



# COMMONWEALTH of VIRGINIA

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January 1, 2017

The Honorable Terence McAuliffe  
Governor  
Commonwealth of Virginia  
P.O. Box 1475  
Richmond, Virginia 23218

The Honorable Stephen D. Newman  
President Pro Tempore  
Senate of Virginia  
General Assembly Building, Room 621  
Richmond, Virginia 23219

The Honorable William J. Howell  
Speaker of the House  
Virginia House of Delegates  
General Assembly Building, Room 635  
Richmond, Virginia 23219

Dear Governor McAuliffe, President Newman, and Speaker Howell:

Pursuant to HB 1359 enacted by the 2016 Virginia General Assembly, please find attached the interim report of the work of the Transit Capital Project Revenue Advisory Board.

Sincerely,

Handwritten signature of Jennifer L. Mitchell in black ink.

Jennifer L. Mitchell  
Director  
Virginia Department of Rail and Public Transportation

Handwritten signature of Marty Williams in black ink.

Marty Williams  
Chair  
Transit Capital Project  
Revenue Advisory Board

# HB 1359 – Transit Capital Project Revenue Advisory Board

INTERIM REPORT TO THE VIRGINIA GENERAL ASSEMBLY

December 2016



Virginia Department of Rail and Public Transportation

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## EXECUTIVE SUMMARY

In 2016, the Virginia General Assembly enacted HB 1359, creating the Transit Capital Revenue Advisory Board (RAB) to examine the impacts of the forthcoming revenue reduction created by the expiration of the Transportation Capital Project Revenue (CPR) bonds in 2018. Additionally, the RAB is tasked with identifying possible sources of replacement revenue, and to develop methodologies for prioritization of transit capital funds similar to the successful HB2 (SMART SCALE) program enacted in 2015. The RAB is comprised of seven members appointed to one-year terms by the Secretary of Transportation, upon the recommendation of key stakeholders in state and local government as well as the transit industry, including: Community Transportation Association of Virginia (CTAV), DRPT, the Virginia Association of Counties (VACO), the Virginia Municipal League (VML), and the Virginia Transit Association (VTA). The Department of Rail and Public Transportation (DRPT) was directed to provide necessary administrative support to the Board.

The CPR bonds were first authorized by the General Assembly in 2007 through HB 3202 (§ 33.2-365). A total of \$3.0 billion of bonds were authorized, and a minimum of 20 percent were dedicated to transit in an effort to meet the demands of a rapidly growing transportation mode. The Commonwealth Transportation Board (CTB) first allocated the CPR bonds to transit projects in Fiscal Year 2008. The CTB chose to allocate the minimum 20 percent transit share (\$60 million annually) over a ten year period which ends in 2018. Additionally, the CTB elected to allocate an additional \$50 million a year of CPR bond funds to the state of good repair on the Washington Metropolitan Area Transit Authority (WMATA) system. In light of the fact that the CPR bonds provide 40 percent of the entire transit capital program with over \$110 million in annual revenues, their expiration in 2018 will leave transit systems in the Commonwealth without necessary funds for capital improvement, at a time when transit demand and needs continue to grow across Virginia.

Thus far, the RAB has focused on validating the transit capital needs and developing a transit capital prioritization process. The transit capital needs work was summarized in three ten year (FY 18 – FY 27) funding scenarios with the conservative base case projecting a funding gap of \$178M in FY27. Furthermore, analysis indicates that existing state transit capital funds are insufficient to cover just those needs associated with maintaining a state of good repair for existing transit assets. Consequently, existing state transit capital grant match rates cannot be maintained without additional revenue. Reduced state capital grant contributions will likely result in a reduction in transit capital investments by Virginia transit agencies, or will require additional funding from local, regional, or federal funding sources to make up the gap created by reductions in state funding.

For the purpose of prioritization, it is proposed that projects will be divided into two major groups that will follow separate prioritization processes: State-of-Good Repair (SGR) and Major Expansion projects. In this proposed approach, minor capital expansion projects will be evaluated and prioritized using the same criteria as the SGR projects. Both prioritization processes will use a different set of criteria and scoring process, and will ultimately lead to two separate lists of prioritized projects. Project scores would be compared against other transit projects and ranked relative to cost (i.e. cost-effectiveness) within the two categories.

Over the next few months, the RAB will be focused on evaluating potential revenue streams and finalizing the prioritization process in order to make a final recommendation to the General Assembly by August 1, 2017.

## INTRODUCTION

The General Assembly has long recognized the need to fund essential transit capital projects. In 1986, the Transportation Trust Fund (TTF) was established, appropriating 8.4 percent of the total funds to mass transit. By 1999, the General Assembly recognized increased demand for mass transit, and it increased transit's share to 14.7 percent, taking the difference from the share for highways – a rate that remains constant today. The Commonwealth Transportation Board (CTB) first allocated the CPR bonds to transit projects in Fiscal Year 2008. The CTB chose to allocate the minimum 20 percent transit share (\$60 million annually) over a ten year period which ends in 2018. Additionally, the CTB elected to allocate an additional \$50 million a year of CPR bond funds to the state of good repair on the Washington Metropolitan Area Transit Authority (WMATA) system.

In 2015, HB 1887 redistributed a portion of the new revenues generated from HB 2313 to transit capital beginning in FY17. These new sources of transit capital funds are approximately \$26 million annually from motor vehicle fuel taxes and \$14 million annually from recordation taxes.

Despite these proactive actions by the General Assembly, CPR bond revenues will decline by 2019 and be fully exhausted in 2020, resulting in a \$70 million annual loss of transit capital program revenues. In 2016, Delegate Christopher Peace introduced and the Virginia General Assembly enacted HB 1359, creating the Transit Capital Revenue Advisory Board (RAB) and directing the Department of Rail and Public Transportation (DRPT) to provide administrative support to the Board. The enactment of HB 1359 comes in advance of the anticipated loss of revenues, and is a recognized effort by the General Assembly to further study the issue, to identify possible sources of replacement revenue, and to develop methodologies for prioritization of transit capital funds, along the similar parameters of the highly successful HB2 (SMART SCALE) program enacted in 2015.

The RAB is comprised of seven members appointed to one-year terms by the Secretary of Transportation, upon the recommendation of key stakeholders in state and local government as well as the transit industry, including: CTAV, DRPT, VACO, VML, and VTA. RAB members represent diverse geographic areas and industry leadership to address the revenue reduction issue. It includes former Senator and current CTB member Marty Williams as Chairman and Fairfax County Supervisor Jeff McKay as Vice Chairman. The RAB membership also includes former Delegate and House Transportation committee Chairman, Tom Rust; the Mayor of Fredericksburg, Mary Katherine Greenlaw; former Virginia Beach City Manager, Jim Spore; Dr. James Toscano of Norfolk; and the General Manager of the Greater Lynchburg Transit Company, Josh Baker.

RAB held its first organizational meeting on June 16, 2016, in Richmond. The Board, in meeting its obligations under HB1359, presents this Interim Report of its work to date to Governor Terence McAuliffe as well as the members of the 2017 Virginia General Assembly.

## ROLE OF THE TRANSIT SERVICE DELIVERY ADVISORY COMMITTEE

During the 2013 General Assembly Session, the Transit Service Delivery Advisory Committee (TSDAC) was established by SB 1140 to advise DRPT in the development of a distribution process for transit capital and operating funds. The TSDAC consists of representatives from the CTAV, DRPT, VACO, VML, and VTA. Members of the TSDAC bring a wealth of technical knowledge about transit and are well versed in matters of Federal and state policy impacting transit in the Commonwealth. The committee advises DRPT on methodologies used to distribute transit funds based on performance, the application of funding tiers, and how the transit systems can incorporate these metrics in their transit development plans. Coordination between the work of the TSDAC and RAB has been critical to the advancement of the tasks outlined in HB 1359.

Integral to this effort, the TSDAC endorsed a set of Guiding Principles to provide focus to the development of a prioritization methodology. These overarching principles are:

- Maintain the integrity of the statewide program,
- Promote efficiency, accountability, and transparency,
- Support effective program implementation, and
- Make the business case for transit investment.

## TRANSIT CAPITAL NEEDS AND REVENUE ANALYSIS

Through DRPT, the RAB engaged WSP | Parsons Brinckerhoff to develop a ten-year projection of transit capital spending by agencies across Virginia, as well as, the estimated draws on state transit capital funds stemming from that spending. The projection of transit capital spending reflects a conservative forecast of system needs based on the fiscally constrained planning process established in Federal and State Code. The subsequent analysis compares the estimated state transit capital funding contributions to projected revenues to identify funding shortfalls, and it further projects additional funding needed to offset shortfalls.

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### FUNDING SOURCES

State transit capital funding sources for the period of 2018 – 2027 amount to approximately \$1.3 billion (in year-of-expenditure dollars) and include the following sources:

- **State Capital Assistance**, which constitutes the 25 percent share of the Mass Transit Fund dedicated to transit capital assistance and provides approximately \$100 million annually
- **Transportation Capital Project Revenue Bonds**, which provide \$60 million annually to the statewide transit capital program; and \$50 million annually to WMATA dedicated to its state of good repair activities which are matched equally under the federal Passenger Rail Investment and Improvement

Act of 2008 (PRIIA). These annual bond fund authorizations begin to diminish in FY 2019 and are exhausted after FY 2020.

## SCENARIO ANALYSIS

Based on approximately \$1.3 billion in state funding available for the period of FY 18 – FY 27, three scenarios were developed to assess potential transit capital funding needs:

- **Scenario 1: Base Case** - Agencies seek funding consistent with the Six Year Improvement Program (SYIP). Projected spending totals \$6.3 billion, with a state funding contribution, under current allocation approaches and matching rates, of \$2.4 billion dollars. This scenario results in a \$1.1 billion gap between estimated state transit capital funding needs and projected funding sources.
- **Scenario 2: SGR Only** - State provides funding only to cover costs of State of Good Repair (SGR) expenses. Any expansion projects would be funded by local, regional, or federal funds, without state transit capital assistance. Projected SGR spending totals \$4.5 billion, with a state funding contribution, under current allocation approaches and matching rates, of \$1.8 billion dollars. This scenario results in a funding gap of \$0.5 billion.
- **Scenario 3: Additional Expenditures** – Building on the base case scenario, agencies seek funding for additional expansion projects for which funding is not currently identified. In addition, this scenario includes a 5% contingency on project capital costs. Projected spending in this scenario totals \$8.5 billion, with a state funding contribution, under current allocation approaches and matching rates, of \$3.3 billion dollars. This scenario results in a gap of \$2.0 billion.

For each scenario, Table 1 summarizes projected state transit capital needs, the projected state contribution, available state funding, and the projected funding gap over the 10 year projection.

**Table 1- Projected Spending, State Contribution, and Funding Gap by Scenario (FY 18 – FY 27)**  
(Billions of Year-of-Expenditure Dollars)

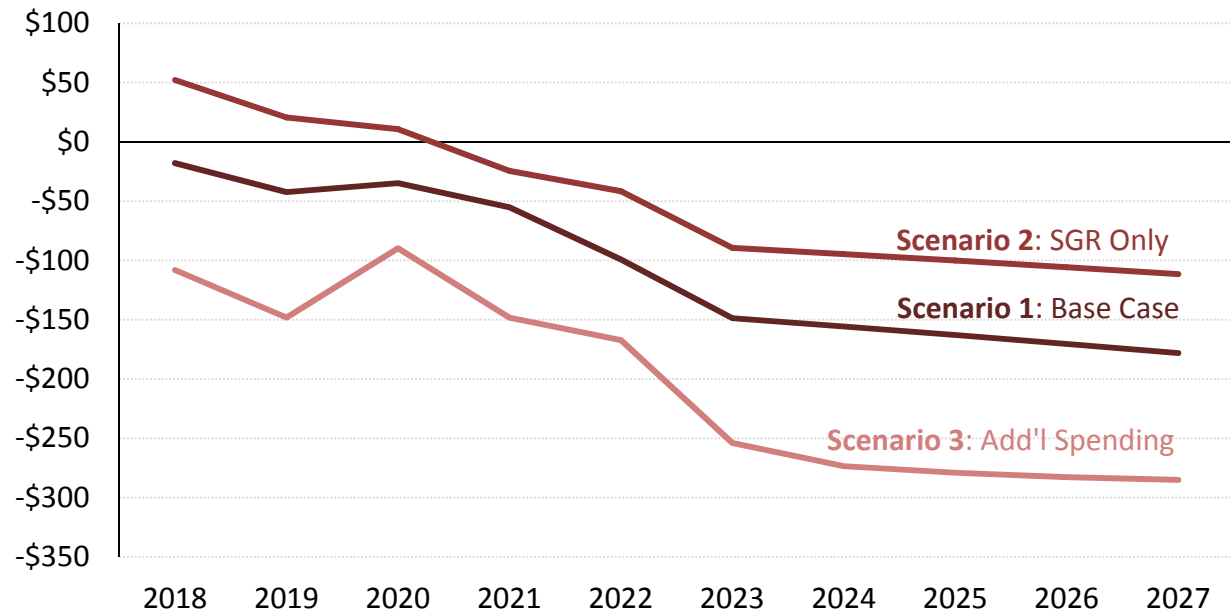
	Statewide Transit Capital Needs	Projected State Contribution*	Available State Funding	Projected Funding Gap
Scenario 1: Base Case	\$6.3B	\$2.4B	\$1.3B	\$1.1B
Scenario 2: SGR Only	\$6.3B Total \$4.5B SGR	\$1.8B	\$1.3B	\$0.5B
Scenario 3: Add'l Spending	\$8.5B	\$3.3B	\$1.3B	\$2.0B

\*: Excludes share of transit capital costs funded by federal revenues and by State Other Sources

Figure 1 summarizes the annual projected state transit capital funding gap by scenario, which increases over time in each case as bond funds presently providing state transit capital funding assistance expire, and projected capital needs grow over time.

**Figure 1 - Annual Projected State Transit Capital Funding Gap by Scenario (FY18 – FY27)**

(Millions of Year-of-Expenditure Dollars)



**KEY FINDINGS**

As shown in Figure 1, the state is projected to face a funding gap in all three scenarios, even in the conservative base case. Furthermore, Scenario 2 indicates that existing state transit capital funds are insufficient to cover needs associated with maintaining a state of good repair for existing transit assets. Consequently, existing state transit capital grant matching rates will not be maintained without new funding streams. Lower state capital grant contributions will likely result in a reduction in transit capital investments by Virginia transit agencies or will require additional funding from local, regional, or federal funding sources to make up the gap created by reductions in state funding.



## DEVELOPMENT OF A PROJECT PRIORITIZATION METHODOLOGY

Through DRPT, the RAB engaged Cambridge Systematics to develop a prioritization methodology. Over the past six months, DRPT and Cambridge Systematics have worked closely with the TSDAC and RAB to discuss and review potential approaches for prioritization of transit capital funds. HB 1359 specifies the following requirements for the new prioritization process:

- “Transit capital used for new transit projects or expansion of existing transit projects shall be evaluated using a prioritization process based on an objective and quantifiable analysis that considers, at a minimum, the following factors relative to the cost of the project or strategy: congestion mitigation, economic development, accessibility, safety, environmental quality, and land use”; and
- “Develop a proposal to foster project-specific prioritization within the asset tiers of the tiered approach established by the Commonwealth Transportation Board for capital purposes based on asset need and anticipated state participation level and revenues, for which funding for the transit state of good repair program shall be allocated and distributed.”

A draft approach has been developed for further study based upon a set of process assumptions with the concurrence of the RAB and the TSDAC. The draft approach will be utilized to model potential scenarios for implementation and is subject to change based upon testing and validation.

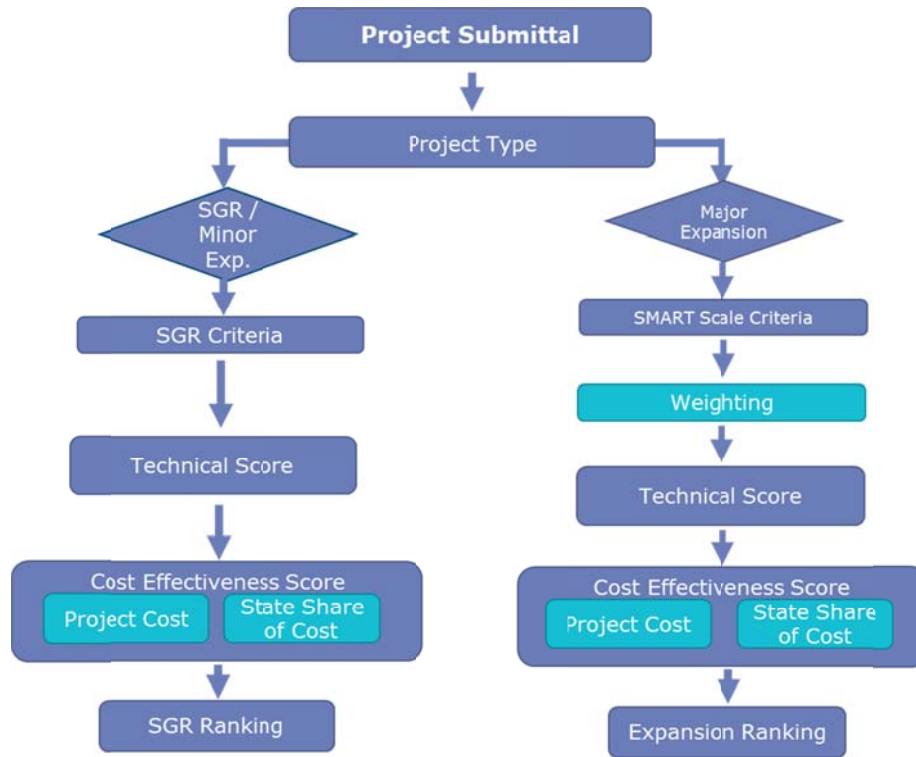
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## SEPARATION OF SGR AND MAJOR EXPANSION FOR PRIORITIZATION

Figure 2 is a flowchart of the proposed prioritization process being developed. For the purpose of project prioritization, projects would be divided into two major groups that will follow separate prioritization processes: SGR and Major Expansion projects. Both prioritization processes will use a different set of criteria and scoring process, and will ultimately lead to two separate lists of prioritized projects by type. In this proposed approach, minor capital expansion projects will be evaluated and prioritized using the same criteria as the SGR projects. Project scores would be compared against other transit projects and ranked relative to cost (i.e. cost-effectiveness) within the two categories.

A list of representative project types for both project categories is shown in Table 2.

**Figure 2. Prioritization Process Framework**



**Table 2 Examples of SGR/Minor Expansion Projects and Major Expansion Projects**

SGR/Minor Expansion	Major Expansion
<ul style="list-style-type: none"> <li>• Replacement buses and vans</li> <li>• Rehabilitation/Renovation of Administrative/Maintenance facilities</li> <li>• Replacement of bus shelters or customer facilities</li> <li>• Replacement of technology/systems/communication</li> <li>• Fleet or facility expansion</li> </ul>	<ul style="list-style-type: none"> <li>• Significant fleet expansion</li> <li>• New bus stops, stations and customer facilities</li> <li>• New administrative or maintenance facilities</li> <li>• Significant new technology/system upgrades</li> <li>• Station access improvements</li> <li>• BRT/LRT corridors</li> </ul>

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## POTENTIAL PRIORITIZATION CRITERIA AND MEASURES

The project team reviewed several potential measures for each criterion, and considered the following when examining potential measures:

- Data availability,
- Complexity,
- Quantitative (vs. qualitative),
- Relevance to transit projects,
- Consistency with FTA or Smart Scale evaluations, and
- Advantages and Limitations.

The following summarizes the current draft criteria and measures being developed for SGR and minor expansion projects.

- **Asset Condition:** ensure that investments are targeted at maintaining a state of good repair. Asset age, vehicle mileage and condition rating are the proposed measures for asset condition. Asset age and vehicle mileage are collected by DRPT in its asset management system (TransAM); and it is anticipated that a condition rating will be integrated in the future, which would allow project evaluation using both criteria. FTA has developed a condition rating from 1 (worn) to 5 (excellent) scale that can be applied to the prioritization process.
- **Service Quality:** the project's impact on service (direct or indirect), and to what extent it affects the rider experience. The proposed approach to measure service impact will be primarily qualitative and will consider how the capital investment will impact the reliability, efficiency, frequency and travel time, access and customer experience, and safety and security of transit service provided.

Major expansion projects will be evaluated using the criteria specified in HB 1359, which are the same criteria used for the SMART Scale prioritization process. A modified "SMART Scale" process is proposed that considers data availability and the level of effort required from grantees to prepare grant applications. The following summarizes the proposed modified "SMART Scale" measures for each of the following criteria:

- **Congestion Mitigation:** a project's ability to reduce delay, improve transportation system reliability, and encourage transit use. The evaluation will be based on the expected ridership related to the capital project. This analysis is similar to how the SMART Scale benefits are calculated, but it would not involve explicit calculation of person throughput or hours of delay which are based on ridership.
- **Economic Development:** the extent to which the project supports existing economies and enhances opportunity for economic development. The measure would be similar to the SMART Scale "Project Support for Economic Development" measure, but may revise procedures for calculation of development impacts.
- **Accessibility:** whether the project enhances worker and overall household access to jobs. As with SMART Scale, this evaluation would consider access to jobs for all households and by disadvantaged persons, but the calculation is expected to emphasize walk access to and from the transit service.

- **Safety:** whether the project addresses multimodal safety concerns and improves transit safety and security. It is envisioned that this measure will be a qualitative assessment based on the type of transit investment and whether it contains project components or elements that contribute to improved safety or security.
- **Environmental Quality:** extent to which the project will reduce emissions and energy consumption and minimize natural resource impacts. These measurements will be very similar to SMART Scale, but it will consider ways to simplify the calculation of natural resource impacts.
- **Land Use:** if it improves consistency of the connection between local comprehensive plans and land use policies with transit investments. This measure will follow the SMART Scale scoring process that evaluates the promotion of walkable, bicycle-friendly mixed-use development and in-fill development; and it will also scale points by population and employment density.

## NEXT STEPS

Over the next few months, the RAB, TSDAC, DRPT, and the consultant team will advance work on project prioritization and potential revenues focusing on the following activities:

- Identify and evaluate potential options for increasing transit capital revenue.
- Fully develop the prioritization methodologies for both SGR/Minor Expansion and Major Expansion Projects, including finalizing quantitative/qualitative measures to be scored under each criterion, and propose weighting measures.
- Test prioritization processes with a representative sample of actual projects.
- Develop an allocation methodology utilizing the prioritization process and determine the appropriate application of the tiering methodology to prioritized projects.