



Value For Money Analysis

SR 400 EXPRESS LANES

JUNE 2024

- Executive Summary **1**
- 1 SR 400 Express Lanes Project **3**
 - 1.1 Project Benefits..... 3
- 2 Value for Money: A Primer..... **5**
 - 2.1 Qualitative Analysis 6
 - 2.2 Quantitative Analysis..... 6
 - 2.3 Bipartisan Infrastructure Law Requirements for VFM 7
- 3 Qualitative Analysis **9**
 - 3.1 Financial Factors 9
 - 3.2 Non-Financial factors 12
- 4 Quantitative Analysis **14**
 - 4.1 State Cashflows..... 14
 - 4.2 Net Present Value of State Cash Flows 15
 - 4.3 Discount Rate Sensitivities 17
- 5 Quantitative analysis: Assumptions **18**
 - 5.1 Schedule..... 18
 - 5.2 Capital Costs 18
 - 5.3 Maintenance Costs 19
 - 5.4 Tolling Costs..... 19
 - 5.5 Traffic & Revenue..... 20
 - 5.6 Financing Assumptions 21
 - 5.7 Procurement Costs 21
 - 5.8 Tax and Competitive Neutrality..... 22
- Appendix A: Approach for Present Value Analysis **23**
- Appendix B: Funding Sources and Availability..... **24**
- Appendix C: Key Terms of the Proposed P3 Agreement **25**

EXECUTIVE SUMMARY

The Georgia Department of Transportation (“GDOT”) and State Road and Tollway Authority (“SRTA”) of the State of Georgia (together, “the State”) are planning to add approximately 16 centerline miles of new express lanes along SR 400, between the MARTA North Springs Station at Exit 5C in Fulton County and approximately 0.9 miles north of the SR 400/McFarland Parkway Interchange at Exit 12 in Forsyth County (“the Project”).

The Project aims to add high-performance capacity to the corridor to provide an option to avoid traffic congestion, improve travel time reliability, increase safety, and enhance multimodal connectivity as part of the larger Major Mobility Investment Program (“MMIP”).

What is a Value for Money Analysis?

Infrastructure projects can be financed, constructed, operated, and maintained in different ways. A Value for Money (“VFM”) study is a comparative analysis of different delivery approaches for a project, and aims to support decision makers in evaluating which approach is likely to generate better value for taxpayers.

The 2021 Bipartisan Infrastructure Law (“BIL”)¹ requires a VFM analysis to be completed for the Project. Accordingly, GDOT undertook the analysis to compare two delivery approaches:

- ▶ A design-build approach, whereby the State hires contractors to design and construct the Project, financed using a combination of toll-revenue backed debt and public funds. The State would also operate and maintain the Project (the “**Traditional Approach**”), and
- ▶ A Public Private Partnership (P3) approach², whereby a P3 developer is selected to design, build, finance, operate and maintain the Project (the “**P3 Approach**”)

Under both approaches, the proposed new express lanes would provide new capacity and use dynamic pricing based on demand, while the existing general purpose lanes would continue to be untolled.

Key Findings from the State's Value for Money Analysis

A P3 Approach is expected to deliver greater benefits compared to the Traditional Approach:

- ✓ **Less public funding required:** The P3 Approach would provide access to private sector capital, reducing the public funding required compared to the Traditional Approach. As such, the P3 Approach would also allow the State to advance more of its capital program than would be the case under the Traditional Approach, and enable MARTA to accelerate its Bus Rapid Transit (BRT) project within the Project right of way, helping expand transit services for communities within the corridor.
- ✓ **Accelerates Project completion and benefits to users:** If the State were to deliver the Project under the Traditional Approach, the Project would be delivered in phases over the next 10-15 years based on GDOT’s financial capacity to fully fund the Project. The P3 Approach

¹ Section 11508, Section 70701

² Consistent with past P3 projects in the State, SRTA would enter into the Project Agreement with the developer. GDOT would enter into a series of intergovernmental arrangements with SRTA detailing its commitments and responsibilities regarding the Project and would act as SRTA’s agent.

would deliver the Project as a single phase, and therefore would be operational more quickly. Accelerating delivery of the Project under the P3 Approach would have several benefits:

- Limits additional construction cost and right of way acquisition cost escalation. Such an escalation would materially increase the cost of the Project to the State. The March 2024 update of the FHWA's Highway Construction Cost Index indicated that highway construction costs have grown by 69% between 2020 and 2023,³ highlighting that there is a significant cost to delay.
 - There are likely to be economies of scale from a single phase, avoiding additional mobilization and demobilization costs for multiple phases.
 - Earlier realization of user benefits. The Project will offer significantly improved travel times in the corridor by up to 17 mins for vehicles that opt to use the new facility (compared to a No-Build scenario)⁴, and will enable expanded public transit (via BRT and free public transit vehicle access to the express lanes), as well as improved travel time reliability. With significant population and economic growth expected in Fulton and Forsyth Counties, these improvements will be ever greater as the SR 400 corridor becomes more developed.
- ✓ **Transfers key Project risks to the private sector:** The P3 Approach allows the State to transfer key project risks to the developer - notably the risk that traffic demand and toll revenue does not meet forecasted levels, but also risks related to the long term cost of operations, maintenance and rehabilitation. This risk transfer provides far greater budget certainty for the State, at a contractually prescribed level of performance.

Estimated Savings to the State under the P3 Approach

Typically, projects with toll revenues are financed using debt (or equity, in case of P3s) which are then repaid using toll revenues. Under both delivery approaches, agency toll revenue forecasts do not fully repay such financing sources. This means that, under the Traditional Approach, the State would contribute significant upfront cash funding for the Project. Similarly, under the P3 Approach, the State may have to provide an upfront subsidy to the developer.

Considering both delivery approaches over a consistent period (the duration of the proposed P3 contract — construction period plus a 50-year operating term), **the P3 Approach is estimated to require \$130m to \$250m less State funding in net present cost terms than the Traditional Approach.**

Note that this VFM analysis reflects the State's best estimates and assumptions reflecting the current stage of Project development and, as such, should be treated as indicative rather than definitive. Further, for the P3 Approach, it is possible that the developer's revenue estimates surpass the State's estimates, which would help reduce or even eliminate the upfront subsidy requirement. In the most optimistic scenario, the developer could pay an upfront concession payment to the State.

³ *Workbook: NHInflationDashboard (dot.gov)*

⁴ *Source: Environment Assessment drafted by the US Department of Transportation and GDOT available at: <https://0001757-gdot.hub.arcgis.com/pages/0001757-environmental>*

1 SR 400 EXPRESS LANES PROJECT

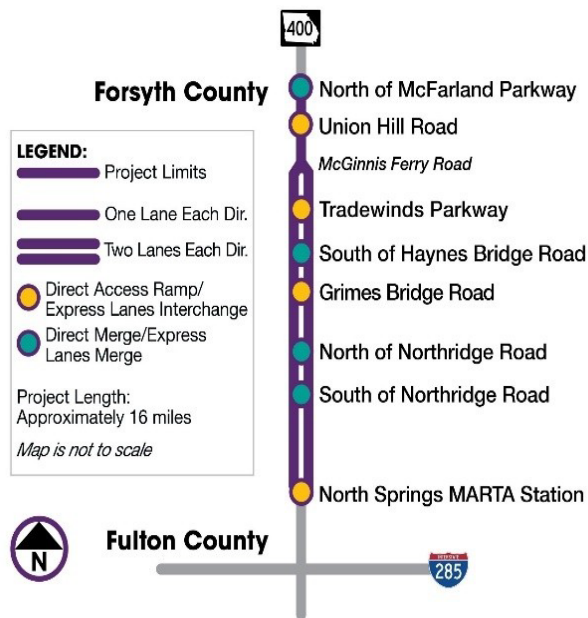
The SR 400 Express Lanes Project forms part of GDOT's express lanes network, which is being delivered through an interagency partnership between GDOT and SRTA.

The Project will deliver approximately 16 centerline miles of new capacity in the form of express lanes along SR 400 between the MARTA North Springs Station at Exit 5C in Fulton County and approximately 0.9 miles north of the SR 400/McFarland Parkway Interchange at Exit 12 in Forsyth County (see adjacent graphic).

Ramps, and a collector-distributor system that is nearing the end of the construction phase, will connect the general-purpose lanes on I-285 to the Project.

The Project will add two express lanes in each direction from the MARTA North Springs Station to McGinnis Ferry Road and one express lane in each direction from McGinnis Ferry Road to the Project terminus, north of McFarland Parkway. Express lanes will be physically separated by delineators from the general-purpose lanes with limited entrances and exits.

The Project will also include elements to facilitate future Bus Rapid Transit ("BRT") service, which will be completed subsequently in the corridor by MARTA.



1.1 PROJECT BENEFITS⁵

The Project is a critical piece of the larger State MMIP program that will relieve congestion at the SR 400 and I-285 interchange and will directly connect with the proposed future I-285 Express Lanes. The Project will have the following benefits⁶:

- **Improved mobility and travel time savings:**
 - Developing express lanes with greater certainty of travel times will greatly improve mobility by offering new reliable travel options. By 2046, travel times for tolled express lanes are projected to be approximately one third of the travel times for general purpose lanes, and the express lanes are projected to save users approximately 17 minutes in travel time.
 - By 2046, it is projected that General purpose lane users would also see savings in travel times between 9-12 minutes because of the additional capacity made available by

⁵ This section provides information required by Section 70701(a)(3)(f) of the Bipartisan Infrastructure Law. See Section 2.3 for more information.

⁶ Source: Environment Assessment drafted by the US Department of Transportation and GDOT available at: <https://0001757-gdot.hub.arcgis.com/pages/0001757-environmental>

the new express lanes. Average speeds on general purpose lanes would increase from 24 mph to 32 mph.

- **Public Transit Benefits:**

- Registered public transit vehicles will have free access to the express lanes, improving travel time reliability for existing public transit. The Project will also expand multimodal transportation by facilitating MARTA BRT operations in the corridor.

- **Benefits to low-income residential areas:**

- Most low-income residential areas will benefit from a decrease in traffic and travel time due to the Project. Low-income populations are projected to form 26% of total trips in the express lanes by 2046. The Project includes 11 access points in or adjacent to low income areas, providing direct access to express lanes.

- **Improved Level of Service:**

- The Project will improve Level of Service (operating conditions of the roadway based on factors such as speed, travel time, maneuverability, delay, and safety), which will deteriorate materially in eight of the nine segments of SR 400 if the Project were not built and sustainably operated over a multi-decade term.

2 VALUE FOR MONEY: A PRIMER

This VFM analysis compares the impacts to the State of delivering the Project under a traditional Design Build (“DB”) procurement and delivery approach versus a P3 approach. The table below summarizes both approaches.

Traditional Approach

Traditionally, the State has delivered complex projects using a DB approach, whereby it selects a contractor to design and construct the project, with payments made against project progress and completion. The State has previously used both multi-year DB contracts, contracted through SRTA and facilitated via various intergovernmental agreements between GDOT and SRTA. Such DB contracts were funded primarily through federal and State appropriations and, in the case of Northwest Corridor Express Lanes Design Build Finance (“DBF”) project, a 35-year loan. The Project is significantly larger in scale than any of the State’s prior DB procurements and would include project financing (a TIFIA⁷ loan), therefore it is assumed that it would be delivered using a multi-phase contract via SRTA, due to capital costs required that are beyond the State’s fiscal constraints.

It is also assumed that, once constructed, the State would operate and finance the Project in a manner consistent with express lanes projects previously developed by the State. This means that:

- the Project would be tolled and operated by SRTA and maintained by GDOT.
- the Project would be partially financed using a TIFIA loan to SRTA. The TIFIA loan would be repaid exclusively from toll revenue generated from the Project and (per the TIFIA statute) could finance up to 33% of eligible project costs, although the loan size could be lower if the Project does not generate sufficient revenues to support this level of debt.
- TIFIA debt would be reported in the State of Georgia’s Annual Comprehensive Financial Report (“ACFR”) and Debt Management Plan, but since the debt is non-recourse to the State, would not count towards the Georgia’s constitutional debt cap.
- the State would fund remaining Project capital costs using a combination of federal funding and State motor fuel tax revenue.

P3 Approach

Under the P3 Approach, the State would select a developer to design, build, finance, operate and maintain the Project for a term of 50 years following construction.

The developer would finance the Project using a combination of private equity capital (equity contribution is unique to the P3 Approach) and debt (typically, a federal TIFIA loan and tax-exempt Private Activity Bonds (“PABs”)), as well as public contribution, with the amount of such contribution to be determined via competitive procurement. The TIFIA loan would be used by the developer to finance up to 33% of eligible Project costs, with PABs being issued by the developer depending on projected cashflows available to support debt service. Since the debt is being issued by the developer (PABs would be issued through a conduit issuer), and is not guaranteed by the State, it would not count towards the Georgia’s constitutional debt cap.

Similar to the current SRTA tolling policy for express lanes, the proposed express lanes would be variably priced based on demand to deliver reliable trip times through the corridor. The developer

⁷ Transportation Infrastructure Finance and Innovation Act program – a loan program managed by the Build America Bureau (within US Department of Transportation)

P3 Approach

would be granted by SRTA (in the exercise of its toll powers on a project to manage the flow of traffic) the exclusive right to toll, subject to the limitations and parameters set out in the project agreement.

Under the P3 contracting structure, the developer will be contractually obliged to provide high quality service to customers (primarily in the form of guaranteed minimum travel speeds and reliable trip times), and face financial damages if the express lanes do not meet the performance standards set in the Project Agreement for the full duration of the contract (50 years from completion of construction and commencement of operation of the express lanes). Within the confines of the contract and State law, the contract terms will enable the P3 developer to adjust toll rates to guarantee minimum travel speeds both for personal and eligible commercial vehicles choosing to use the lanes, as well as registered transit vehicles that can use the lanes free-of-charge).

SRTA would provide account management, interoperability and customer service functions on behalf of the developer.

While P3s can involve a range of different commercial structures, this "demand risk" approach minimizes fiscal impacts to the State for delivering the Project, enabling the State to use its finite funding to advance other priority projects and to facilitate an efficient transfer of certain key risks to the developer (as explained further in the Section 3).

The VFM analysis considers both qualitative and quantitative factors to assess which delivery approach is likely to generate greater value for the State (and, by extension, Georgia's taxpayers).

2.1 QUALITATIVE ANALYSIS

A qualitative analysis considers the non-quantifiable impacts of each delivery approach for the Project. For example, the P3 Approach can lead to greater budget certainty, quicker delivery, and improved travel time reliability for the State compared to the Traditional Approach.

Qualitative considerations are discussed further in Section 3.

2.2 QUANTITATIVE ANALYSIS

A quantitative analysis aims to forecast costs and revenues to the State under the two delivery approaches to estimate which would generate the highest net present value (or lowest whole-life net present cost) to the State.

The State is using the following guidance documents for quantitative analysis:

- ▶ Generally Accepted Value for Money Principles, Volume 1, March 2023 by the Build America Center
- ▶ Guidebook on Estimating Cost of Capital for Value for Money Assessments, February 2023 by the Build America Center
- ▶ Value for Money Assessment, December 2013, by Federal Highway Administration's Center for Innovative Finance Support

The Project's cashflows are estimated over the term of the Project (5.5 years of construction plus 50 years of operation) and discounted to present value (i.e., 2024 value) to compare cashflows to and from the State for each approach.

What is a discount rate? The rate at which future cashflows are discounted to their present values. Typically, discount rate is based on the rate of return expected by lenders and investors in the project being evaluated. Rate of return expectations, in turn, are driven by inflation estimates (income in future years needs to compensate for inflation) as well as risk associated with the cash flows. Discounting cash flows is important because cashflows under these approaches are incurred over more than 50 years and are incurred at different times during this period. The discounting process demonstrates the time-value of money.

Quantitative VFM analysis should reflect the different risks held by the State and developer, and inherent in the cashflows under the different delivery options. Retained risks can be accounted for in the costs themselves, or in the discount rates used to translate the cashflows to present values, but should not be reflected in both. This analysis reflects the different risk profiles of each delivery option in the discount rates used.

Recognizing that the results of the analysis can vary materially based on the discount rate used, and that the valuation of risk is inherently subjective and difficult to quantify (whether incorporated as cost adjustments or discount rates), this analysis compared the expected funding required for the Project using a range of discount rate assumptions⁸. Sensitivities were also performed, considering the potential variability of other key factors for the Project, notably revenue, to understand the impact on the comparative analysis.

The quantitative analysis approach and results are discussed in Section 4; cost and revenue assumptions used in the analysis are discussed in Section 5.

2.3 BIPARTISAN INFRASTRUCTURE LAW REQUIREMENTS FOR VFM

The 2021 Bipartisan Infrastructure Law ("BIL") requires a VFM analysis to be completed for certain projects:

- ▶ Section 11508 stipulates that certain project sponsors receiving federal loans or grants should include a VFM analysis within the financial plan if the project sponsor intends to carry out the project using a P3. Section 11508 does not include details as to the requirements of a VFM analysis.
- ▶ Section 70701 requires a VFM analysis for projects over \$750 million in total cost in states with P3 legislation for transportation projects and that are utilizing a TIFIA or RRIF⁹ loan.

The table below maps the requirements of Section 70701 in BIL with the sections in this report where this information has been provided.

Subsection	Information Required	Section Reference
(a)(1)	Lifecycle cost and project delivery schedule	Section 5.1, 5.3 and 5.4

⁸ Per guidance in Value for Money Assessment, December 2013, by Federal Highway Administration's Center for Innovative Finance Support

⁹ Railroad Rehabilitation & Improvement Financing program. A federal government loan program similar to TIFIA.



Subsection	Information Required	Section Reference
(a)(2)	The costs of using public finance versus private financing for the project	Section 3.1 and 5.6
(a)(3)	A description of key assumptions made in developing the analysis, including:	N/A
(a)(3)(A)	An analysis of any Federal grants or loans and subsidies received or expected (including tax depreciation costs)	Appendix B
(a)(3)(B)	The key terms of the proposed public-private partnership agreement, if applicable (including the expected rate of return for private debt and equity), and major compensation events	Appendix C, Section 3.1 and 5.6
(a)(3)(C)	A discussion of the benefits and costs associated with the allocation of risk	Section 3
(a)(3)(D)	The determination of risk premiums assigned to various project delivery scenarios	Appendix A explains the discount rate approach used to reflect risk premiums
(a)(3)(E)	Assumptions about use, demand, and any user fee revenue generated by the project	Section 5.5
(a)(3)(F)	Any externality benefits for the public generated by the project	Section 1.1
(a)(4)	A forecast of user fees and other revenues expected to be generated by the project, if applicable	Section 5.5

3 QUALITATIVE ANALYSIS

This chapter provides information required by Section 70701(a)(2), (a)(3)(B), and (a)(3)(C) of the BIL.



The State's qualitative analysis compares the financial and non-financial impacts of using the P3 or Traditional delivery approach for the Project, and concludes that the P3 Approach provides clear benefits compared to the Traditional Approach.

3.1 FINANCIAL FACTORS

<p>Project Delivery</p> 	<p>A Traditional Approach would require the State to arrange funding and financing for the full cost of the Project. To the extent possible, financing would be up to a 35-year term, repaid from the Project's toll revenue. Such revenues, however, are only expected to support borrowing for a relatively limited share of the Project cost, requiring the State to fund the balance of the Project's capital costs from its annual budget.</p>
<p>P3 Approach results in faster Project delivery</p>	<p>Given the scale of investment, it is likely that the State would have to deliver the Project in phases delaying the benefits of the new facility outlined in Section 1.1 above.</p>
	<p>A P3 Approach is likely to require comparatively lower capital contribution from the State, enabling the Project to be delivered under one single procurement. While the requisite P3 procurement process may take as long as 24 months, a single integrated P3 procurement would likely result in operation of the Project occurring several years earlier than multi-phased delivery required under a Traditional Approach.</p> <p>Faster completion would mean that users will be able to benefit from the Project much earlier as well.</p>
<p>Project Costs</p> 	<p>As mentioned above, the P3 Approach would deliver the Project earlier than under a Traditional Procurement under a single procurement.</p>
<p>P3 Approach results in lower overall Project Costs</p>	<p>Such earlier completion and delivery could lead to material savings in costs, primarily due to avoided cost escalation. GDOT's cost estimates assume that capital costs typically escalate by 4% each year. This is in line with long term escalation rates—although annual escalation was as high as 17% during 2022¹⁰. Costs under the Traditional Approach would also be higher to pay for interim operational measures and improvements, interfaces between multiple projects, and duplicative mobilization costs for each phase.</p>
	<p>Additionally, the P3 Approach includes future funding of MARTA BRT (of up to \$26 million) as a scored, competitive proposal requirement. This developer funding supports additional multimodal benefits within the corridor.</p>

¹⁰ Engineering News Record (ENR) Construction Cost Index for Atlanta

<p>Program Impacts</p> 	<p>A Traditional Approach would require the State to arrange funding and financing for the full cost of the Project. Diverting additional funding to the Project is likely to require the State to delay or defer other important projects in GDOT's program in order to advance the SR 400 Express Lanes.</p> <p>As with delays to the Project itself, delaying other projects in the capital program will lead to increased construction costs, as well as deferral of user benefits.</p>
<p>P3 Approach allows for faster delivery of other projects in the program</p>	<p>A P3 Approach requires comparatively lower capital contribution from the State, as noted above. As such, the P3 Approach would consequently free up funds for use on other projects, enabling faster delivery of GDOT's capital program generally, with corresponding benefits to users and the Georgia economy more broadly.</p>
<p>Demand Risk Transfer</p> 	<p>The State would partially finance the Project using debt to be repaid from toll revenues under the Traditional Approach. If such revenues are lower than forecast, the State would be required to access other funding sources to pay debt service or to fund operations and rehabilitation of the Project.</p> <p>Conversely, if toll revenues exceed expectations under the Traditional Approach, revenues in excess of debt service and other Project costs would be available to the State.</p>
<p>P3 Approach allows the State transfer risk of lower revenues to the developer</p>	<p>Several factors, many of which are outside the control of the State, can affect revenues generated by the Project, including:</p> <ul style="list-style-type: none"> ▶ economic downturns/economic shocks, ▶ slower regional and statewide economic development, and ▶ construction delays.
	<p>The State would transfer the demand risk to the private sector under the P3 Approach. Therefore, if revenues are lower than forecasted by the developer, the State would not be impacted and would not be required to make any additional payments to the developer. If revenues exceed the developer's forecast, the majority of this benefit would accrue to the developer, which took on the risk of the investment, and the State may also be entitled to a share in the excess revenue as per a revenue share mechanism that could be included in the P3 agreement.</p> <p>The P3 Approach also has an additional benefit related to demand risk. Recent history suggests that private developers, who bring enhancements to facility design and are experienced at efficient operations of express lanes generally have a higher tolerance for this type of financial risk, have typically valued the potential long-term revenue from tolled projects more highly than public owners, and have essentially captured those higher revenue forecasts in their P3 proposals. Although the operational experience of these projects has been limited, some express lane projects in the U.S. have outperformed their initial traffic forecasts and are now sharing excess revenue with the public owners. However, there have also been several express lane projects which have not performed as</p>

	<p>forecasted and as a result, the private investors have reduced their return expectations or, in at least one case, invested additional equity.</p> <p>This experience highlights the volatility of this investment payback and the potential value of transferring demand risk to the developer.</p> <p>Note that even in situations where revenues are lower than forecast, under a P3, the projects were delivered, users continued to benefit, and the government sponsor did not have to make additional contributions.</p>
<p>O&M and Lifecycle Risks</p> 	<p>Under the Traditional Approach, the State would retain all operating, maintenance and lifecycle responsibilities and risks for the Project, and would have budgetary exposure to potential changes in these costs over the life of the Project. Additionally, while the financing agreements for the Traditional Approach would require reserve funds for major maintenance on the express lanes while the Project debt is outstanding, the Traditional Approach does not involve long-term performance requirements comparable to the contractual terms that are possible with a P3 Approach and therefore maintenance would be subject to the State's standards and ability to pay the long-term costs for express lanes and general purpose lanes.</p>
<p>P3 Approach helps the State transfer risk of higher O&M and lifecycle costs to the developer</p>	<p>Under the P3 Approach, the State would contractually transfer the responsibilities and risks of O&M¹¹ and lifecycle/ rehabilitation of the express lanes and general purpose lanes to the developer over the 50 year operating term of the Project. The developer would be required to fund such works and would be required to meet specified standards throughout the operating term and at handback, enforced by a contractual performance regime. As such, the State would have no budgetary obligations related to O&M or lifecycle for the Project, and no exposure to overruns or increases in these costs.</p>
<p>Disputes and Compensation</p> 	<p>DB contracts under the Traditional Approach are relatively less complex than P3 contracts; disputes are restricted to design and construction matters and therefore concentrated over a relatively shorter duration.</p> <p>A contract under the P3 Approach is much longer (construction plus a 50 year operating term) and more complex. A longer contract term and the potential changes during that period (whether foreseen or unforeseen) may create higher potential for disputes or claims for compensation events.</p>
<p>Disputes under the P3s could be more complex and expensive</p>	<p>Further, in case the Project does not proceed as planned, compensation for changes to the contract is likely to be lower under the Traditional Approach than under the P3 Approach, where contractual terms would require compensation for the impacts on financing and the developer's potential loss of revenue.</p>

¹¹ The State would retain responsibility for certain limited O&M obligations, including snow and ice removal.

3.2 NON-FINANCIAL FACTORS

Innovation



and Expertise

In Georgia as in many states, the **P3 Approach** includes a two-step procurement process, the first of which shortlists bidding teams that are the most qualified to do the work, both technically and financially. The second step requires proposers to develop fixed price proposals, and offers an opportunity for shortlisted teams to propose alternative technical concepts (ATCs) which the State may not have previously considered but that comply with best practices in engineering and meet legal and regulatory requirements.

P3s incentivize access to private sector innovation and expertise

The P3 Approach—where the developer stands to gain from enhanced revenues or lower overall lifecycle costs—incentivizes the developer to optimize design, construction, and operations and to make decisions over the life of the asset. The P3 Approach incentivizes the developer to employ innovative approaches, new technologies and implement operational improvements that can also improve user experience.

The **Traditional Approach** would also utilize a two-step procurement process and allow alternative technical concepts, but unlike a P3, and without any incentive to optimize operations and maintenance retained by the State, the universe of innovation that contractors are likely to consider is limited to the design and construction phase. The Traditional Approach is therefore unlikely to incentivize bidders to suggest improvements to operations and maintenance, traffic flows or revenue.

Flexibility



Over the 50 years of the P3 contract term, it is expected that there will be changes in regulation, market conditions, consumer behavior, economic climate, and advancements in technology.

A **Traditional Approach** provides more flexibility to the State to address changing market conditions, since the State is responsible for maintaining and operating the asset.

The State has more flexibility under the Traditional Approach

The **P3 Approach** incentivizes the developer to adopt new standards or technologies (especially if they increase revenue or reduce cost), and may also mandate upgrades to be consistent with enhancements made by the State on other facilities. However, the State would have more limited ability to mandate changes without compensation to the developer, should the changes increase the developer's costs or reduce revenues.

Public Benefits



The State's primary objectives for the Project are to improve transportation options in Georgia by providing new capacity to a critical and growing corridor that will offer an option to avoid traffic congestion, improve reliability of trip times, safer travel, and enable more commuting choices.

**P3s help
accelerate
public benefits
from the Project**

As noted above, the State would be able to deliver the Project (and ultimately the wider Atlanta express lane network) faster using the P3 Approach compared to the Traditional Approach. Faster completion and delivery under the P3 Approach would result in earlier realization of public benefits and service improvements which, taking account of the time- value of money, would be more valuable to the State.

4 QUANTITATIVE ANALYSIS

Quantitative analysis herein compares the present value of forecast cashflows for the Project under both the Traditional Approach and the P3 Approach.

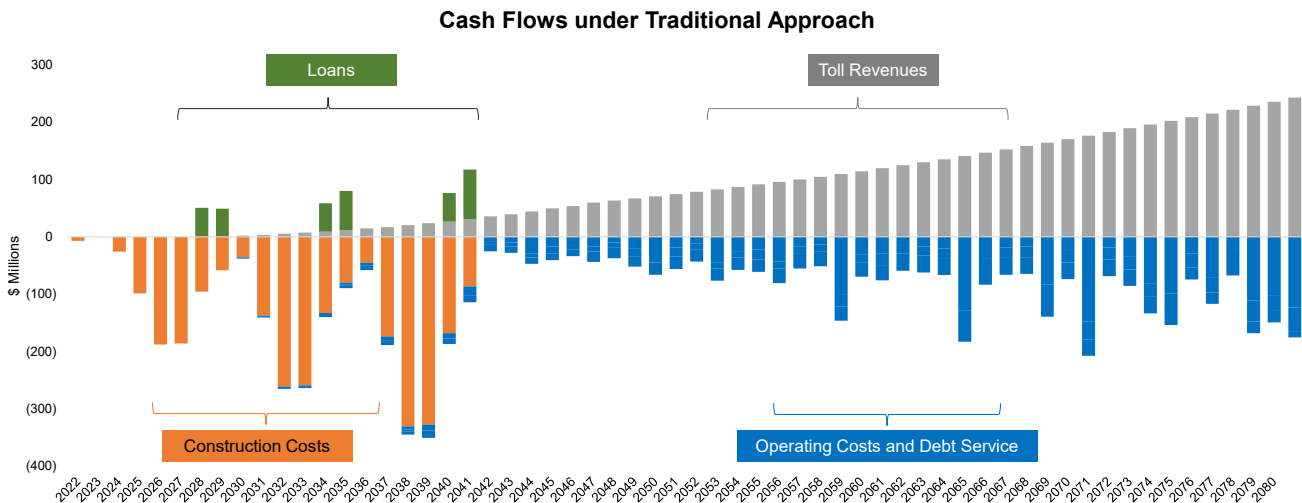
Under the Traditional Approach, the analysis assumes that the State would pay for design and construction using a combination of public funds and financing secured by toll revenues, and would operate and maintain the Project. The Project would also be delivered in three phases, with commencement of each phase six years apart.

In comparison, under the P3 Approach, toll revenues would be retained by the P3 developer in return for financing, designing, constructing, operating and maintaining the Project according to contractual obligations. Depending on the ability to transfer demand risk to the developer, the State may also have to provide a public funding contribution, if toll revenues are not projected to cover the costs of the design, construction, financing, operations and maintenance of the Project. The magnitude of any public funding contribution that may be necessary, if any, would be determined by a competitive procurement.

4.1 STATE CASHFLOWS

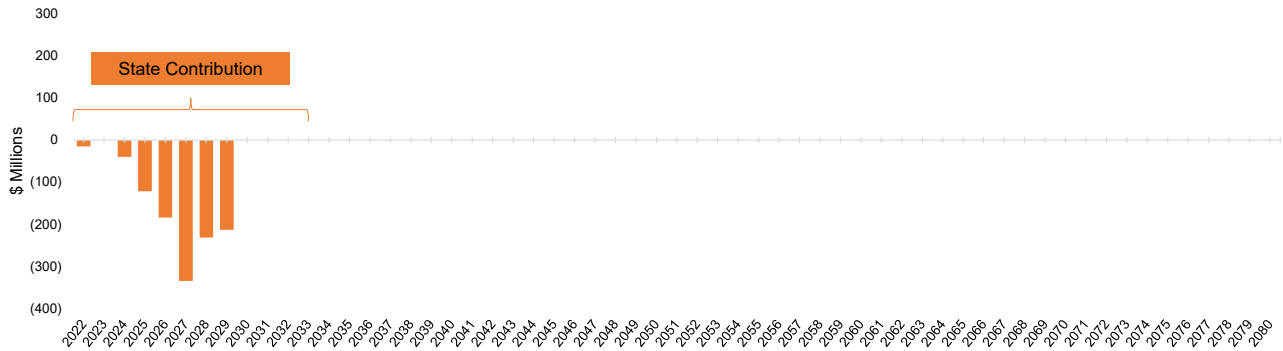
Estimated cashflows to and from the State under the two approaches are summarized below. Assumptions underlying these cashflows are described in Section 5.

Under the Traditional Approach, the State builds the Project in three phases, operates and maintains the Project, and collects toll revenues.



Under the P3 Approach, the Project is built in one phase and the State contribution is limited to paying upfront subsidy.

Cash flows under P3 Approach



Note: Some minor maintenance (e.g., snow and ice clearing costs) that the State would incur under both approaches, as well as oversight costs under the P3 Approach are not incorporated in analysis - however these costs are expected to be immaterial.

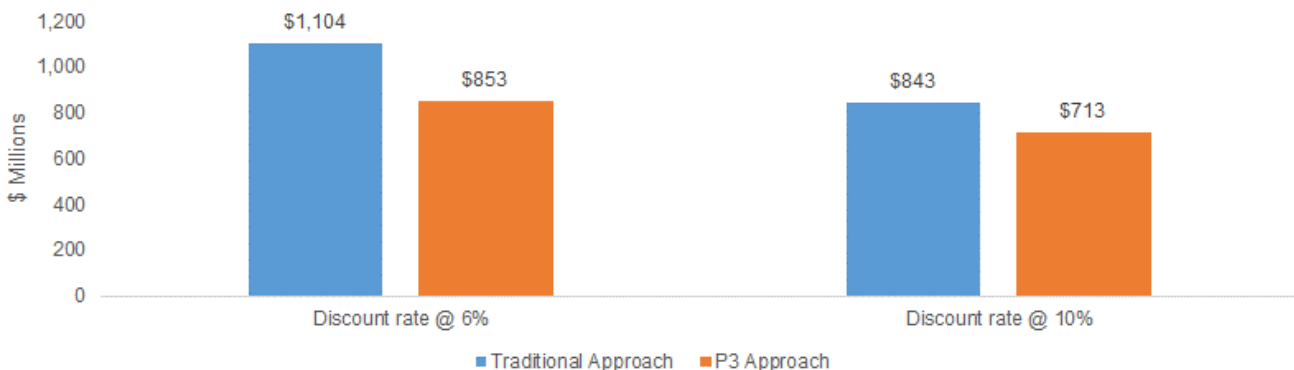
FHWA guidance requires that the different risks borne by the State under each delivery approach be reflected in the quantitative analysis. While there are multiple ways to incorporate risk into the quantitative analysis, the State has opted to account for risk in the relevant discount rates used for the present value calculation, one of the methodologies detailed in the FHWA Guidebook (“market based discount rate”). Under this methodology, the discount rate assumed for calculating present value under both delivery models reflects the risks inherent in the Project using a “market comparable” approach, incorporating how the market perceives and prices risks associated with the Project.

Appendix A details the methodology adopted for estimating the discount rates used. In recognition of the prospective nature and inherent uncertainty of projections, a range of possible discount rates has been used for this analysis.

4.2 NET PRESENT VALUE OF STATE CASH FLOWS

While both delivery approaches are projected to require the State to contribute public funding, the **State's required funding contribution over the life of the Project is expected to be lower in net present cost terms under the P3 Approach.**

Net Present Cost Comparison



The chart above shows that, when discounting cash flows at a 6% discount rate, the net present cost of the State's funding requirement under **the P3 Approach is approximately \$251 million lower** than the Traditional Approach. At a 10% discount rate, the net present cost of the State's funding requirement under **the P3 Approach is approximately \$130 million lower** than the Traditional Approach.

The table below compares key State cash inflows and outflows on a nominal and present value basis:

Cash flows using a 6% discount rate:

Cash Flow (\$million)	Traditional Approach		P3 Approach	
	Nominal	Present Value	Nominal	Present Value
State Payments	(\$2,344)	(1,257)	(\$1,075)	(\$853)
Net Toll Revenue Received by State	\$1,777	153	-	-
Net Revenue/(Cost) to State	(\$566)	(\$1,104)	(\$1,075)	(\$853)

Cash flows using a 10% discount rate:

Cash Flow (\$million)	Traditional Approach		P3 Approach	
	Nominal	Present Value	Nominal	Present Value
State Payments	(\$2,344)	(\$884)	(\$1,075)	(\$713)
Net Toll Revenue Received by State	\$1,777	\$42	-	-
Net Revenue/(Cost) to State	(\$566)	(\$843)	(\$1,075)	(\$713)

The P3 Approach has a lower net present cost to the State principally because it is expected to generate higher toll revenues and would require lower upfront public contribution than the Traditional Approach.

Like the current SRTA tolling policy for express lanes, the proposed express lanes would be variably priced based on demand. The developer's tolling policy will be established consistent with State law, within the confines of the tolling parameters set by SRTA, and contractualized in the Project Agreement.

Higher toll revenues under the P3 Approach are driven by the following factors:

- The developer is contractually obliged under the P3 Approach to provide high quality service to customers in the form of contractual minimum speeds and reliable trip times and could face financial damages if the express lanes do not meet the performance standards set in the Project Agreement.
- To enable the developer to guarantee minimum speeds, the Project Agreement will provide flexibility to the developer to vary toll rates (within the confines of State law and contractual tolling parameters set by SRTA).
- The P3 Approach incentivizes developer-proposed alternative design concepts that improve access as well as innovation in delivery and operations (e.g. usage of new technology).

In addition, a phased Project delivery under the Traditional Approach delays Project revenues, which is impactful in present value terms due to time value of money. The phased approach also escalates construction costs, further eroding the value of the Traditional Approach.

In the later years of the express lane operation, the State is anticipated to generate toll revenues in excess of operating and debt service costs under the Traditional Approach. Impact of these excess revenues is, however, low in present value terms and is outweighed by the increased initial State contribution requirement during construction.

Sensitivity analysis of the impact of changing toll revenue assumptions on the VFM analysis has been included at Section 5.5 below.

4.3 DISCOUNT RATE SENSITIVITIES

Given that the profile of the State's cashflows is notably different under each approach, the discount rate used to adjust for the time-value of money and calculate the present values has a material impact on the comparison¹².

The table below compares the difference in net present cost between the two approaches with different discount rate assumptions. The positive values in the table denote that the P3 Approach has a lower net present cost to the State than the Traditional Approach – indicating that the P3 represents better quantitative value for money for the State.

P3 Approach yields lower net present cost under almost all discount rate scenarios:

		Traditional Approach		
		Discount Rates		
P3 Approach Discount Rates	\$ millions	6%	8%	10%
	6%	\$251	\$118	(\$11)
	8%	\$325	\$192	\$64
	10%	\$391	\$258	\$130

The table illustrates that, under discount rates between 6% and 10%, **the P3 Approach is estimated to result in a lower net present cost to the State** (greater value for money) except for when the Traditional Approach is discounted at a much higher discount rate (i.e. 10%) than the P3 Approach (i.e. 6%). This scenario suggests that the Traditional Approach has almost twice the risk to the State as the P3 Approach.

¹² Section 2.2 explains the concept of a discount rate.

5 QUANTITATIVE ANALYSIS: ASSUMPTIONS

This chapter provides information required by Section 70701(a)(1), (a)(2), (a)(3)(B), (a)(3)(E), and (a)(4) of the BIL.

Separate financial forecasts were developed for the Traditional Approach and the P3 Approach. This Section outlines key cost and revenue assumptions used in each model.

Note: Assumptions for quantitative analysis (including cost of capital assumptions discussed in Appendix A) are estimated based on the current understanding of the Project and market conditions.

5.1 SCHEDULE

The Traditional Approach assumes that the State will build the Project in three phases sequentially, six years apart, with each phase delivering one third of the Project scope. Cash flows from operations for each phase were forecasted for a period of 50 years after completion of Phase 3.

Key Milestones	Phase	Traditional Approach	P3 Approach
Procurement Start	Phase 1	Q1 2022	Q1 2022
	Phase 2	Q1 2028	
	Phase 3	Q1 2034	
Design and Construction Start	Phase 1	Q1 2024	Q4 2024
	Phase 2	Q1 2030	
	Phase 3	Q1 2036	
Open to traffic	Phase 1	Q1 2030	Q4 2030
	Phase 2	Q1 2036	
	Phase 3	Q1 2042	

The P3 procurement is assumed to be completed under a single construction contract with cash from operations assumed to accrue for 50 years from when the road opens to traffic.

5.2 CAPITAL COSTS

Under both approaches, all Project development costs such as preliminary engineering and right-of-way acquisition are expected to be the same.

Total Capital Cost	Traditional Approach	P3 Approach
Phase 1	\$1,016m	
Phase 2	\$1,291m	
Phase 3	\$1,633m	
Total Capital Cost	\$3,940m	\$3,173m¹³

¹³ Capital costs for the VFM analysis are higher by around \$130m compared to the Initial Financial Plan (IFP) submitted to the Federal Highway Administration. This is due to a combination of three factors—the IFP does not

Construction costs for each phase under the Traditional Approach was assumed to be one-third of the overall Project costs in 2024 terms. Costs for Phase 2 and Phase 3 were then escalated at 4% each year (typical GDOT assumption for capital cost forecasting) and were further increased by 10% (based on expert opinion) each to account for loss of efficiencies in delivery. The total nominal cost of the three phases is, therefore, higher than capital cost under the P3 approach.

5.3 MAINTENANCE COSTS

Roadway O&M and lifecycle costs under the Traditional Approach have been forecast based on the State's actual costs for other similarly-maintained facilities in the State, and adjusted for the higher level of maintenance standards expected for a tolled express lane facility. Costs under the P3 Approach have been forecast based on a detailed cost estimate developed for the procurement.

O&M costs are escalated at 2.5% p.a¹⁴.

Average Annual Costs	Phase	Traditional Approach	P3 Approach
Roadway O&M	Phase 1	\$5.6m	
	Phase 2	\$5.9m	
	Phase 3	\$6.4m	
Total Avg Annual O&M Costs		\$17.9m	\$25.0m
Roadway Lifecycle	Phase 1	\$7.5m	
	Phase 2	\$9.5m	
	Phase 3	\$12.0m	
Total Avg Annual Lifecycle Costs		\$29.0m	\$21.0m

Lifecycle costs under the Traditional Approach typically include longer gaps in major maintenance, which leads to increased expenditures for life cycle as the asset ages. The State maintains its facilities to meet industry standards and financing covenants (where applicable), but manages maintenance across the entire statewide roadway network within finite funding. This approach would result in lower annual routine maintenance expenditures and therefore higher overall lifecycle expenditures.

Lifecycle costs under the Traditional Approach are also higher due to escalation—costs for Phase 2 and Phase 3 are incurred later than under the P3 Approach and were escalated by 4% per year.

5.4 TOLLING COSTS

Under the P3 Approach, SRTA would provide tolling commercial back office services to the developer. For its services, SRTA would charge the developer a base transaction fee of \$0.13

include certain financing costs and reserves expected to be funded by the developer, IFP does not include some previously incurred costs used for sizing TIFIA financing in the VFM calculations, and the IFP includes costs for Phase I of the Project which were not included in VFM (which only covers Phase II).

¹⁴ O&M costs inflation is lower than capital cost inflation (4%) as drivers for capital costs inflation are different (e.g., material prices such as steel, supply chain considerations, labor costs, regulatory and compliance costs etc.)

(2023\$) which would escalate as justified within the parameters of the Toll Services Agreement, as well as a 3% variable fee on toll revenue to account for credit card processing fees.

In addition to the base transaction fee, the developer would incur operation and maintenance (including lifecycle) costs for tolling equipment. Tolling O&M costs are assumed to escalate each year by 2.5%.

Average Annual Costs	Phase	Traditional Approach	P3 Approach
Tolling O&M	Phase 1	\$6.0m	
	Phase 2	\$5.9m	
	Phase 3	\$6.0m	
Total Avg Annual Tolling O&M Costs		\$17.9m	\$19.0m
Tolling Lifecycle	Phase 1	\$0.7m	
	Phase 2	\$0.8m	
	Phase 3	\$1.1m	
Total Avg Annual Tolling Lifecycle Costs		\$2.6m	\$2.0m

Tolling O&M and lifecycle costs under the Traditional Approach are calculated on the same basis as the P3 Approach, but are different given different assumptions around tolling transactions—more reliable trip times generate demand and additional transactions. Further, like roadway lifecycle costs, tolling lifecycle costs are higher under the Traditional Approach as they are delayed for Phase 2 and Phase 3 and are assumed to inflate at 4% (typical GDOT assumption for capital cost forecasting) per year.

5.5 TRAFFIC & REVENUE

Revenues under the Traditional Approach were forecasted assuming a tolling policy consistent with existing publicly operated State toll facilities. For the P3 Approach, forecasts were developed based on expected tolls and transactions likely under this approach.

Average Annual Revenue	Traditional Approach	P3 Approach
Phase 1	\$48m	
Phase 2	\$49m	
Phase 3	\$49m	
Total Avg Annual Revenues	\$147m	\$300m

Higher toll revenue assumptions are a key factor in the estimated lower net cost of the P3 Approach. Recognizing the importance of traffic forecasts to this quantitative analysis, the State evaluated sensitivities to consider the impact of toll revenues on the quantitative comparison.

The sensitivities illustrate that the P3 Approach is estimated to generate lower net present costs (and, consequently, higher value for money) than the Traditional Approach even **if the P3 Approach revenues are reduced by 20% and revenues under the Traditional Approach are**

increased by 20%¹⁵. Alternatively, toll revenue under the P3 Approach would have to be reduced by approximately 40% for the Traditional Approach to show lower net present cost.

5.6 FINANCING ASSUMPTIONS

The P3 Approach assumes that the developer would finance the design and construction of the Project using non-recourse project debt (primarily a low-cost federal TIFIA loan and tax-exempt PABs) and equity, all of which would be repaid from toll revenues. The difference between the debt and equity that the developer can finance from tolls and the estimated capital costs would be bid by the developer as a public contribution requirement, and would be paid by the State from its available funding sources during the construction period.

Under the Traditional Approach, SRTA would also borrow capital via a federal TIFIA loan. It is assumed that debt under the P3 Approach would be non-recourse, backed only by projected toll revenues. Debt under the Traditional Approach would follow a structure similar to Georgia's Northwest Corridor Express Lanes Project which was financed with a TIFIA loan to SRTA, repaid with toll revenues generated from the project, with GDOT backstopping O&M and lifecycle costs. The remainder of the funding under the Traditional Approach would be paid by the State based on construction progress, using available State and federal funds.

Financing Assumption	Traditional Approach	P3 Approach
TIFIA Loan Interest Rate	4.0% ¹⁶	4.0%
TIFIA Loan Tenor from Service Commencement	45 years	45 years
All-in PABs Interest Rate	NA	4.75%
PABs Maximum Maturity	NA	40 years
Equity IRR	NA	13.5% (pre-tax)

Key financing assumptions under both approaches noted in the table above are consistent with Build America Center guidance.¹⁷

5.7 PROCUREMENT COSTS

Procurement costs incurred by the State under both approaches would include the costs of developing investment-grade traffic and revenue forecasts, initial design and permitting, formulation of technical specifications, drafting of procurement and legal documents, and consultants to provide necessary legal, technical and financial support. These costs help the State develop a sufficiently sound assessment of Project economics and schedule, estimate State funding required, draft transaction terms that provide the best value to the State aligned with market expectations, and manage the procurement process efficiently and in accordance with industry best practices.

¹⁵ Assumes 10% discount rate when calculating net present value

¹⁶ Average rate over a two year period from May 2022 to May 2024

¹⁷ Guidebook on Estimating Cost of Capital for Value for Money Assessments, February 2023

P3 procurement costs are expected to be higher compared to costs of a Traditional DB procurement. P3s require more complex deal terms and documentation, a lengthier procurement process, and additional design activities. The State consequently is expected to require more extensive internal and external resourcing.

By comparison, traditional DB procurement for each of three phases under the Traditional Approach may be completed more quickly, and contract development and other procurement activities are more standardized. The State has successfully managed several such procurements and has a standard form for multi-year DB contracts.

Based on the State's experience, procurement costs for the Traditional Approach are assumed to be \$5 million for each phase, subject to annual escalation of 4% p.a., amounting to \$19m for the Project. Under the P3 Approach, these costs are assumed to be \$15 million (around 0.5% of capital costs under both approaches). Thus, while procurement costs for each phase are lower under the Traditional Approach, total procurement costs for the expected three phases exceed procurement costs under the P3 Approach.

5.8 TAX AND COMPETITIVE NEUTRALITY

“Competitive neutrality” is a concept often applied in VFM analysis whereby quantitative adjustments are made to ensure that both the Traditional and P3 Approaches are being compared on an equivalent basis.

One such adjustment typically relates to the treatment of taxes.

- Under the Traditional Approach, the construction contractor would generate State and federal taxes based on its income from the Project. The State would operate the facility and would not incur State or federal income taxes on net revenues from tolling.
- Under the P3 Approach, the construction contractor (which will be part of the developer team) would similarly pay taxes. Additionally, the private P3 developer (or its shareholders) would incur and pay taxes on its taxable net revenues from the Project. However, such taxes would flow to the government (State and federal) - therefore the tax cost that the developer would incur under the P3 Approach would also be a tax revenue to government.

The FHWA P3 User Guide expands on this concept, suggesting that *“if the P3 is more expensive due to taxation that would flow back to the government, the increased cost due to taxation should logically not negatively impact the [VFM] evaluation.”*¹⁸

Federal and state taxes have been incorporated in the estimates of the developer's costs for the P3 Approach. Since this analysis is being undertaken at the agency (GDOT and SRTA) level and the benefit of such tax payments would not directly flow to these agencies but to State and federal governments, these taxes have not been deducted from the P3 Approach, or added to the Traditional Approach, in the quantitative analysis in Section 4. However, doing so would serve to further increase the relative quantitative benefit of the P3 Approach.

¹⁸ U.S. Department of Transportation. “Guide to P3-Value 2.3” January 2021.

APPENDIX A: APPROACH FOR PRESENT VALUE ANALYSIS

This appendix provides information required by Section 70701 (a)(3)(D) of the BIL

As noted in Section 2.2, the quantitative analysis projects the costs and revenues to the State under the two delivery approaches to estimate which approach would generate the highest net present value (or lowest whole-life net present cost) to the State.

Cashflows in this comparison are “risk-adjusted” by incorporating the value of risk retained by the State under each delivery approach.

The value of State retained risk can be reflected in *either* the cashflows for each approach and discounted at a common risk-free discount rate (exclusive of a project specific risk premium), or reflected in “market-based”, risk-adjusted discount rates which reflect market perception and pricing of project risks, and used to derive the present values of the cashflows.¹⁹

The quantitative analysis in this report incorporates the latter approach -- risk by adjustment to the discount rates used, rather than as cashflows, using market information for similar projects to calculate a range of possible risk-adjusted discount rates. A range of discount rates is used, recognizing that a single discount rate would imply an inappropriate level of accuracy in valuing project risks.

The range of discount rates for this analysis were derived based on the following principles:

- ▶ Had the State reflected retained risk in cashflows, it would have been appropriate to use the State’s cost of capital (currently around 3.75%²⁰) as the appropriate “risk-free” discount rate for cashflows.
- ▶ Instead, the State is using a market-based discount rate - a fair estimate of the weighted average cost of capital (“WACC”) inclusive of these risks. As directed in the FHWA Guidebook, the WACC for other similar projects has been used as the “market valuation” of the project risks.
- ▶ Based on market information, the WACC for similar demand risk express lane concession projects ranges between 6.5% and 8.5%. These rates represent a risk premium in excess of the cost of funds that the State would incur under a general obligation financing, exclusive of Project risks (around 3.75%).
- ▶ Cost of capital assumptions used for the P3 Approach are in accordance with guidance on estimating cost of capital for VFM published by Build America Center (“BAC”).

Cost of Capital Assumption	P3 Approach	BAC Guidance
Cost of Capital for Debt (PABs)	4.75%	4.4% - 6.1%
Cost of Capital for Equity	13.5%	13.0% - 15.0%
Debt-to-Equity Ratio	68/32	60/40 to 70/30

- ▶ Discount rates ranging from a low of 6% to a high of 10% were used for the purpose of sensitivity analysis.

¹⁹ See FHWA Guidebook for Value for Money Assessment, Section 6 – Approach 1 and Approach 2.

²⁰ State of Georgia, General Obligation Bonds, 2023A

APPENDIX B: FUNDING SOURCES AND AVAILABILITY

This appendix provides information required by Section 70701 (a)(3)(A) of the BIL

Funding Sources under the Traditional Approach

- ▶ Infrastructure For Rebuilding America ("INFRA") grant: The Project was awarded a FY2018 grant of \$184 million, of which \$48 million has been used to fund the SR 400 Phase 1 Design-Build Bridge Replacements Project. The remaining \$136 million would be available for the Project. Both funding amounts are being matched with an appropriate amount of State funds. The full amount of INFRA grant would be used for Phase 1.
- ▶ State of Georgia general obligation ("GO") bonds have been issued to support infrastructure to enable future implementation of BRT in the corridor by MARTA. Approximately \$75 million would be available to the developer for construction of this future transit infrastructure. The full amount of GO bonds would be used for Phase 1.
- ▶ The State would seek financing backed by toll revenues from the Project. It is assumed that a TIFIA loan would be used. The TIFIA loan would be sized based on Project cashflows and TIFIA financing terms. SRTA would borrow TIFIA loan to finance Phase 1 to 3.
- ▶ In addition, the State would utilize other appropriated federal and state sources to fund construction.
- ▶ Toll revenue generated from the Project would be utilized to pay for the operations and maintenance of the facility and support the financing used to pay for the construction of the project (pursuant to a flow of funds regime).

Funding Sources under the P3 Approach

The State would make funding available to the developer, with sizing determined via a competitive procurement process. In addition to public funding, the developer would use debt (e.g., TIFIA and PABs) and equity to finance Project construction.

The State's payments to the developer would be drawn from two sources discussed above for the Traditional Approach (\$136 million INFRA grant, \$75 million of State GO bonds).

In addition, the State may utilize in the form of public contribution, other appropriated federal and State sources such as motor fuel tax revenue as sources of funds for payments to the developer and other project costs.

Other forms of federal support: The State has requested a provisional allocation of tax-exempt PABs of \$2 billion on behalf of the developer. While the amount of PABs issuance required would depend upon capital costs, forecast revenues and interest rates, the tax exemption on any PABs issued may be considered an additional form of federal contribution for the Project.

APPENDIX C: KEY TERMS OF THE PROPOSED P3 AGREEMENT

This appendix provides information required by Section 70701 (a)(3)(B) of the BIL

This appendix sets out the key terms of the proposed public-private partnership agreement ("Project Agreement") including the major compensation events.

Topic	Summary
Parties	<ul style="list-style-type: none"> a) SRTA (referred to as the "Authority"); and b) the private partner (referred to as the "Developer")
Developer Concession Rights	<p>In accordance with the terms of the Project Agreement, the Authority would grant the Developer the exclusive right and Developer would accept the obligation to:</p> <ul style="list-style-type: none"> a) finance, develop, design, and construct the Project; b) use, manage, operate, maintain, and repair the Project; c) toll the express lanes; and d) access the relevant right of way to carry out the Project and perform its obligations under the Agreement.
Term	<p>The Agreement has two periods:</p> <ul style="list-style-type: none"> ▶ the "D&C Period" would commence on the Effective Date (i.e., date on which the Project Agreement is signed) and end on the Services Commencement Date. The Services Commencement Date would occur on achievement of substantial completion and other specified activities required for the commencement of tolling and roadway operations. ▶ The "Operating Period" would be a fixed period of fifty (50) years from the Services Commencement Date. <p>The "Term" of the Project Agreement would therefore commence on the Effective Date and would end on the earlier of:</p> <ul style="list-style-type: none"> a) the end of the Operating Period; or b) any earlier termination in accordance with the terms of the Project Agreement.
Project Scope: Design & Construction	<p>The Project consists of approximately 16 miles of express lanes along SR 400 between the MARTA North Springs Station at Exit 5C in Fulton County and approximately 0.9 miles north of the SR 400/McFarland Parkway Interchange at Exit 12 in Forsyth County.</p> <p>The Project will add two express lanes in each direction from the MARTA North Springs Station to McGinnis Ferry Road and one express lane in each direction from McGinnis Ferry Road to the Project terminus, north of McFarland Parkway.</p> <p>The Developer would be required to construct elements to accommodate future bus rapid transit ("BRT") facilities within the scope of the Project.</p>

Topic	Summary
	<p>GDOT would provide the Developer with certain access rights to required right of way, and to properties owned by other local cities or agencies like MARTA for the construction.</p> <p>The Developer would be responsible for performing utility adjustments for the Project. GDOT would facilitate communications between the Developer and the utility owners, assist in obtaining timely cooperation of such owners and assist in resolving disputes, if any.</p>
<p>Project Scope: Roadway Operation and Maintenance</p>	<p>The Developer would be responsible for operating and maintaining the Project during the Term. The Developer must comply with the operating performance requirements set out under the Project Agreement.</p> <ul style="list-style-type: none"> ▶ Operations responsibilities include operations of both the general-purpose lanes and the express lanes on SR 400 including incident detection, monitoring and management, communications with motorists including messaging on DMS, providing a customer assistance hotline for reporting accidents, incidents, and debris, and general highway monitoring, roadside customer assistance and operating the ITS. ▶ Maintenance responsibilities include maintenance of both the general-purpose lanes and the express lanes on SR 400 including all structures that are newly constructed, widened, rehabilitated, or replaced as part of the Project. The scope includes minor maintenance, lifecycle renewal and replacement. The Developer would also be responsible for the maintenance of all bridges carrying SR 400, and all bridges over SR 400 that are required to be widened, rehabilitated, or replaced as part of the Project. (Developer would not be responsible for the maintenance of any existing bridges over SR 400 that are <i>not</i> required to be widened, rehabilitated or replaced as part of the Project).
<p>Project Scope: Tolling System</p>	<p>The Developer would be responsible for the design, installation, testing, integration, financing, operation, and maintenance of:</p> <ol style="list-style-type: none"> a) an electronic toll collection system ("ETCS") which shall support all electronic open road tolling and congestion pricing on the express lanes. It must accept transactions using the Authority's "Peach Pass" protocol and other protocols from all entities with which SRTA has interoperability agreements; b) tolling ITS equipment, toll rate dynamic message signs ("DMS"), traffic sensors, cameras, AVI readers/antennae, as required to support ETCS; and c) roadside and operational back office ("OBO") systems
<p>Handback Requirements</p>	<p>On the Termination Date, the Developer would handback the Project, at no charge, to the Authority in accordance with handback requirements specified in the Project Agreement.</p> <p>The Developer would fund a handback reserve account to be set up no later than five years before the scheduled end of the Term, which can be called upon by the Authority to cover any major maintenance or handback transition activity not completed as required to meet the handback requirements by the end of the Term.</p>

Topic	Summary
<p>Right and Obligation to Toll</p>	<p>To enable the effective management of traffic flow and minimum speeds in the new express lanes, the Developer would be granted by SRTA (in the exercise of its toll powers on a project to manage the flow of traffic) the exclusive right, subject to the limitations and parameters set out in the Project Agreement, to:</p> <ul style="list-style-type: none"> a) set, charge, modify, adjust, collect and enforce tolls for the express lanes commencing on the Services Commencement Date; and b) receive toll revenue with respect to the express lanes. <p>The Developer would also have an obligation to require payment of tolls for use of express lanes, subject to the limitations and parameters set out in the Project Agreement.</p>
<p>Operational Toll Rate</p>	<p>The express lanes would be divided into pricing segments measured between defined points ("Toll Segments") as well as facilities comprising one or more Toll Segments. Generally, users would be charged a toll based on a dynamic tolling approach. The toll rate for a Toll Segment or portion thereof would be determined to maintain traffic at or above a minimum average 45 mph speed and not be higher than the then-effective Base Toll (defined below) for any movement within a Toll Segment.</p> <p>The Base Toll at any time for any Toll Segment would be based on the then-current operational toll rate (maximum toll rate on a per mile basis) which would be initially established and thereafter subject to temporary or permanent adjustment to maintain target operational speeds and volumes as well as annual adjustments based on specified escalation factors that reflect lane performance and economic factors, as validated and approved by SRTA.</p>
<p>Noncompliance Events</p>	<p>To ensure that the Developer performs as per the standards required in the Project Agreement, the Project Agreement would use a performance measurement and noncompliance point system. If the Developer fails to remedy a breach or a failure to comply within a specified period, noncompliance points may be assessed and result in noncompliance payments. Performance shortfalls may also trigger increased oversight by the Authority, and, if unresolved beyond a specified period, a Developer default.</p>
<p>Early Works</p>	<p>Before achieving Financial Close and NTP3, the Developer is authorized to perform "Early Work" from the Effective Date (subject to complying with certain pre-conditions to facilitate the Early Work).</p> <p>Early Work would include activities required to achieve NTP2 and NTP3 (including the advancement of project plans, site investigations, design reviews and submittals, and other non-permanent work).</p> <p>From the Effective Date onwards, the Developer would be entitled to payment from the Authority based on the work progressed as Early Works, up to a total capped amount.</p>
<p>Public Funds Payments from Authority to Developer</p>	<p>The Project Agreement provides a mechanism for the Authority to make payments of public funds to the Developer during the D&C Period based on the level of work progressed by the Developer in each monthly invoicing period, up to a total capped amount.</p>

Topic	Summary
Revenue Share from Developer to Authority	The Developer would be required to pay to the Authority a percentage of revenue when the amount of toll revenue received by the Developer reaches or exceeds certain defined thresholds.
Relief Events	<p>The Project Agreement would include a comprehensive list of relief events, including:</p> <ul style="list-style-type: none"> a) compensation events (see below); b) force majeure events; c) change in law; d) natural disasters and extreme weather events; e) riots/civil unrest and labor disputes impacting the Project; and f) discovery of subsurface conditions during the design and construction work (that were not known to the Developer, and could not have reasonably been identified or discovered prior to the setting date). <p>The Developer, upon occurrence of such event, may claim relief from performance and an extension of time to meet certain milestones, subject to certain risk sharing and/or exclusions.</p>
Compensation Events	<p>The Project Agreement would include a comprehensive list of compensation events:</p> <ul style="list-style-type: none"> a) Authority caused events that are specified failures by the Authority to comply with certain obligations and requirements under the Project Agreement, and certain Authority controlled activities; b) change in law that: <ul style="list-style-type: none"> (i) requires capital expenditure (including, in limited circumstances, a change in State or local tax if the transaction is incurred in performing the D&C Work and the tax increase is above a specified threshold); (ii) which is "discriminatory" (in that it is directed at the Project or similar projects, or the Developer or its key contractors); or (iii) that changes the categories of vehicles that are exempt from paying tolls; c) hazardous materials release by third parties; d) the discovery of unidentified utility facilities, or undisclosed pre-existing hazardous materials, title restrictions, endangered species, or archaeological remains, (each provided that the discovery was not known to the Developer, and could not reasonably have been identified or discovered prior to the setting date); e) certain delays in obtaining required governmental approvals or re-evaluations in specified circumstances; f) continued failure by a utility owner to cooperate in relation to a utility adjustment, provided the Developer has attempted to cooperate, and

Topic	Summary
	<p>subject to resolution via the State's utility mediation process (where applicable);</p> <ul style="list-style-type: none"> a) damage or interruption to the construction or operations and maintenance work, or interference with traffic on the Express Lanes, except where permitted under the Project Agreement (e.g., during agreed hours, or as necessary for the Authority to carry out an obligation), by the Authority, a utility owner, or certain parties related to the Authority; b) discovery, during the D&C Period, of an undisclosed condition with one of four key bridges for SR 400, or operations and maintenance requirements for such bridges to be conducted at or above a specified price cap during the Term; and g) construction of additional SR 400 lanes on or immediately adjacent to the Project limits during the Term. <p>The Developer, upon occurrence of such event, may claim compensation for increase in costs, loss of revenue or increase in financing costs caused by such event subject to certain deductibles, risk sharing, specified allowances and/or exclusions.</p>
Performance and Payment Security	The Developer would be required to furnish a performance bond and a payment bond in the prescribed form and in the prescribed amount.
Financing	The Developer shall be responsible for financing the Project and the Authority would have no liability to the lenders.
Termination and Compensation on Termination	<p>The Authority may terminate the Project Agreement, at any time, at its convenience. Termination may also be triggered due to certain defaults by the Authority or the Developer, an extended force majeure that prevents a party from performing its obligations, due to court ruling or termination by the Authority if the Project becomes uninsurable.</p> <p>Compensation for termination due to Authority default would compensate the Developer for return on equity, equity investment, lenders' liabilities, subcontractor breakage costs, redundancy payments and unpaid amounts owing to Developer under the Tolling Services Agreement</p> <p>Compensation for termination due to reasons other than Authority default or Developer default would compensate the Developer for its equity investment, lenders' liabilities, subcontractor breakage costs, redundancy payments and unpaid amounts owing to Developer under the Tolling Services Agreement.</p> <p>Compensation for termination due to Developer default prior to Services Commencement Date would cover the lesser of a) the value of the D&C Work and b) net lenders' liabilities. After the Services Commencement Date, the termination compensation would cover a specified percentage of lenders' liability only.</p> <p>Further, the compensation may be reduced for maintenance costs, rectification costs, account balances, insurance proceeds, unpaid amounts owing to SRTA under the Tolling Services Agreement, and other outstanding deductions owed by Developer and not previously considered.</p>