Letter from the Secretary of Transportation to MTA's Office of Planning Director approving the advancement of the Purple Line P3 to submission of a presolicitation report
2. Maryland National Capital Purple Line Project Request for Information, Industry Forum, and One-on-One Meeting Summary: Report that outlines the findings of the Purple Line RFI responses (due to MDOT/MTA on May 8, 2013) and the Purple Line industry forum/one-on-one meetings (held on May 15, 2013). Also attached is the original RFI document that was issued on April 9, 2013.
3. Synopsis of December 2012 Value-for-Money (VfM) Analysis: The MTA evaluated a wide range of delivery alternatives for the Purple Line. A VfM analysis was conducted to compare the value to the State of delivering the project under a 35-year DBFOM concession against a traditional DBB solicitation. This is the synopsis of the VfM findings.
4. Maryland New Starts Project Delivery Decision-Making Process, Analysis, and Recommendations: This report summarizes a comprehensive review of project delivery and financing methods for the Baltimore Red Line and Purple Line light rail transit projects.
5. Availability Payment Case Studies: These case studies focus on two recent P3 projects involving AP structures: the Eagle P3 implemented by the Regional Transit District (RTD) in Colorado and the Ohio River Bridges East End Crossing, implemented by the Indiana Finance Authority.
6. Preliminary Purple Line P3 Risk/Responsibility Allocation General Assumptions as of July 31, 2013: This table outlines the preliminary general working assumptions for P3

risk/responsibility allocation at the beginning of the Purple Line solicitation development process.

7. Presentation materials from Purple Line Industry Forum: Materials prepared for the industry forum held on May 15, 2013.