Finance and Capital Committee

Action Item III-A

November 7, 2024

Approval of Restructuring Metrobus and Metrorail Operating Subsidy Allocation Formulas

Washington Metropolitan Area Transit Authority

Board Action/Information Summary

◉ Action ○ Information	Document Number: 210868	Resolution: ◉ Yes ○ No

Presentation Name:

Approval of Revised Metrobus and Metrorail Subsidy Allocation Formulas

Project Manager:

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Project Department:

Planning and Performance

Purpose/Key Highlights:

This presentation provides an overview of the Metrobus and Metrorail operating subsidy allocation formulas and recommends adoption of restructured subsidy formulas for Metrobus and Metrorail that aligns with formula goals, address key challenges, and work better for customers and the region.

Interested Parties:

None

Background:

Metrorail Operating Subsidy Allocation Formula

The current Metrorail Operating Subsidy Allocation Formula was originally adopted by the Board of Directors, starting with the Base Subsidy, in 1977. It was subsequently amended in 1995 to include the Maximum Fare Subsidy. For Metro's FY2020 – FY2024 budgets, the Board adopted a modified allocation that incorporated Virginia and Maryland's Three Percent Cap legislation.

The Metrorail Operating Subsidy Allocation Formula calculation begins by deducting all budgeted Metrorail operating revenues from operating costs, which results in the total Metrorail Operating Subsidy allocated to Metro's Compact Jurisdictions. The current Metrorail Operating Subsidy Allocation Formula has two parts:

- Maximum Fare Subsidy and
- Base Subsidy.

The Metrorail Maximum Fare Subsidy allocates 50 percent of the possible fares that the riders would have paid without Metro's fare taper[1] and maximum fare cap (currently set to $6.75) to their home jurisdiction. The remaining 50% is allocated to the Metrorail Base Operating Subsidy. The Metrorail Maximum Fare Subsidy calculation is based on trip data from the Metrorail Passenger Survey, conducted approximately every five years. Each jurisdiction's share of the Maximum Fare Subsidy component is calculated by the sum of surveyed Metrorail passenger trips, which links those trips to riders' home jurisdiction. The Metrorail Maximum Fare Subsidy calculation is shown below.

Weight	Variable	Calculation
50%	Rail maximum subsidy	Share of total surveyed rail fare taper and maximum rail fare trips by rider home jurisdiction multiplied by total possible rail fares without the taper or maximum fares in place.
50%	Rail maximum subsidy	Allocated to Metrorail Base Subsidy.

The Metrorail Base Subsidy is computed by taking an equal weight of each of three variables, ridership, density-weighted population, and stations, which were selected to represent three types of Metrorail System benefits. The Metrorail Base Subsidy calculation is shown below.

Weight	Variable	Calculation	Benefit Proxy
33%	Ridership	Jurisdiction average weekly Metrorail ridership divided by Compact area total average weekly Metrorail ridership[2]	Users
33%	Density-weighted population	Average of: • Jurisdiction Census Urbanized Area Population divided by Compact Census Urbanized Area Population, **and** • Jurisdiction Census Urbanized Area Population multiplied by Jurisdiction Census Urbanized Area Population Density.	Non-users
33%	Stations	Jurisdiction number of Metrorail stations divided by Compact area total Metrorail stations[3]	Development

Metrobus Operating Subsidy Allocation Formula

The current Metrobus Operating Subsidy Allocation Formula was adopted by the Board of Directors in 1998 based on the recommendations of the Regional Mobility Panel (RMP).[4] The Panel was appointed in 1997 by the Board of Directors and was comprised of elected officials and business, labor, and community leaders. The panel was asked to develop a plan to strengthen and stabilize the Metro operated regional bus system, including how Metrobus jurisdictional investment was allocated. **For Metro's FY2020 – FY2024 budgets, the Board**

adopted a modified allocation that incorporated Virginia and Maryland's Three Percent Cap legislation.

The Metrobus Operating Subsidy Allocation Formula defines two service types: Regional and Non-Regional. Metrobus Regional routes are planned and funded regionally, and in FY2025 represents 83% of Metrobus service. Non-Regional service is all other Metrobus routes that do not meet the criteria to be a Regional route or has been granted an exception by the Board of Directors. Non-regional service represents 17% of Metrobus service in FY2025. Regional Service incorporates Metrobus System Costs (also known as administrative or overhead costs), while Non-Regional service only allocates direct service costs. The Metrobus Operating Subsidy Allocation Formula is benefits-based, connecting the service provided to regional benefits received.

Metrobus routes are defined as Regional if they benefit multiple jurisdictions by either one of two criteria:

1. Operate interjurisdictionally:

- Crossing a jurisdictional boundary (independent city, county, state); and
- Traveling in at least two jurisdictions by more than ½ mile each; and
- Operating open door[5] over a portion of the line in two or more jurisdictions, **or**:

2. Meeting two of the following three criteria:

- Serving one or more Regional Activity Centers;[6] or
- Traveling considerable distance and serving a majority of riders on arterial streets; or
- Having annual boardings per platform hour greater than 30 to show cost effectiveness.

The Metrobus Regional Subsidy is determined by taking the Regional share of the Metrobus service budget, adding Metrobus system (overhead or administrative) costs, and subtracting Regional Bus revenue. The Metrobus Regional Subsidy Allocation is then computed by taking the shares of four variables, ridership, density-weighted population, revenue hours, and revenue miles, which were each selected to represent various Metrobus System benefits.

Weight	Variable	Calculation	Benefit Proxy
15%	Ridership	Jurisdiction average weekly Metrobus ridership divided by Compact area total average weekly Metrobus ridership[7]	Users
25%	Density-weighted population	Average of: • Jurisdiction Census Urbanized Area Population divided by Compact Census Urbanized Area Population, **and** • Jurisdiction Census Urbanized Area Population multiplied by Jurisdiction Census Urbanized Area Population Density.	Non-users
25%	Revenue Hours	Jurisdiction Regional route revenue hours divided by total Regional route revenue hours	Service (time)
35%	Revenue Miles	Jurisdiction Regional route revenue miles divided by total Regional route revenue hours	Service (distance)

The Non-Regional Metrobus Regional Subsidy is determined by taking the Non-Regional share of the Metrobus service budget, divided by the total Non-Regional platform hours, which results in a Non-Regional operating cost hourly rate.

The Non-Regional Metrobus Subsidy by route is calculated by taking the Non-Regional operating cost hourly rate, multiplied by the platform hours by route, and subtracting the fare revenue for each route.

Application of the Three Percent Operating Subsidy Cap

In 2018, when Virginia, Maryland, and the District of Columbia adopted legislation to provide $500 million annually in dedicated capital funding, Maryland and Virginia also added legislative requirements to cap the growth of their respective statewide operating subsidy payments to Metro by three percent. This has resulted in an overall cap of Metro's overall annual baseline subsidy growth at three percent,[8] with allowable legislative exclusions.[9] Maryland and Virginia's legislation also includes financial penalties if each state's subsidy growth exceeds three percent, excluding legislative exclusions.

In 2019, when the Board of Directors adopted the FY2020 operating budget, it applied the three percent growth to the FY2019 operating budget subsidy to meet the requirements of the

legislation. That is, each state's operating subsidy grew by three percent, regardless of how much or where service was budgeted to operate in FY2020.[10] This approach of maintaining the FY2019 state level subsidy allocations has continued in every subsequent fiscal year. This approach has disconnected the subsidy paid from the amount of service provided and the formulas outlined below. For example, in September 2021 Metro launched the Frequent Service Network, with more frequent service on 36 bus lines across the region and discontinued many commuter bus routes. However, the subsidy paid is still growing annually based on the service that was provided in FY2019, prior to the pandemic.

In 2024, Maryland and Virginia temporarily suspended the three percent cap to provide additional investments to Metro to help close the FY2025 operating budget gap. At the same time, the subsidy allocation was 're-baselined' to calculate the FY2025 jurisdictional subsidies based on actual subsidy formula components such as the ridership survey, Metrobus revenue hours, and other components explained on the following pages, not just growth in investment from the previous year.

The three percent cap applies to Maryland and Virginia state-level baseline operating subsidy payments and does not apply to the local jurisdictions within those states. Virginia and Maryland local jurisdictions subsidy payments can fluctuate by more or less than three percent per year based on service levels, fares, ridership, and other factors, so long as the combined baseline operating subsidy at the state level does not exceed three percent.

Your Metro Strategic Transformation Plan

In February 2023, the Board of Directors adopted the Your Metro, The Way Forward, Strategic Transformation Plan (STP), which guide Metro's day-to-day actions and long-term strategy. The plan includes a Sustainability goal to manage resources responsibly to achieve a sustainable operating, capital, and environmental model. Within this goal is an initiative to "update [the] subsidy formula and jurisdictional funding model to increase focus on servicing the region's and customers' needs." Restructuring the Metrobus and Metrorail Operating Subsidy Allocation Formulas aligns with this STP initiative.

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[1] The mileage taper was the second mileage charge for trips longer than 6 miles up to the max fare in Metrorail's legacy fare structure. The Board of Directors-defined procedure for computing the Metrorail taper subsidy remains in place, however the taper itself was removed through Metro's Fare Optimization initiative in the FY2024 Budget.

[2] Riders who live outside the Compact area are excluded from the calculation.

[3] Arlington Cemetery is excluded. Border station allocations are based on the 1968 Adopted Regional System Capital Formula: Capitol Heights: 50% District of Columbia, 50% Prince George's County, Friendship Heights: 50% District of Columbia, 50% Montgomery County, Southern Avenue: 27% District of Columbia, 73% Prince George's County, Van Dorn Street: 50% City of Alexandria, 50% Fairfax County.

[4] https://planitmetro.com/wp-content/uploads/2011/03/RegionalMobilityPanel97.pdf

[5] Open door: Allows both boarding and alighting at stops along the route.

[6] Defined by the Metropolitan Washington Council of Governments (MWCOG)

[7] Riders who live outside the Compact area are excluded from the calculation.

[8] Baseline operating subsidy growth means the increase in costs of existing operations.

[9] Legislative exclusions: costs for any service, equipment, or facility required by state or federal law such as paratransit cost increases, occupational safety and health cost increases, legal disputes (including litigation) and any capital project approved by the Board of Directors. For example, the addition of the Silver Line Phase 2 and Potomac Yard Station were excluded from the three percent cap.

[10] The Maryland and Virginia jurisdictions apply the formulas within the state-level totals, so local jurisdictions may show more or less than 3 percent on any given year.

Discussion:

The current Metrobus and Metrorail Operating Subsidy Allocation Formulas are out of date and confusing to staff, jurisdictional partners, and stakeholders alike. The formulas are disconnected from Metro's service and cost structure, distorting each jurisdiction's return on their Metro investment.

Metro is also working to advance the Better Bus Network Redesign, the first comprehensive redesign of the Metrobus network in 50 years. As Metro looks to implement a redesigned network beginning in summer 2025, incorporating a new funding formula within the FY2026 Budget, expected to be released in December 2024, is critical to realizing the transformed network's benefits.

Given the challenges with the current formulas, it is important to advance a new modernized funding formula built for today's transit network and modernized to support current and future investments.

Proposed Restructured Metrobus and Metrorail Subsidy Allocation Formulas

Key features of the restructured formulas include:

- better alignment between service delivered and the region's investment in Metro,
- financial incentives for ridership and revenue growth,
- less confusing, more legible inputs,
- a single bus service definition,
- a bus service unit rate to enable the purchase of Metrobus service,
- incorporation of rail service and cost variables,
- financial incentives to continue to address fare evasion, and
- greater predictability and transparency.

The proposed restructured formula begins with a different structure than the current formula. Instead of deducting revenue and then allocating subsidy as the current formulas do, the

restructured formula allocates both operating costs *and* operating revenues.

The detailed restructured subsidy allocation formula calculations are shown in the proposed Board resolution attachment A.

Funding Impact:

There is no impact on funding from this action item. This action will impact future subsidy allocations without impacting total operating or capital budget requests.

Previous Actions:

- May 1977: Metrorail Operating Subsidy Allocation Formula (1977-12)
- May 1995: Incorporation of Metrorail Maximum Fare Subsidy Formula (1995-14)
- June 1998: Metrobus Regional Subsidy Allocation Formula (1998-27)
- July 1998: Metrobus Non-Regional Subsidy Allocation Formula (1998-32)
- March 2019: Incorporation of Three Percent Cap Subsidy legislation (2019-09)
- September 2019: Regional Metrobus Subsidy Allocation Formula for Loudoun County (2019-34)

Next Steps:

Staff will incorporate the new formulas into the GM/CEO's Recommended FY2026 Budget.

Recommendation:

Approval to: Staff recommends adoption of the restructured Metrorail and Metrobus Subsidy Allocation Formulas

Washington Metropolitan
Area Transit Authority

November 7, 2024

Approval of Restructured Metrobus and Metrorail Operating Subsidy Allocation Formulas

Finance and Capital Committee

RD OR BL GR YL SV metrobus Metro Access

Your Metro, the Way Forward

Objectives of Sustainability Goal

Financial Sustainability | Update subsidy formula and jurisdictional funding model to increase focus on servicing the region's and customers' needs.

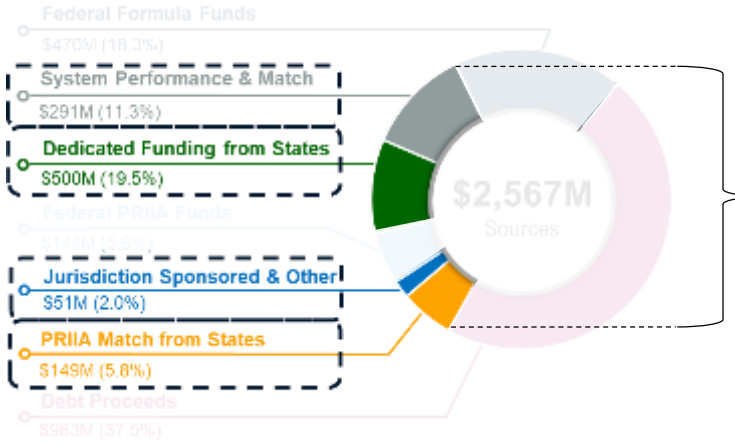
Focus today

Actions taken to date to support this initiative:

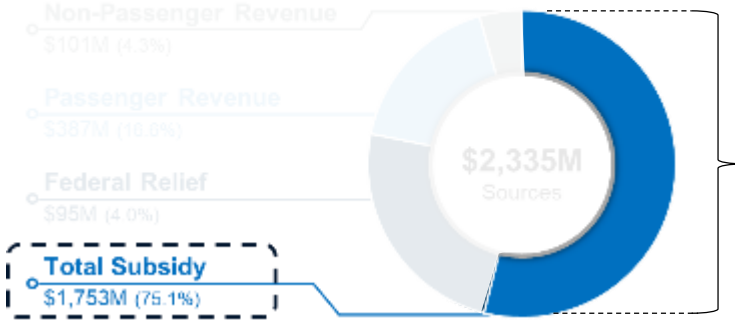
- Review legacy operating subsidy formulas
- Workshop potential modernization concepts with jurisdictional partners
- Developed restructure proposal

Investment in Metro: Multiple Sources and Methods

FY2025 Capital Sources



FY2025 Operating Sources



Sources of jurisdictional investments and subject to subsidy formula or other allocations

Jurisdiction Funding Sources	Formula Governed by
System Performance & Match • Variable formula: modal operating formulas & capital program investment by mode • Use: flexible often for federal match	Board of Directors
Dedicated Capital Funding from States • Fixed formula: DC 36%, MD 33%, VA 31% • Use: defined by state agreements	VA DC MD
Jurisdiction Sponsored & Other* • Fixed formula: 100% by sponsor jurisdiction • Use: per jurisdiction (mostly expansion)	Board of Directors
PRIIA Match from States • Fixed formula: 1/3 from each state • Use: capital and preventive maintenance	VA DC MD
Operating Subsidy • Variable mode-specific formulas • Use: operation and maintenance support	Board of Directors

Today's focus: bus and rail formulas

* Note: Total costs of these projects is higher as many system jurisdiction project costs are outside of Metro's capital program.

Current Subsidy Formulas

Metrobus subsidy allocation formula defines two types of service:

- Regional service:
  - Integrated bus system that is planned, funded, and operated similarly to Metrorail (~80 percent of service)
  - Interjurisdictional, serves 1+ activity centers, travels on arterial streets, or meets cost efficiency target
  - Basis for Metrobus system cost allocation*
- Non-regional service:
  - Local bus system funded by a single jurisdiction (~20 percent of service)
  - Allocates direct service costs only

Metrorail subsidy allocation formula has two parts:

- Max Fare Subsidy:
  - Acknowledges the benefit to customers and their jurisdiction of the fare cap on distance-based fares
- Base Subsidy:
  - Applies benefit proxies for users, non-users, and development opportunity

*Note: System costs are sometimes called administrative costs.

Feedback from Jurisdictional Partners: Existing Formula Challenges

→ **Confusing and unclear relationship** between subsidy and service levels ←

→ **Lack of transparency and predictability** ←

→ **Confusing** for staff, elected officials, and other stakeholders ←

→ **Fare evasion revenue impacts** not reflected ←

→ Concern about **time between passenger surveys** ←

- **Barrier to Metrobus investment**
- Special exceptions create **audit challenges**
- **Difficult to compare costs** to local operators
- **Large administrative effort** to maintain records

- Costs **not correlated to service** levels
- **Disincentive to** policies that drive **ridership**
- Oriented towards **system expansion**
- Does not consider **rail cost structure**

Goals of Restructuring Operating Subsidy Formula

Formula Goals	
	Consider service from a **regional perspective**
	Increase **legibility**
	Increase **transparency**
	Align service **benefits and costs**
	Improve service and **fiscal predictability**

Overview of Proposed Subsidy Allocation Changes

Metrorail *Current*

Total Expense − Total Revenue =

Share of Subsidy

Max Fare
- 50% Trips above the max fare

Base
- 33% Ridership
- 33% Density-Weighted Population
- 33% Stations

Metrobus *Current*

Total Expense − Total Revenue =

Share of Subsidy

Non-Regional Costs
- 100% Platform Hours *less* Revenue

Regional (including System costs)
- 15% Ridership
- 25% Density-Weighted Population
- 35% Revenue Hours
- 25% Revenue Miles

Category	Method for dividing between jurisdictions

Metrorail *Restructured*

Share of Costs

Infrastructure
- 50% Stations*
- 50% Track Miles

System
- 50% Ridership
- 50% Population

Service
- 90% Railcar Miles
- 10% Peak Vehicles

−

Share of Revenue

Passenger
- 100% Paid Ridership

Non-Passenger
- 100% Share of Costs*

Metrobus *Restructured*

Share of Costs

System
- 50% Ridership
- 50% Population

Service
- Revenue Hours (per unit)*
- Peak Vehicles (per unit)

−

Share of Revenue

Passenger
- 100% Paid Ridership

Non-Passenger
- 100% Share of Costs

*Notes on approach to further allocate Virginia subsidy:
- National and Dulles Airport station costs are sub-allocated to each Virginia jurisdiction at a 1/6th share.
- Metrorail non-passenger revenues are suballocated to each Virginia jurisdiction based on share of track miles
- City of Fairfax Metrobus service costs shared between the City and Fairfax County 20%/80%, respectively
- City of Falls Church Metrobus service costs shared by the City, Arlington County, and Fairfax County 50%/25%/ 25%, respectively

Restructure Suballocation within Virginia Jurisdictions

Airports As Northern Virginia Regional Assets

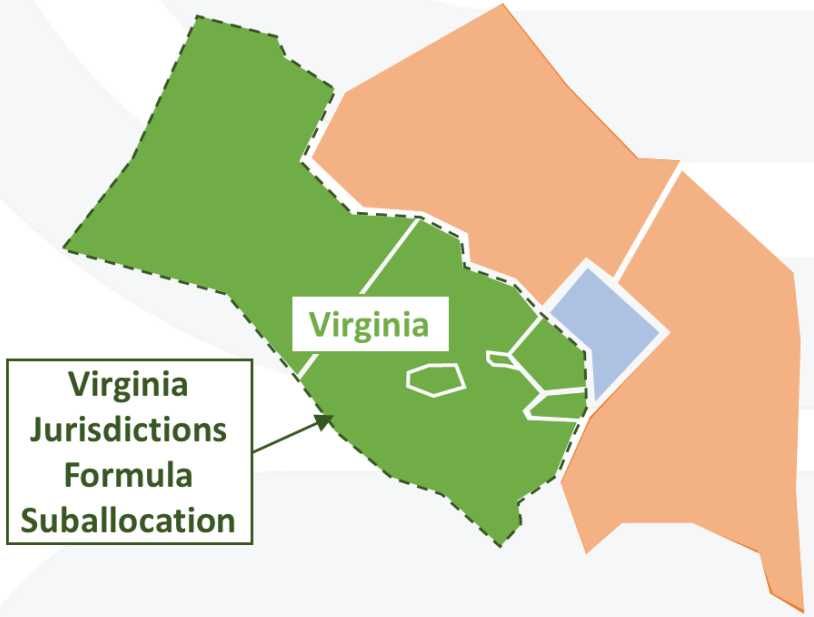
- Airport trips come from many jurisdictions
- Approach: Allocate National and Dulles Airport stations equally among the six Northern Virginia jurisdictions

Align Rail Non-Passenger Revenue Sharing

- Align rail non-passenger revenues to rail infrastructure
- Approach: Sub-allocate Virginia rail non-passenger revenue based on each Virginia jurisdiction's share of rail track miles

Establish City/County Metrobus Service Costs Sharing

- Revise cost-sharing for Cities of Fairfax and Falls Church
- Approach: Share Metrobus revenue miles and peak vehicle allocations:
  - City of Fairfax (20%) and Fairfax County (80%)
  - City of Falls Church (50%), Arlington County (25%) and Fairfax County (25%)



FY2025 Subsidy Allocation Comparison by State

Existing Formula with FY2025 Approved Budget + Reimbursable Agreements[2]		Restructured Formula with FY2025 Approved Budget October 1, 2024		Restructured Formula with 2025 Better Bus Network	
Jurisdiction	**Operating Subsidy**	**Operating Subsidy**	**Variance from Current**	**Operating Subsidy**	**Variance from Restructure Proposal**
Bus	$320.3	$350.6	$30.3	$374.0	$23.4
Reimbursable Bus Service	$22.1	$22.1	$0.0	$0.0	-$22.1
Rail	$297.2	$267.9	-$29.3	$267.9	$0.0
Access	$44.1	$44.1	$0.0	$44.1	$0.0
District of Columbia	**$683.7**	**$684.7**	$1.0	**$686.0**	**$1.3**
Bus	$262.1	$246.5	-$15.6	$252.6	$6.1
Rail	$266.1	$279.3	$13.2	$279.3	$0.0
Access	$103.1	$103.1	$0.0	$103.1	$0.0
Maryland	**$631.3**	**$628.9**	-$2.5	**$635.0**	**$6.1**
Bus	$166.1	$151.5	-$14.6	$146.6	-$4.9
Reimbursable Bus Service	$2.5	$2.5	$0.0	$0.0	-$2.5
Rail	$272.5	$288.7	$16.1	$288.7	$0.0
Access	$20.9	$20.9	$0.0	$20.9	$0.0
Virginia	**$462.1**	**$463.5**	$1.5	**$456.2**	**-$7.4**
Total Contribution	**$1,777.2**	**$1,777.2**	$0.0	**$1,777.2**	**$0.0**

1. $ rounded nearest $000,000; inputs for Restructured Formula based on FY2025 budgeted fares, service levels, expense, and revenue; not an estimate for FY2026

2. FY2025 Reimbursable Agreements for DC 24 Hour and Additional Bus Service and FY2026 Arlington for Commuter Connections 16M Service. The 2025 Better Bus Network includes $24.6M in current or planned reimbursable bus service that would be brought into the subsidy if approved by the Board

FY2025 Subsidy Allocation Comparison by Jurisdiction and Mode

Existing Formula with FY2025 Approved Budget + Reimbursable Agreements[2]						Restructured Formula with FY2025 Approved Budget + Reimbursable Agreements October 1, 2024					Restructured Formula with 2025 Better Bus Network			
Jurisdiction	Bus	Bus Reimbursables	Rail	Access	Operating Subsidy	Bus	Bus Reimbursables	Rail	Access	Operating Subsidy	Bus	Rail	Access	Operating Subsidy
District of Columbia	**$320.3**	**$22.1**	**$297.2**	**$44.1**	**$683.7**	**$350.6**	**$22.1**	**$267.9**	**$44.1**	**$684.7**	**$374.0**	**$267.9**	**$44.1**	**$686.0**
Montgomery County	$106.1		$139.9	$29.8	$275.8	$92.3		$135.2	$29.8	$257.2	$94.1	$135.2	$29.8	$259.1
Prince George's County	$156.0		$126.2	$73.3	$355.6	$154.2		$144.1	$73.3	$371.6	$158.5	$144.1	$73.3	$375.9
Maryland	**$262.1**		**$266.1**	**$103.1**	**$631.3**	**$246.5**		**$279.3**	**$103.1**	**$628.9**	**$252.6**	**$279.3**	**$103.1**	**$635.0**
City of Alexandria	$33.4		$37.4	$2.0	$72.7	$29.2		$42.3	$2.0	$73.5	$26.4	$42.3	$2.0	$70.6
Arlington County	$44.9	$2.5	$78.4	$1.8	$127.6	$42.1	$2.5	$77.6	$1.8	$124.0	$46.5	$77.6	$1.8	$125.9
City of Fairfax	$1.0		$2.5	$0.4	$3.9	$1.6		$2.0	$0.4	$3.9	$1.1	$2.0	$0.4	$3.4
Fairfax County	$83.8		$122.6	$16.7	$223.1	$77.1		$131.0	$16.7	$224.8	$71.0	$131.0	$16.7	$218.7
City of Falls Church	$2.9		$2.5	$0.1	$5.5	$1.4		$1.9	$0.1	$3.4	$1.5	$1.9	$0.1	$3.5
Loudoun County	$0.1		$29.2	$0.0	$29.4	$0.1		$33.8	$0.0	$33.9	$0.1	$33.8	$0.0	$33.9
Virginia	**$166.1**	**$2.5**	**$272.5**	**$20.9**	**$462.2**	**$151.5**	**$2.5**	**$288.7**	**$20.9**	**$463.5**	**$146.6**	**$288.7**	**$20.9**	**$456.2**
Total Contribution	**$748.6**	**$24.6**	**$835.8**	**$168.2**	**1,777.2**	**$748.6**	**$24.6**	**$835.8**	**$168.2**	**$1,777.2**	**$773.2**	**$835.8**	**$168.2**	**$1,777.2**

1. $ rounded nearest $000,000; inputs for Restructured Formula based on FY2025 budgeted fares, service levels, expense, and revenue; not an estimate for FY2026

2. FY2025 Reimbursable Agreements for DC 24 Hour and Additional Bus Service and FY2026 Arlington for Commuter Connections 16M Service. The 2025 Better Bus Network includes $24.6M in current or planned reimbursable bus service that would be brought into the subsidy if approved by the Board

Next Steps

- Recommend Board approval of restructured subsidy allocation formula
- Apply new formulas to 2025 Better Bus Network and FY2026 operating budget

Appendix

Appendix Part I

Current Metrobus and Metrorail Operating Subsidy

Current Metrobus Subsidy Allocation Formula

1. Metrobus Operating Expenses

2. Split into Regional vs. Non-Regional

(Based on % of platform hours)

Regional Subsidy Allocation

3. Regional Share of Bus Budget

3.1 Add Metrobus System Costs

3.2 Subtract Regional Fare Revenue

3.3 Regional Subsidy

3.4 Allocate to Jurisdictions

- **25%** Density weighted population by jurisdiction
- **15%** Ridership by Jurisdiction of Residence
- **25%** Bus revenue hours by location
- **35%** Bus revenue miles by location

Non-Regional Subsidy Allocation

4. Non-Regional Share of Bus Budget

4.1 Divide by Platform Hours to Calculate Non-Regional Rate

4.2 Assign Line to Single Jurisdiction

4.3 Apply Rate to Platform Hours by Line to Calculate Cost

4.4. Deduct Revenue by Line from Cost to Calculate Non-Regional Subsidy

Current Metrorail Subsidy Allocation Formula

Metrorail Operating Expenses

−

Revenues (fare and non-fare)

=

Metrorail Subsidy

Maximum Fare Subsidy

50% max fare subsidy (surveyed rail trips that would exceed $6.75) allocated to jurisdiction of benefitting riders*

50% of max fare subsidy allocated to base subsidy

Base Subsidy

33% average weekly ridership*

+

33% density-weighted population

+

33% number of rail stations

Proxy measures for three types of benefits:

Users

Non-users

Development

* Notes: Determined by Metrorail passenger survey Fare levels per FY2025 Revised Draft Budget

Appendix Part II

Subsidy Formula Restructure Concept Allocation Changes

Restructure Concept: Fare Revenue Overview

What it is: Metrobus and Metrorail revenues from passenger fares, passes and fare programs*

Rationale: Create financial incentive to:

- Increase ridership
- Address fare evasion

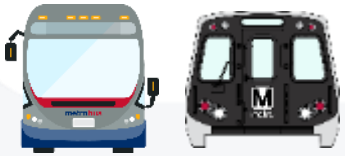
Math:

Proposed FY fare revenues by mode

×

Prior FY paid ridership by mode*

*Notes:
-Includes subsidized fare program such as DC Kids Ride Free
-Incremental revenue from proposed major service changes are allocated to those services.



Restructure Concept: Non-Fare Revenue Overview

What it is: Metrobus and Metrorail revenues from non-passenger fare sources

Rationale:

- Recognizes unique revenue sources and drivers, distinct from service
- Create distinct non-passenger fare revenue allocation, using distinct methodology

Math:

Proposed FY non-fare revenues by mode

×

Total operating cost share by mode*

Bus	Rail
Advertising	
Other Revenue	
	Parking
	Joint Development
	Fiber Optics

*Note: Virginia rail non-passenger revenues are suballocated to each Virginia jurisdiction based on share of track miles

Restructure Concept: System Costs Overview

What it is: Administrative costs supporting transit operations

Rationale:

- Recognizes key transit support functions which benefits the region, whose costs vary differently from service

Math:

Bus & Rail Administration Cost Share*

×

Proposed FY Bus & Rail Costs

System Cost Examples

- Customer Experience
- Finance
- Human capital
- Information technology
- Legal
- Planning
- Real estate management
- Safety

*Notes: Based on National Transit Database General Administration costs

Restructure Concept: Population Overview

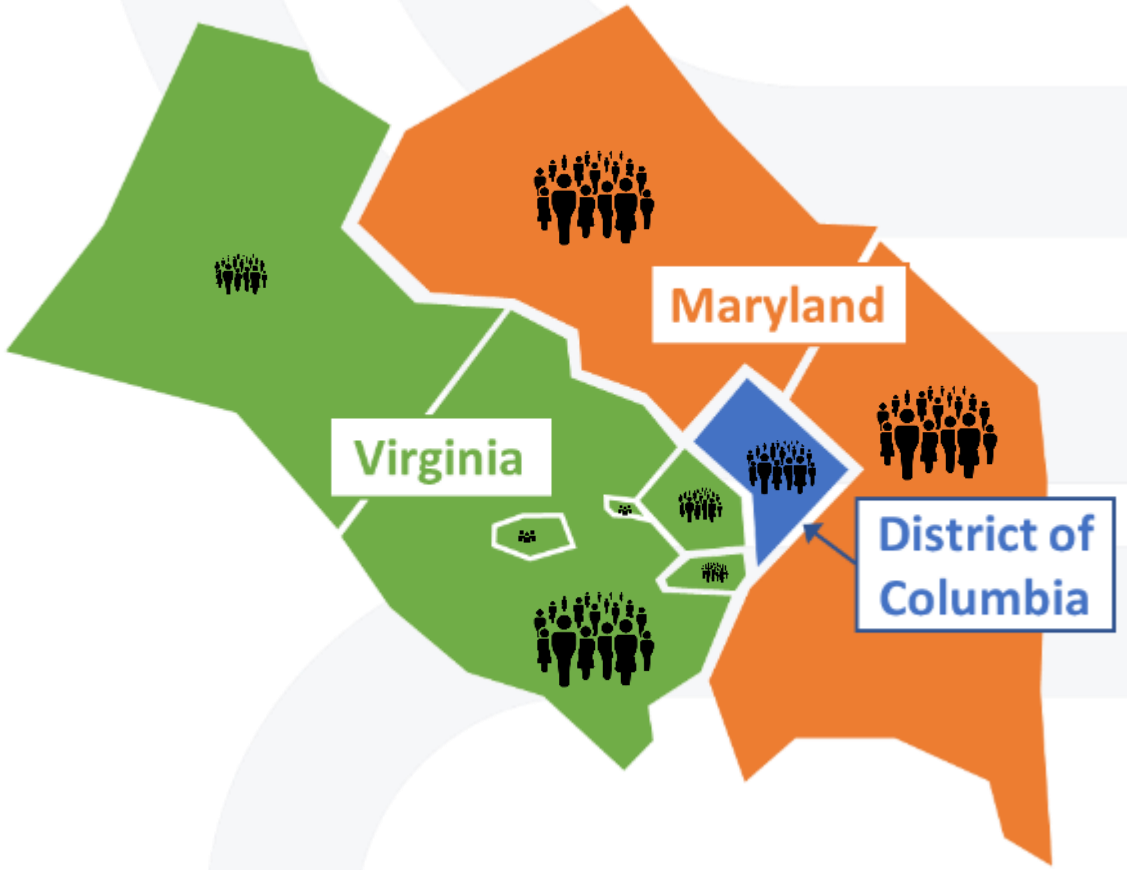
What it is: Population of each Compact jurisdiction per the most recent Decennial US Census*

Rationale:

- Recognizes that all the region's residents benefit from Metro
- Allocate based on resident users and non-users

Math:

$$\frac{\text{Jurisdiction Census population*}}{\text{Compact area Census population}}$$



*Notes: Loudoun is excluded from the proposed bus formula population calculation

Restructure Concept: Ridership Overview

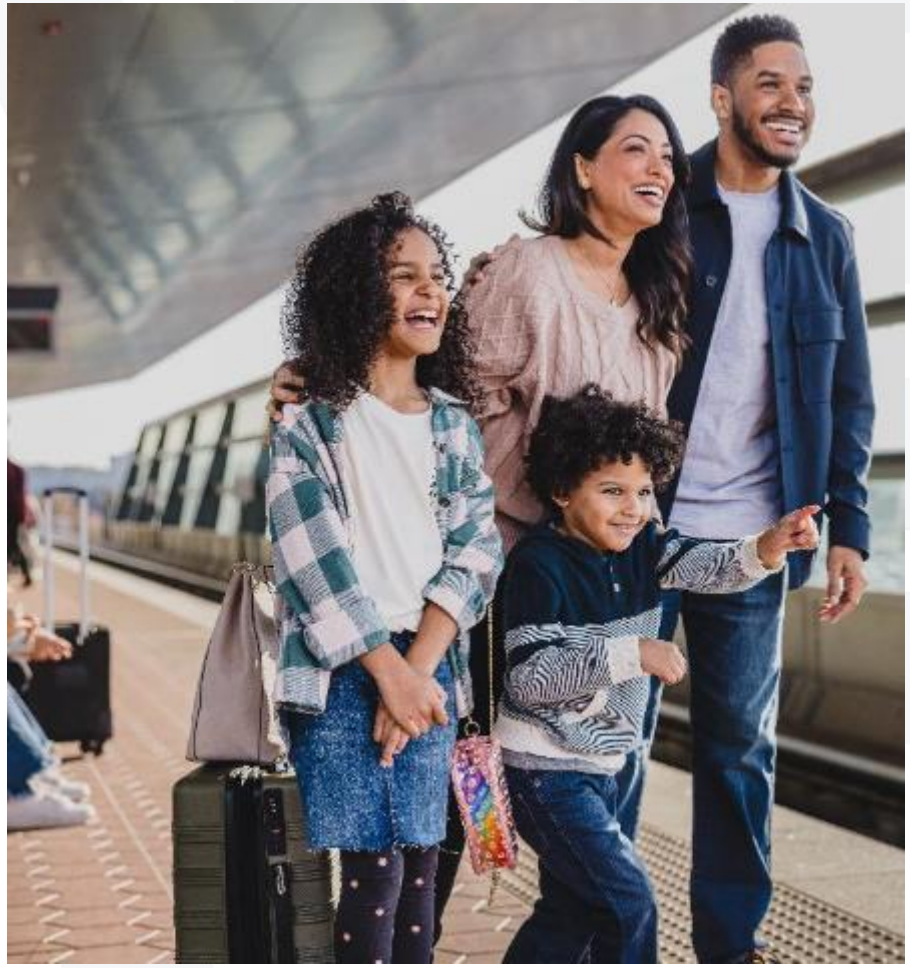
What it is: Count of weekly ridership by jurisdiction of residence (via passenger surveys)*

Rationale:

- Recognizes the region's transit riders benefit from Metro
- Allocate based on users

Math:

$$\frac{\text{Jurisdiction home ridership*}}{\text{Compact area ridership*}}$$



*Notes: Based on Passenger Surveys; Non-Compact riders are excluded

Restructure Concept: Rail Operating Infrastructure Costs Overview

What it is: Infrastructure and facility-related maintenance costs

Rationale:

- Recognizes cost to maintain rail infrastructure and facilities is independent of their utilization
- Recognizes key transit support functions, whose costs vary differently from service

Math:

Rail Infrastructure Cost Share*

×

Proposed FY Metrorail Costs

Infrastructure Cost Examples

- Track maintenance
- Structure maintenance
- Facility maintenance

*Notes: Based on National Transit Database Facility Costs

Restructure Concept: Rail Track Miles Overview

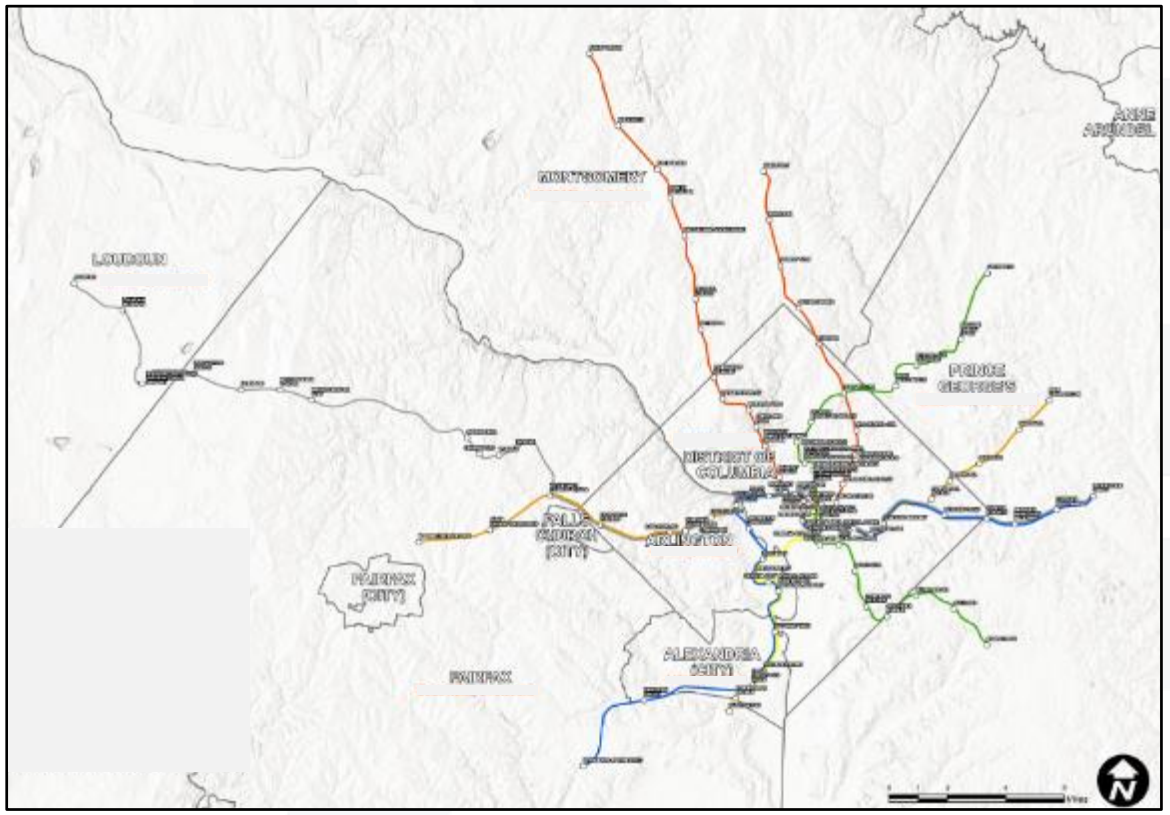
What it is: Metrorail track center line miles in each jurisdiction

Rationale:

- Recognizes cost to maintain linear infrastructure independent of its utilization
- Allocates costs by amount of track in each jurisdiction

Math:

$$\frac{\text{Jurisdiction track center line miles*}}{\text{Total track center line miles*}}$$



*Notes: Revenue track center line miles within each jurisdiction's borders, measured to each terminal station platform

Restructure Concept: Metro Stations Overview

What it is: Metro stations in each jurisdiction

Rationale:

- Recognizes cost to maintain stations and facilities independent of their utilization
- Aligns costs with number of stations in each jurisdiction (current allocation)*

Math:

$$\frac{\text{Stations in each jurisdiction*}}{\text{Total stations*}}$$

*Note: Arlington Cemetery is excluded. Other station allocations are: Capitol Heights: 50% DC, 50% Prince George's Co., Friendship Heights: 50% DC, 50% Montgomery Co., Southern Ave: 27% DC, 73% Prince George's Co., Van Dorn St: 50% Alexandria, 50% Fairfax Co. ; National and Dulles Airport station costs are sub-allocated to each Virginia jurisdiction at a 1/6th share.

Restructure Concept: Bus Service Costs Overview

What it is: Bus operating costs that vary with service levels

Rationale:

- Recognizes transit operating functions that deliver service to customers and the region
- Allocate costs based on service and vehicle maintenance

Math:

Bus Service Cost Share*

×

Proposed FY Metrobus Costs

Service Cost Examples

- Cleaning of vehicles and facilities
- Fare collection
- Operators
- Revenue vehicle movement control (MICC)
- Transit police
- Vehicle inspection and maintenance
- Vehicle power



*Notes:
-Based on National Transit Database Vehicle Maintenance and Vehicle Operations costs.
- City of Fairfax Metrobus service costs shared between the City and Fairfax County 20%/80%, respectively
=City of Falls Church Metrobus service costs shared by the City, Arlington County, and Fairfax County 50%/25%/ 25%, respectively

Restructure Concept: Bus Revenue Hours Overview

What it is: Time (in hours) the vehicle travels while carrying customers.

Rationale: Industry standard measure of direct bus service costs by time.

Math:

Proposed FY Annual Revenue Hours by Line ✕
Proposed FY Annual Revenue Miles (%) by Jurisdiction

Total Proposed FY Annual Revenue Hours

Restructure Concept: Bus Peak Vehicles Overview

What it is: Budgeted weekly peak buses operated in each jurisdiction

Rationale:

- Recognizes linkage between peak service, fleet size, and vehicle maintenance costs

Math:

$$\frac{\text{Proposed FY Weekly Peak Buses by Line} \times \text{Proposed FY Revenue Miles by Line (\%) by Jurisdiction*}}{\text{Total Proposed FY Weekly Peak Vehicles*}}$$

*Notes: Formula revenue peak vehicles excludes spares.

Restructure Concept: Rail Service Costs Overview

What it is: Rail operating costs that vary with service levels

Rationale:

- Recognizes transit operating functions that deliver service to customers and the region
- Allocate costs based on service and vehicle maintenance

Math:

Rail Service Cost Share*

×

Proposed FY Metrorail Costs

Service Cost Examples

- Cleaning of vehicles and facilities
- Fare collection
- Operators
- Revenue vehicle movement control (MICC)
- Station managers
- Transit police
- Vehicle inspection and maintenance
- Vehicle power

*Notes: Based on National Transit Database Vehicle Maintenance and Vehicle Operations costs.

Restructure Concept: Railcar Miles Overview

What it is: Proposed fiscal year annual railcar miles operated in each jurisdiction

Rationale:

- Recognizes key service cost driver, including unique rail costs (e.g., traction power)
- Combines service (miles) and capacity (cars) measures

Proposed FY Annual Railcar Miles by Line ✕
Proposed FY Route Miles (%) by Jurisdiction*

Total Proposed FY Annual Revenue Railcar Miles*

*Notes: Route miles are the one-way mileage for each line or route, accounting for service interlining.
-Formula revenue railcar miles excludes special event, gap trains, and spares.

Restructure Concept: Rail Peak Vehicles Overview

What it is: Budgeted weekly peak railcars operated in each jurisdiction

Rationale:

- Recognizes linkage between peak service, fleet size, and vehicle maintenance costs

Math:

Proposed FY Weekly Peak Railcar by Line ✕
Proposed FY Route Miles (%) by Jurisdiction*

Total Proposed FY Weekly Peak Vehicles*

nsit Authority

*Notes: Route miles are the one-way mileage for each line or route, accounting for service interlining.
- Formula revenue peak vehicles excludes special event, gap trains, and spares.

Appendix Part IV

Other Concepts Considered

Other Formula Components Considered

Mode	Concept	Rationale for Exclusion
Bus	Density-weighted population	Complicated, confusing
Rail	Revenue hours	Car miles includes service & capacity
Bus	Revenue miles	Used to assign routes to jurisdictions
Bus	Platform miles	Not aligned with industry standard
Bus & Rail	Total (tap + non-tap) ridership	Doesn't incentivize action to reduce fare evasion
Rail	Station infrastructure (entrances, mezzanines, etc.)	Complicated
Rail	Incentivizing transit-oriented development	Allocating ridership provides incentive
Bus	Incentivizing bus priority	Difficult to quantify
Bus	Credit for serving equity communities	Complicated, not transparent, built into service parameters

SUBJECT: APPROVAL OF OPERATING SUBSIDY ALLOCATION FORMULAS

RESOLUTION
OF THE
BOARD OF DIRECTORS
OF THE
WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

WHEREAS, Section 16 of the WMATA Compact provides that payment of all costs beyond those borne by the persons using or benefiting from Metro facilities and services "shall be equitably shared among the federal, District of Columbia and participating local governments in the [Transit] Zone"; and

WHEREAS, The equitable sharing of such remaining costs calculated through Board-adopted subsidy allocation formulas, most recently in Resolution 2019-34; and

WHEREAS, Staff has proposed a restructured subsidy allocation formula for each of Metrobus and Metrorail as set forth in Attachment A, which addresses the challenges with the current formulas by improving clarity and transparency, aligning service costs with regional benefits, and incentivizing ridership and revenue growth; and

WHEREAS, The existing paratransit subsidy allocation formula will remain unchanged and is restated in Attachment B to this resolution; and

WHEREAS, The three percent subsidy increase limitation imposed by the Virginia and Maryland Dedicated Funding legislation is applied at the signatory level to the amounts generated by the Board-approved subsidy formulas;

NOW, THEREFORE, be it

RESOLVED, That the Board of Directors rescinds all previous subsidy allocation formulas and adopts the new subsidy allocation formulas as set forth in Attachment A and Attachment B to this Resolution; and be it finally

RESOLVED, That to ensure the inclusion of the new subsidy formulas in the FY 2026 budget proposal, this resolution shall be effective immediately.

Reviewed as to form and legal sufficiency,

/s/
Patricia Y. Lee
Executive Vice President, Chief Legal Officer, and General Counsel

WMATA File Structure No.:
4.3.2 Jurisdictional Funding Agreements

ATTACHMENT A – METRORAIL AND METROBUS SUBSIDY ALLOCATION FORMULA CALCULATIONS

Metrobus and Metrorail Cost Allocation

Before cost allocation to Metro's jurisdictions, Metrobus and Metrorail operating costs are divided into several cost categories:

- Metrobus and Metrorail System Costs, which are commonly known as administrative costs (such as finance and legal functions) that support the Metro system.
- Metrobus and Metrorail Service Costs, which are costs associated with service delivery (such as operators, hours and miles of revenue service, and station manager functions).
- Metrorail Infrastructure Operating Costs, which are costs associated with rail infrastructure and facility maintenance (such as track, stations, and structures) that result regardless of the amount of rail service provided.

Cost categories are determined by aligning cost categories in the most recently approved Metro National Transit Database (NTD) data submission by the Federal Transit Administration (FTA) with each formula cost category. Cost categories are applied as follows:

NTD Cost Category	Metrobus Formula Costs	Metrorail Formula Costs
General Administration by mode	Metrobus System Costs	Metrorail System Costs
Vehicle Maintenance plus Vehicles Operations by mode	Metrobus Service Costs	Metrorail Service Costs
Facility Maintenance	Metrobus System Costs	Metrorail Infrastructure Operating Costs

The formula cost categories in each fiscal year are determined by taking the proportion of System, Service and Rail Infrastructure Operating Costs by mode based on the NTD categories as above and multiplying each category by mode times the proposed fiscal year budget Metrobus and Metrorail operating costs.

Metrobus and Metrorail System Cost Allocation

Cost	Weight	Variable	Calculation
Metrobus and Metrorail System Costs by mode	50%	Ridership	Jurisdiction average weekly ridership by mode divided by Compact area total average weekly ridership by mode.[1]
	50%	Population	Jurisdiction US Decennial Census Population divided by Metro Compact Area Census Population.[2]

[1] Determined by Metrobus and Metrorail Passenger Surveys. Riders who live outside the Metro Compact area are excluded from the calculation.

[2] The Metrobus System Cost allocation population factor for Loudoun County is set to zero since it does not receive Metrobus service. This is consistent with Board of Directors policy in resolution 2019-34.

Metrobus Service Cost Allocation

Cost	Weight	Variable	Calculation
Metrobus Service Costs	Unit rate	Revenue Hours[3]	Proposed fiscal year bus vehicle operations expense divided by the total proposed fiscal year bus revenue hours. The result is multiplied by each jurisdiction's share of bus revenue miles.[4]
	Unit rate	Peak Vehicles[3]	Proposed fiscal year bus vehicle maintenance expense divided by the total proposed fiscal year bus peak vehicles. The result is multiplied by each jurisdiction share of bus revenue miles.

Metrorail Service Cost Allocation

Cost	Weight	Variable	Calculation
Metrorail Service Costs	90%	Railcar Miles	Proposed fiscal year scheduled revenue railcar miles by rail line times the proposed fiscal year rail route miles by line and by jurisdiction. The result is divided by the total rail system proposed fiscal year scheduled revenue railcar miles.[5]
	10%	Peak Vehicles	Proposed fiscal year scheduled revenue peak vehicles by rail line times the proposed fiscal year rail route miles by line and by jurisdiction. The result is divided by the total rail system proposed fiscal year scheduled revenue peak vehicles.[5]

Metrorail Infrastructure Operating Cost Allocation

Cost	Weight	Variable	Calculation
Metrorail Infrastructure Operating Costs	50%	Track Miles	Proposed fiscal year rail center line revenue track miles, divided by the proposed fiscal year total rail system center line revenue track miles.[6]
	50%	Stations	Proposed fiscal year rail stations by jurisdiction, divided by the proposed fiscal year total number of rail system stations.[7]

[3] Metrobus Service costs allocation (revenue hours and peak vehicles) for the City of Fairfax are allocated as follows: Fairfax County (80%), City of Fairfax (20%). City of Falls Church bus service costs (revenue hours and peak vehicles) are allocated as follows: City of Falls Church (50%), Arlington County (25%) and Fairfax County (25%)

[4] Revenue miles by Metrobus line by jurisdiction, the geo-distribution that determines each jurisdiction's share, is only recalculated in a budget year when a major bus service change takes place.

[5] Rail route miles are the one-way center line mileage for each rail line or route, accounting for service interlining, which serve as the geo-distribution that determines each jurisdiction's share. Scheduled revenue railcar miles and peak vehicles excludes special event, gap trains, and spares.

[6] For formula purposes, revenue track center line miles are measured within each jurisdiction's borders, measured to each terminal station.

[7] Arlington Cemetery is excluded. Border station allocations are as follows: Capitol Heights: 50% District of Columbia and 50% Prince George's County; Friendship Heights: 50% District of Columbia, 50%

Metrobus and Metrorail Revenue Allocation

Before revenue allocation, Metrobus and Metrorail revenues are divided into passenger and non-passenger revenues, as determined in each proposed fiscal year's operating budget. As an illustrative example, the passenger and non-passenger revenue categories by mode from the FY2025 budget are shown below:

- Metrobus and Metrorail Passenger Revenues: revenues from bus and rail passenger fares, passes, and fare programs.
- Metrobus Non-Passenger Revenues: advertising and other revenues.
- Metrorail Non-Passenger Revenues: parking, joint development, fiber optics, advertising, and other revenues.

Metrobus Passenger Revenue Allocation

Revenue	Weight	Variable	Calculation
Metrobus Passenger Revenue	100%	Metrobus Paid Ridership	Share of aggregate prior fiscal year actual paid bus trips multiplied times the total fiscal year budgeted Metrobus Passenger Revenue.[8]

Metrorail Passenger Revenue Allocation

Revenue	Weight	Variable	Calculation
Metrorail Passenger Revenue	100%	Metrorail Paid Ridership	Share of aggregate prior fiscal year actual paid rail trips multiplied times the total fiscal year budgeted Metrorail Passenger Revenue.[9][10]

Montgomery County; Southern Avenue: 27% District of Columbia, 73% Prince George's County; Van Dorn Street: 50% City of Alexandria, 50% Fairfax County. Reagan National Airport and Washington Dulles International Airport station costs are allocated to each Virginia jurisdiction at a 1/6th share.

[8] Prior fiscal year paid bus trips are allocated by bus line. Bus line paid ridership is distributed by each jurisdiction's share of bus revenue miles by line. For proposed fiscal year budget Major Bus Service changes, the incremental proposed fiscal year budgeted passenger revenue resulting from those services are allocated to each jurisdiction in the proposed budget. Major Service Changes are defined in the Board-approved Title VI Program as may be amended from time to time.

[9] Allocation of station level paid rail ridership is distributed by the percentage of each station's riders from in each jurisdiction. For proposed fiscal year budget Major Rail Service changes, the incremental proposed fiscal year budgeted passenger revenue resulting from those services are allocated to each jurisdiction in the proposed budget. Major Service Changes are defined in the Board-approved Title VI Program as may be amended from time to time.

[10] Revenue for the City of Fairfax and Falls Church is redistributed to all other Compact jurisdictions. This is done because, except for the share of costs of National and Dulles Airport stations, those cities are not allocated rail service nor infrastructure costs due to the lack of rail service or infrastructure within their borders (e.g., track miles, stations, railcar miles, and peak vehicles).

Metrobus and Metrorail Non-Passenger Revenue Allocation

Revenue	Weight	Variable	Calculation
Metrobus and Metrorail Non-Passenger Revenue	100%	Operating Cost Share by Mode	Each jurisdiction's operating cost allocation share by mode for Metrobus and Metrorail is determined based on the factors described above (weighted average of system, service, and rail infrastructure costs). Within Virginia, the state-level subtotal is allocated to the jurisdictions within Virginia based on share of track miles. The resulting allocation share by mode is multiplied times the proposed fiscal year budgeted non-passenger revenue by mode.

ATTACHMENT B – PARATRANSIT SUBSIDY ALLOCATION FORMULA

The costs[11] to the Authority for providing paratransit services shall be allocated between the jurisdictions as described in the four tiers listed below, provided however, no costs shall be allocated to Loudoun County pursuant to this resolution so long as there shall be a separate paratransit funding agreement in place between Loudoun County and the Authority:

TIER 1 - FIXED COSTS Fixed costs are continuing fixed overhead costs that do not fluctuate relative to the level of paratransit service that is operated. The allocation of fixed costs will be allocated based on the proportion of ADA-certifications by jurisdiction of residence of the participating jurisdictions.

TIER 2 - ALLOCATED ADMINISTRATIVE COSTS Allocated administrative costs are continuing overhead costs that fluctuate and are related to the level of paratransit service provided. The allocation of allocated administrative costs will be based on actual demand (trips requested) for the regional paratransit system.

TIER 3 - DIRECT OPERATING SUBSIDIES Direct operating subsidies are the direct paratransit-related operating costs, including costs paid to regional paratransit contractors less revenues collected from patrons. These subsidies will be allocated on the basis of actual usage of the regional paratransit system by the jurisdiction of residence of the user.

TIER 4 - VISITOR TRIP SUBSIDIES Visitor trips are those trips taken by a non-resident of the participating jurisdictions who utilize the 21-day visitor temporary certification allowed by the ADA regulations. The subsidies (costs less revenues) of trips provided to visitors will be allocated based on the origin of boarding of each one-way trip.

[11] Prior to Fiscal 1995 all costs incurred by the Department of ADA were distributed by the paratransit formula, regardless of whether the costs were paratransit costs. Paratransit costs incurred by other departments within the Authority were not distributed by this formula. In Fiscal 1995, the paratransit formula was modified to eliminate all departmental restrictions - all departments can now charge appropriate expenses and staff time to paratransit and the Department of ADA can charge non-paratransit costs to the other appropriate modes. This is consistent with the way all other charges are distributed by formula.