



COMMONWEALTH of VIRGINIA

Commonwealth Transportation Board

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RESOLUTION OF THE COMMONWEALTH TRANSPORTATION BOARD

Agenda Item #6

March 21, 2019

MOTION

Made By: Ms. Hynes, Seconded By: Mr. Kasproicz
Action: Motion Carried, Unanimously

Title: Policy for the Implementation of Performance Based State Transit Operating Allocation

WHEREAS, Section 33.2-1526.1 of the *Code of Virginia* provides that the Commonwealth Transportation Board shall allocate thirty-one percent of the Commonwealth Mass Transit Fund to support operating costs of transit providers; and

WHEREAS, Section 33.2-1526.1 of the *Code of Virginia* provides that the Commonwealth Transportation Board shall establish service delivery factors, based on effectiveness and efficiency, to guide the relative distribution of such funding; and

WHEREAS, the Department of Rail and Public Transportation has consulted with the Transit Service Delivery Advisory Committee in the development of this performance based allocation process; and

WHEREAS, the Transit Service Delivery Advisory Committee adopted the following policy objectives to guide their deliberations: promoting fiscal responsibility, incentivizing efficient operations, supporting robust transit service, rewarding higher patronage, promoting mobility, supporting a social safety net, and utilizing data that exists for all agencies; and

WHEREAS, the Commonwealth Transportation Board adopted Strategic Planning Guidelines on October 30, 2018, which are intended to guide urban transit agencies through an evaluation of their services that would ultimately improve system performance over time; and

WHEREAS, the Department of Rail and Public Transportation has solicited input from localities, metropolitan planning organizations, transit authorities, and other stakeholders in the development of the performance based allocation process; and

NOW THEREFORE BE IT RESOLVED, the Commonwealth Transportation Board hereby adopts the following policy for the allocation of operating funding pursuant to subdivision C of 33.2-1526.1 of the *Code of Virginia*:

1. For the purposes of system sizing the following metrics will be applied:

Bus Systems:

Operating Cost (50%)
Ridership (30%)
Revenue Vehicle Hours (10%)
Revenue Vehicle Miles (10%)

2. A separate sizing metric shall be created, for the purpose of allocating funds to commuter rail systems based on the performance of commuter rail systems, relative to all other modes on the basis of:

Passenger Miles Traveled (33%)
Revenue Vehicle Hours (33%)
Revenue Vehicle Miles (33%)

3. For the purpose of performance adjustment the following metrics will be applied to all systems:

Passengers per Revenue Vehicle Hour (20%)
Passengers per Revenue Vehicle Mile (20%)
Operating Cost per Revenue Vehicle Hour (20%)
Operating Cost per Revenue Vehicle Mile (20%)
Operating Cost per Passenger (20%)

4. In order to ensure an even distribution of funding, the share of state operating assistance will be capped at 30% of an agency's operating cost. Unallocated balances remaining after applying the cap will be run through the performance based formula to ensure full allocation of the available operating funding.

5. Agencies that receive an increase in state assistance as a result of the performance based formula are encouraged to invest the increased allocation into sustaining and expanding service options.

BE IT FURTHER RESOLVED, the Board recognizes the potential impacts associated with implementation of this policy and hereby adopts the following policy for the allocation of operating funding for fiscal year 2020 only:

1. For the purposes of system sizing the following metrics will be applied in FY2020:

Bus Systems:

Operating Cost (60%)
Ridership (20%)
Revenue Vehicle Hours (10%)
Revenue Vehicle Miles (10%)

2. Supplemental assistance will be provided for FY2020 to any mass transit provider that receives a reduction in operating assistance as a direct result of the implementation of the performance based allocation methodology. The impact will be determined by comparing FY20 allocations under the prior formula to the FY20 allocations under the new formula. The supplemental assistance shall not exceed \$3 million.

BE IT FURTHER RESOLVED, the Board hereby directs the Director of the Department of Rail and Public Transportation to take all actions necessary to implement and administer this policy and process, including, but not limited to preparation of program guidance and outreach consistent with this resolution.

BE IT FURTHER RESOLVED, the Board hereby directs the Director of the Department of Rail and Public Transportation to analyze the outcomes of this process on an annual basis and to revisit the process at least every three years, in consultation with the Transit Service Delivery Advisory Committee, transit agencies, metropolitan planning organizations, and local governments prior to making recommendations to the Commonwealth Transportation Board.

CTB Decision Brief

Policy for the Implementation of Performance Based State Transit Operating Allocation

Issue:

HB 1539 was passed during the 2018 General Assembly Session. This legislation provided dedicated funding for WMATA Capital, restructured the Mass Transit Trust Fund, and enacted a slate of reforms for the statewide transit program. The Policy for the Implementation of Performance Based State Transit Operating Allocation provides the policy framework for the implementation of a fully performance based allocation process in the FY2020 funding cycle.

Facts:

Section 33.2-1526.1(C)(1) of the *Code of Virginia* provides that the Commonwealth Transportation Board shall distribute transit operating funds on the basis of service delivery factors, based on effectiveness and efficiency measures established by the Board. Such measures and their relative weight shall be evaluated every three years. The eleventh enactment clause of Chapter 856 of the 2019 Acts of Assembly deferred implementation of this legislation until July 1, 2019.

DRPT has worked in consultation with the Transit Service Delivery Advisory Committee (TSDAC) and other stakeholders to develop the necessary policies and process to implement a performance based state transit operating allocation. The TSDAC unanimously approved the proposed policy principles at their meeting on December 4, 2018. The only unresolved issue was the number of transition years provided for in the policy. DRPT has recommended one year, but has included language in the resolution reflecting TSDAC's desire for two transition years.

The CTB was briefed on this effort in April and December of 2018, as well as, January 2019 and the attached policy has been open for public comment for a period of 45 days.

The 2019 Appropriations Act, SB 1680, and HB 2553 provide that any mass transit provider that receives funds from the Commonwealth Mass Transit Fund and that incurs a loss in operating funds as a direct result of the performance-based allocation process shall be eligible for supplemental funding in FY20. This supplemental funding will be allocated in the FY20-25 Six Year Improvement Program.

Prior to the implementation of HB 1539 (2018 General Assembly Session), operating funds were distributed based on a combined formula with approximately two-thirds allocated based on operating costs, with the remaining funds allocated based on a performance based allocation methodology that considered operating costs, ridership, revenue vehicle miles and revenue vehicle hours.

Recommendation: DRPT recommends that the CTB approve the Policy for the Implementation of Performance Based State Transit Operating Allocation.

Action Required by CTB: Approve the Policy for the Implementation of Performance Based State Transit Operating Allocation.

Options: Approve, Deny, or Defer.



Virginia Department of Rail and Public Transportation

Performance-Based Operating Assistance Allocation Guidance

Fiscal Year 2020

July 1, 2019 – June 30, 2020

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INTRODUCTION AND OVERVIEW

Virginia's Department of Rail and Public Transportation (DRPT) allocates operating assistance funding to transit agencies across the Commonwealth through an allocation process based on the Code of Virginia and Commonwealth Transportation Board (CTB) policy. Beginning in Fiscal Year (FY) 2020 the entirety of each transit agency's allocation will be based on a new performance-based methodology.

This document describes the proposed methodology for allocating state operating assistance grants in Fiscal Year 2020 and future years.

DRPT, working with Virginia's Transit Service Delivery Advisory Committee (TSDAC), has developed a proposed methodology for allocating operating assistance funding to comply with a 2018 legislative mandate to base grant amounts on each agency's performance (Section 33.2-1526.1 of the *Code of Virginia*). This recommendation is subject to review and approval by the Commonwealth Transportation Board.

The metrics and their weights were considered during several meetings of the TSDAC and CTB in 2018. The proposed methodology balances the need for reliable annual funding as well as the availability and reliability of performance data to support the six policy goals TSDAC identified:

- Promote Fiscal Responsibility
- Support Robust Transit Service
- Improve Transit Patronage
- Incentivize Efficient Operations
- Promote Mobility
- Support Social Safety Net

OPERATING ASSISTANCE METHODOLOGY

PROPOSED PROCESS

The proposed performance-based operating allocation methodology would allocate operating assistance based on a combination of an agency's sizing and performance factors. Sizing factors represent an agency's relative size to other agencies across the Commonwealth. Performance factors represent an agency's performance trend for a given metric relative to statewide trends for all agencies.

The data required from each agency to compute the operating allocation formula includes:

- **Operating Cost for System Sizing:** Most recent audited operating cost available, net of depreciation, projects funded in other DRPT programs, and non-transit related expenses. New transit service will be based on budgeted operating costs for the year of implementation until audited operating costs are available.
- **Operating Cost for Performance Metric:** Total operating costs less depreciation, ineligible costs, and costs not related to transit.
- **Ridership** – Unlinked Passenger Trips - Number of passengers who board public transportation vehicles, regardless of whether a passenger is transferring from another transit vehicle.

- **Revenue Vehicle Hours (RVH)** - Hours traveled by revenue vehicles (buses, vans, railcars, etc.) while in revenue service. For uni-directional commuter routes greater than 20 miles in length, non-revenue hours associated with deadhead trips will be considered as revenue vehicle hours for the purpose of allocating operating assistance.
- **Revenue Vehicle Miles (RVM)** - Miles traveled by revenue vehicles while in revenue service. For uni-directional commuter routes greater than 20 miles in length, non-revenue miles associated with deadhead trips will be considered as revenue vehicle miles for the purpose of allocating operating assistance.
- **Passenger Miles Traveled (PMT)** - Cumulative sum of the distances traveled by each passenger. This metric is used for calculation of the Commuter Rail Pool, and is estimated for small transit agencies based on reported ridership relative to statewide average distance traveled by commuter rail and commuter bus agency passengers.

COMMUTER RAIL SIZING

Due to the unique cost structure of Commuter Rail compared to other transit services, Commuter Rail receives a unique treatment in the sizing process. Currently, the only Commuter Rail agency in the Commonwealth of Virginia is Virginia Railway Express (VRE). The **size-weight** for the Commuter Rail pool is calculated by taking the percentage of VRE's Passenger Miles Traveled, Revenue Vehicle Hours, and Revenue Vehicle Miles compared to statewide totals. Each factor is weighted at 1/3 (33.33%) and multiplied by the total amount of operating assistance available statewide.

- 33.33% Passenger Miles Traveled
- 33.33% Revenue Vehicle Hours
- 33.33% Revenue Vehicle Miles

Funds not allocated to Commuter Rail based on this sizing metric are allocated to the remainder of transit agencies on the basis of the sizing factors described below.

The commuter rail allocations are then adjusted by the performance metrics to establish the annual allocation by agency.

SIZING

To correlate funding allocations with the relative size of each agency, a **size-weight** factor is calculated with a combination of sizing metrics, at specific percentage weights. The size-weight for each metric is computed in the following manner:

$$\text{Agency Size-Weight} = (\text{Sum of Agency Sizing Metric} / \text{Statewide Totals}) * \text{Weight}$$

The proposed sizing metrics and weights for the sizing formula are:

- 50% Operating Cost
- 30% Ridership
- 10% Revenue Vehicle Hours
- 10% Revenue Vehicle Miles

If the statewide sum of agency size-weights does not equal 100%, then the ratios are normalized such that the statewide sum of size-weights for all agencies totals 100%.

$$\text{Agency Normalized Size-Weight} = \text{Agency Size-Weight} / \text{Sum of Statewide Size-Weights}$$

PERFORMANCE ADJUSTMENTS

Once the **normalized size-weight** for each agency has been determined, the size-weight is adjusted by the five **performance metrics**.

The proposed performance metrics are:

- Passengers per Revenue Vehicle Hour
- Passengers per Revenue Vehicle Mile
- Operating Cost per Revenue Vehicle Hour
- Operating Cost per Revenue Vehicle Mile
- Operating Cost per Passenger

For each performance metric, three years of historical data plus the most recent year of data is used to calculate performance trends for each agency and statewide. Each agency's three-year trend in year-over-year percentage change relative to the statewide trend is calculated. The formula for this trend is:

$$\text{Trend Factors} = 3\text{-Year Average of (Annual Change in each Agency's Performance Metric / Annual Change in Statewide Performance Metric)}$$

For Passengers per Revenue Vehicle Hour and Passengers per Revenue Vehicle Mile, these **trend factors** are then multiplied by the size-weight to compute a **size-performance weight**.

$$\text{Size-Performance Weight} = \text{Agency Size-Weight} * \text{Trend Factor}$$

For Operating Cost per Revenue Vehicle Hour, Operating Cost per Revenue Vehicle Mile, and Operating Cost per Passenger, an inverse function is used, and the size-weight is multiplied by 1 divided by the trend factor, to incentivize decreasing Cost trends.

$$\text{Size-Performance Weight} = (\text{Agency Size-Weight} * 1) / \text{Operating Cost-based Trend Factor}$$

All size-performance weights are then normalized such that the statewide sum of size-weights for all agencies for each metric are equal to 100%.

$$\text{Agency Normalized Size-Performance Weight} = \text{Agency Size-Performance Weight} / \text{Sum of Statewide Size-Performance Weights}$$

FUNDING ALLOCATIONS

At this stage, each agency has 5 normalized size-performance weight factors. These factors are multiplied by their weight (20% for each performance metric), summed, and multiplied by total available funding. This sum is the agency's total operating assistance allocation.

$$\begin{aligned}
 \text{Agency Funding Allocation} = & \text{Available Funding} * \\
 & [(Passengers per RVH \text{ Normalized Size-Performance Weight} * 20\%) + \\
 & (Passengers per RVM \text{ Normalized Size-Performance Weight} * 20\%) + \\
 & (Operating Cost per RVH \text{ Normalized Size-Performance Weight} * 20\%) + \\
 & (Operating Cost per RVM \text{ Normalized Size-Performance Weight} * 20\%) + \\
 & (Operating Cost per Passenger \text{ Normalized Size-Performance Weight} * 20\%)]
 \end{aligned}$$

FUNDING CAP

A cap on funding allocations is used to minimize the volatility of funding received by each agency. The cap is proposed to be set at 30% of an Agency's latest year of operating costs. The recommended percentage is informed by the highest operating assistance grant received under the FY 2019 allocation methodology by Virginia transit agencies, which is generally below 30% of operating costs. After applying this cap to the operating assistance allocation, an unallocated funding pool remains. These funds are proposed to be redistributed to agencies below this cap proportional to their Agency Funding Allocation.

TRANSITION METHODOLOGY (FY2020)

In order to lessen the impacts of the new methodology on the predictability of agency funding, one transition year was proposed by DRPT to progressively adjust the sizing metrics.

The proposal is for the Operating Cost to be weighted at 60% and for Ridership at 20% for the sizing metrics in FY2020. For FY2021 onward, Operating Cost will be weighted at 50% and for Ridership at 30% in the sizing metrics.

SIZING METRICS	TRANSITION YEAR	FUTURE YEARS
	FY2020	FY2021 ONWARD
Operating Cost	60%	50%
Ridership	20%	30%
Revenue Vehicle Hours	10%	10%
Revenue Vehicle Miles	10%	10%



Virginia Department of Rail and Public Transportation

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