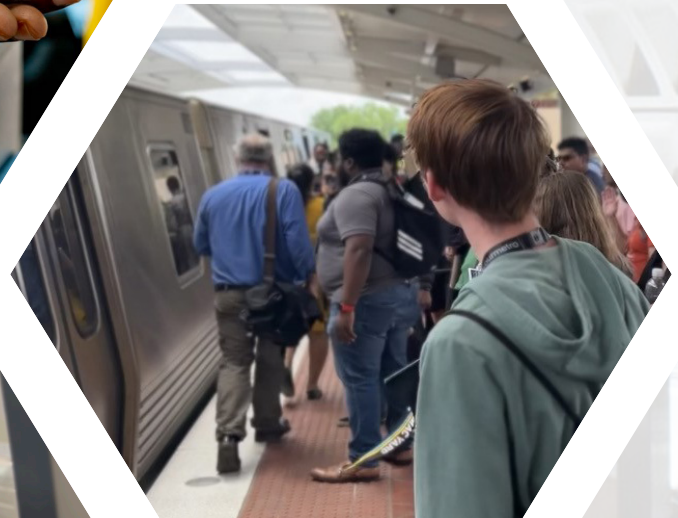




NORTHERN VIRGINIA TRANSPORTATION COMMISSION



2023 Report on the Performance and Condition of the Washington Metropolitan Area Transit Authority



Metro System Map

wmata.com
 Information: 202-637-7000 | TTY: 202-962-2033
 Metro Transit Police: 202-962-2121 | Text: MYMTPD (696873)

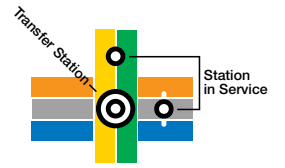
Legend

- RD** Red Line • Glenmont / Shady Grove
- OR** Orange Line • New Carrollton / Vienna
- BL** Blue Line • Franconia-Springfield / Downtown Largo
- GR** Green Line • Branch Ave / Greenbelt
- YL** Yellow Line • Huntington / Mt Vernon Sq
- SV** Silver Line • Ashburn / Downtown Largo

Station Features

- P** Parking
- H** Hospital
- A** Airport

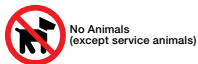
Connecting Rail Systems



Metro is accessible.

WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY © 2023

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 Map is not to scale





December 15, 2023

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On behalf of the Northern Virginia Transportation Commission (NVTC), I am pleased to submit the *2023 Report on the Performance and Condition of the Washington Metropolitan Area Transit Authority (WMATA)* as directed by Virginia Code.

WMATA, like all major U.S. transit agencies impacted by ridership losses and inflation, is facing an operating fiscal cliff as federal pandemic aid is exhausted. Across the country, state and local governments have come together to find permanent and temporary funding solutions to bridge the gap as ridership recovers. This year, NVTC's Metro Operating Funding and Reform Working Group developed recommendations on Metro's structural cost growth, operational and financial accountability, structural funding deficits, oversight, capital and other areas of concern. These recommendations, which are included in this report, provide a framework for Virginia and the region to engage in the regional funding and reform discussions that are needed to transform WMATA after the disruptive impacts of the pandemic.

As a near-term step to stabilize WMATA while the region develops longer-term solutions, NVTC recommends that the Commonwealth 1) re-baseline the 3% cap to allow WMATA to seek additional subsidies without NVTC jurisdictions incurring a penalty and 2) provide additional state aid to match additional local funding.

Further, the report outlines the expenditures of the Commonwealth's WMATA Capital Fund which provided \$154.5 million in dedicated capital funding in FY 2023 as part of WMATA's \$2.35 billion capital budget to support state of good repair improvements. The report also contains safety and reliability, financial performance and ridership data on Metrorail and Metrobus.

WMATA represents a decades long partnership between state and local governments that has made Virginia's only heavy rail transit system a vital piece of economic infrastructure that benefits the entire Commonwealth. We look forward to working with our partners in the Commonwealth to ensure a stable and accountable financial future for Metro.

Best regards,

Dalia Palchik
Chair

Acknowledgements and Credits

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Special thanks to jurisdictional staff, state partners and WMATA for their comments and technical feedback.

All photos courtesy of NVTC and WMATA staff.

Legislative Requirement of This Report

This report fulfills the requirements of §33.2-3402 of the Code of Virginia, pursuant to Chapter 854 of the 2018 Virginia Acts of Assembly, specifying that NVTC report annually on the performance and condition of WMATA, for both Metrorail and Metrobus. Per statute, the report addresses the following elements:

- Potential strategies to reduce the growth in costs and to improve the efficiency of WMATA operations.
- Use of the dedicated capital funds authorized by the legislation to improve the safety and condition of the rapid heavy rail mass transportation system.
- The safety and reliability of the rapid heavy rail mass transportation system and bus network.
- The financial performance of WMATA related to the operations of the rapid heavy rail mass transportation system and bus mass transportation system, including farebox recovery, service per rider and cost per service hour.
- The ridership of the rapid heavy rail mass transportation system and the bus mass transportation system.

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2023 Report on the Performance and Condition of WMATA

NVTC's 2023 Report on the Performance and Condition of WMATA provides Funding, Accountability and Reform Recommendations for WMATA and the region to stabilize WMATA in the short-term and develop long-term solutions. The report also includes the uses of Virginia's dedicated capital funding, recent major accomplishments in the capital program and reliability, ridership and financial performance data.



WMATA's Projected Operating Funding Gap as of June 2023:



Through inflation and reduced ridership, the pandemic disrupted the financial operating model of transit agencies across the United States. All major transit systems, including WMATA, are facing massive operating budget shortfalls as they exhaust their remaining federal pandemic aid. As a result, NVTC developed a series of recommendations to WMATA and federal, state and local funding partners to ensure the long-term viability of WMATA and sustain the critical role the system plays in the region and as an economic asset for the Commonwealth.

NVTC's Near-Term Priorities:



Directed to: VA, MD and WMATA Board

Seek administrative or legislative opportunities to permit WMATA to re-baseline its FY 2025 operating subsidy bill to reflect the impact of COVID-19 pandemic.



Directed to: VA General Assembly

Advocate for additional state aid in FY 2025 to match local funding for WMATA.



Directed to: NVTC and the VA General Assembly

Seek a commitment from federal, state, regional and local funding partners to develop long-term, sustainable, dedicated funding to meet WMATA's capital and operating needs.

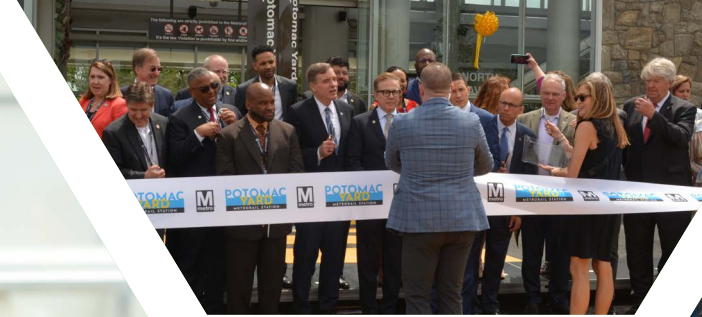
NVTC's Mid- to Long-Term Recommendations:

Directed to WMATA and federal, state and local funding partners

While WMATA and region take temporary actions to sustain bus and rail service and avoid a transit death spiral, they must simultaneously develop long-term solutions. These recommendations offer WMATA, the Commonwealth and the region a framework to help guide regional funding and reform discussions that will take place over the next few years.

- Manage labor cost escalation through reforms to pension and other post-employment benefits (OPEB)
 - Increase worker contributions to pensions and OPEB
 - Limit or prohibit overtime earnings towards retirement pay
 - Implement WMATA's Office of the Inspector General (OIG) findings to improve controls and governance and explore alternative retirement plans
- Seek amendments to the federal Wolf Act that would require consideration of WMATA's fiscal condition and jurisdictions' ability to pay in binding arbitration
- Establish a revised Virginia and Maryland legislative operating assistance growth cap that addresses the unintended consequences of the current cap
- Improve farebox recovery by raising fares for Metrorail and Metrobus
- Formalize the functions and scope of a WMATA Board audit committee to enhance oversight via a coordinated jurisdictional audit
- Secure one or more sustainable and reliable sources of dedicated revenues to support additional operating funding
- Establish a rainy-day fund at WMATA
- Secure one or more sustainable and reliable sources of dedicated revenues to support additional capital funding
- Sustain NVTC's technical, policy, financial and legislative efforts to support the implementation of recommendations





POTOMAC YARD-VT METRORAIL STATION GRAND OPENING

On May 19, 2023, Metro opened the 98th Metrorail station in Alexandria, Virginia. The station will serve the Virginia Tech Innovation Campus.





Introduction

Nationwide, all major transit agencies are facing operating fiscal cliffs as a result of slow ridership and fare recovery, changing travel patterns, inflation and the exhaustion of the federal aid that has sustained agencies throughout and since the pandemic. In response, state and local governments have taken steps to temporarily or permanently develop accountability and funding solutions to sustain their transit agencies. The Washington Metropolitan Area Transit Authority (WMATA) is a vital piece of the Commonwealth's economic infrastructure and is the backbone of Northern Virginia's transit network, which generates \$1.5 billion in annual personal income and sales tax revenue that supports programs and services across the Commonwealth.¹ WMATA faces a projected \$750 million operating gap in FY 2025 which would lead to devastating service cuts if state and local partners do not take action. Like its peer agencies, WMATA and its federal, state and local funding partners must develop both temporary and permanent solutions to close this gap and sustain ridership recovery in the years ahead or risk a transit "death spiral."²

Near-Term Needs

After the successful reintroduction of the 7000-series railcars over the last year and half, WMATA is experiencing a steady and sustained ridership recovery. WMATA has laid the groundwork for a continued recovery by providing frequent, reliable service and finding meaningful budget savings that help reduce the operating funding gap. As a short-term solution, the Northern Virginia Transportation Commission (NVTC) recommends that the Commonwealth: 1) take administrative or legislative actions enabling WMATA to ask its funding jurisdictions for additional contributions, without incurring a financial penalty to NVTC jurisdictions, and 2) provide additional state aid matching local funding to help close short-term operating budget gaps. While these actions will be underway in early 2024, the region must concurrently commit to develop long-term funding solutions.

Long-Term Solutions

While the region implements temporary measures to sustain WMATA services in the near-term, NVTC, the region and the Commonwealth must continue working towards long-term solutions. With the return of 7000-series trains to service, a steady growth in ridership, the opening of the Silver Line Phase 2 in Loudoun and Fairfax Counties and the opening of the Potomac Yard Station in Alexandria, WMATA has sustained momentum to deliver benefits to the region and the Commonwealth. NVTC will work on short and long-term solutions with member jurisdictions, partners in the General Assembly and the Youngkin Administration.

WMATA's Operating Funding Gap

Due to the pandemic, WMATA faces a gap between expenses and revenues. In June 2023, WMATA projected this operating budget gap to be \$750 million in FY 2025 and to grow to \$1.2 billion by FY 2035. This structural disconnect between expense and revenue growth, which was always present but dramatically accelerated by the pandemic, is driven by inflation and collective bargaining agreements (\$266 million), decreased revenue and ridership since the pandemic (\$288 million) and a reduction in jurisdictional subsidies (\$196 million).³

WMATA is working to reduce the projected budget gap from \$750 million to \$650 million through one-time and recurring cost savings, such as administrative efficiencies, reduction in consulting services and overtime, digital transformation and improved asset management.⁴ WMATA’s identification of meaningful cost savings demonstrates its commitment to addressing a difficult financial picture and sets the stage for the WMATA Board of Directors, the Commonwealth and NVTC’s funding jurisdictions to confront difficult tradeoffs in the first post-pandemic operating budget where federal aid is exhausted.

Development of the FY 2025 Budget

As of the publication of this report, the WMATA Board is evaluating several budget scenarios to help inform a proposed FY 2025 budget which is anticipated in December 2023. In order to close the operating budget gap, the WMATA Board will need to balance the following policy levers in a way that can sustainably continue WMATA’s ridership recovery: 1) fare levels, 2) service levels, 3) the acceleration of the capital funding fiscal cliff and 4) jurisdictional subsidies. All but the last policy lever are options currently available to the WMATA Board to help balance the budget, as the 3% operating growth caps in Virginia and Maryland constrain the WMATA Board’s ability to receive additional operating subsidies. Without coordinated near-term and long-term actions from the Commonwealth and all WMATA’s funding and governance partners, balancing WMATA’s budget solely through service cuts and no additional funding would result in devastating service cuts that would trigger a death spiral and undermine a vital piece of economic infrastructure for the Commonwealth.

WMATA’s Capital Funding Gap

The historic regional accord that led to dedicated capital funding for WMATA was made just over five years ago in 2018. Since then, WMATA has dramatically accelerated its capital program to reduce its state of good repair backlog, and between FY 2019 and FY 2023 it has achieved a cumulative total of \$9.48 billion in capital expenditures.

These accomplishments have been made possible by the \$500 million in dedicated capital funding provided per year by VA, MD and DC and the ability to bond on those revenues. WMATA currently projects that dedicated capital funding bond capacity will be exhausted in FY 2029 or earlier, depending on market conditions and on how the WMATA Board and region choose to close the operating budget deficit in FY 2025.

While this exhaustion point can appear far way, it is within the scope of WMATA’s next six-year capital improvement plan and will impact WMATA’s ability to embark on large, multi-year state of good repair projects. With a capital funding cliff on the horizon, the development of any long-term funding solutions should include considerations for both operating and capital funding.

1. Metro Funding, Accountability and Reform Recommendations

Building from the success of the 2018 dedicated capital funding accord and its associated governance and oversight reforms, NVTC, through its 2023 Metro Operating Funding and Reform Working Group, has developed recommendations on WMATA’s structural cost growth, operational and financial accountability, oversight, structural funding deficit as well as capital and other focus areas. Most of these recommendations are directed to WMATA, either for management or the WMATA Board’s consideration, but many are also directed to federal, state and local partners, including NVTC, who play important roles in the aforementioned areas and enable or constrain WMATA’s ability to take certain actions.

Recommendations are grouped into focus areas and organized by near- (now through FY 2025) and long-term (FY 2026 and beyond), followed by a summary of WMATA’s ongoing efforts and accomplishments. The audience to whom the recommendations are directed is identified below the recommendation. At a minimum, these recommendations aim to satisfy the legislative requirement (§33.2-3402) to document potential strategies to reduce the growth in costs and to improve the efficiency of WMATA operations. More broadly, these recommendations are intended to offer WMATA, the Commonwealth and the region a framework for regional funding and reform discussions that will take place over the next few years.

Near-Term Recommendations

Recommendation	Focus Area	Directed to
1. Seek administrative or legislative opportunities to permit WMATA to re-baseline its FY 2025 operating subsidy bill to reflect the impact of the COVID-19 pandemic	Structural Funding Deficit	VA, MD and WMATA Board
2. Advocate for additional state aid in FY 2025 to match local funding for WMATA		VA General Assembly
3. Seek a commitment from federal, state, regional and local funding partners to develop long-term, sustainable, dedicated funding to meet WMATA’s capital and operating needs		NVTC and VA General Assembly
4. Return federal workers to the office and secure a replacement for the region’s losses in fares from riders using federal transit benefits		Federal Government

Focus Area: Structural Funding Deficit

- 1. Seek administrative or legislative opportunities to permit WMATA to re-baseline its FY 2025 operating subsidy bill to reflect the impact of the pandemic without financially penalizing NVTC jurisdictions.**

Recommendation directed to Commonwealth of Virginia, State of Maryland and WMATA Board.

Virginia and Maryland’s legislative 3% caps on their respective annual growth in operating assistance to WMATA were codified in 2018 prior to the COVID-19 pandemic, which was an unprecedented generational disruption to transit agencies across the United States. WMATA felt this disruption more than other agencies due to its pre-pandemic reliance on high farebox recovery from Metrorail, which was at the time driven by long-distance peak hour commuters. WMATA’s immediate operating budget gap reflects structural factors that have been present at WMATA for decades but were accelerated by the unprecedented impacts of the COVID-19 pandemic: historic rates of inflation, significant ridership loss and a subsidy reduction to the jurisdictions to provide relief early in the COVID-19 pandemic.

When the 3% operating cap was implemented, inflation was below 3% and WMATA’s fare revenues exceeded \$700 million.⁵ Inflation, which reached 9% in FY 2022, increased WMATA’s costs primarily through contractual commitments in collective bargaining agreements, yet the 3% operating caps do not include any indexing or factors for inflation.⁶ In the latter half of 2023, WMATA experienced a gradual but steady ridership recovery and projected a total fare revenue of \$403.5 million in the approved FY 2024 budget, but revenue from ridership is still below pre-pandemic levels. In May 2020, the WMATA Board approved a subsidy reduction which lowered the FY 2021 total jurisdictional operating subsidy by \$134.7 million to reflect the challenging financial conditions that were anticipated for state and local partners. Subsequent subsidy increases occurred from this lowered subsidy amount, which was possible because of the availability of federal aid.⁷

NVTC’s 2022 Report on Virginia’s 3% Cap on the Growth in Operating Assistance Payments to WMATA (“3% Cap Report”) found that the 3% cap appeared to be a useful tool to manage the growth in subsidies and for WMATA to control costs, but noted it had created unintended consequences.⁸ NVTC jurisdictions cannot legally provide additional subsidy to WMATA, even if derived from state aid or local sources. Either legislative or administrative action is necessary because if the WMATA Board approves a budget that increases Virginia or Maryland’s jurisdictional operating subsidies by more than 3% (plus limited exclusions) over the previous year, then Maryland and Virginia will withhold state funding. In Virginia, this withholding is 35% of the state aid that is used by NVTC jurisdictions to pay their WMATA operating and capital subsidies, which would penalize funding jurisdictions who would need to find additional funding to fill the gap created by the withholding.⁹ Because WMATA provides regional transit service, a cap on any jurisdiction or signatory (Virginia, Maryland or DC) that provides operating subsidies to WMATA is in effect a cap on the entire system and all contributing parties. Maryland and Virginia will need to take coordinated and identical or near-identical actions to re-baseline the 3% cap.

Due to the scale of these pandemic-related impacts, NVTC recommends that the Commonwealth of Virginia and State of Maryland, in close coordination with the WMATA Board, seek administrative or legislative opportunities to permit WMATA to re-baseline its annual operating subsidy to Virginia and Maryland to reflect these impacts without financially penalizing NVTC localities.

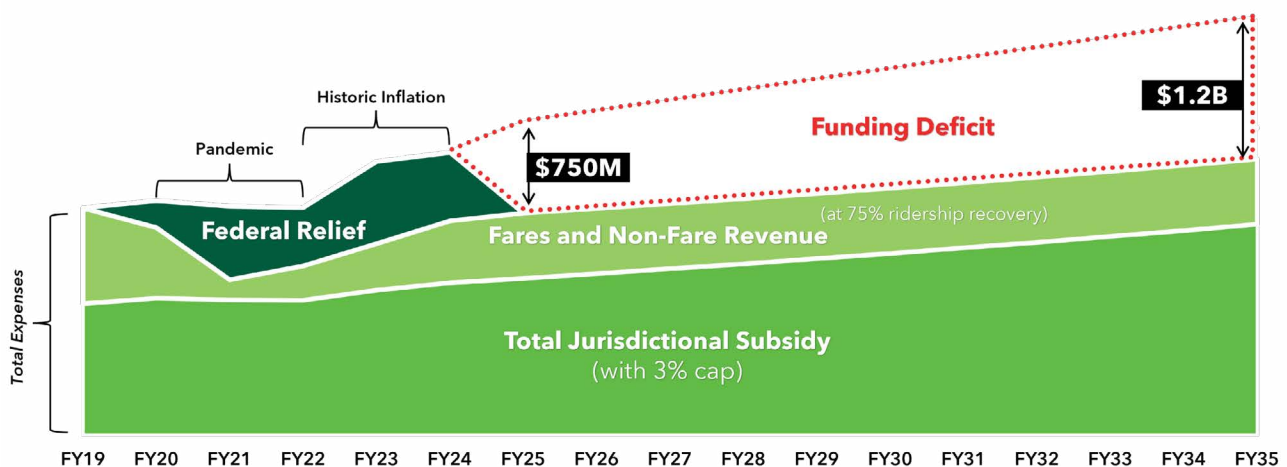
2. Advocate for additional state aid in FY 2025 to match local funding for WMATA.

Recommendation directed to the Virginia General Assembly.

For decades, the Commonwealth and NVTC localities, which are the WMATA Compact funding partners in Virginia, have partnered to fund WMATA. In this partnership, the local governments within NVTC leverage local funds, the regional gas tax and state aid to meet their funding obligations to WMATA. In FY 2024, the Commonwealth will provide \$210.5 million in state aid to assist local governments in meeting their WMATA operating and capital requirements, which is approximately 49% of the \$426.5 million total.¹⁰ In FY 2024, the Commonwealth will also provide \$50 million in matching capital Passenger Rail Investment and Improvement Act (PRIIA) funds and \$154.5 million as Virginia’s share of dedicated capital funding, whose funds largely comprise local and regional revenues from Northern Virginia.

Closing WMATA’s \$750 million FY 2025 operating budget gap (Figure 1) will require a combination of management cost savings, service cuts, fare increases, additional transfers of eligible preventive maintenance expenses to the capital budget and increasing subsidies from the Compact funding jurisdictions. After aggressive management cost savings, WMATA has brought the gap down to \$650 million. While the WMATA Board evaluates different budget scenarios, the amount of subsidy required from the region to avoid devastating service cuts could be anywhere from \$315 to \$650 million (as of October 2023), depending on the level of transfer of eligible preventive maintenance expenses from the operating budget to the capital budget.¹¹ Virginia’s share of this total operating gap would depend on future WMATA Board decisions on the eventual level and distribution of service and fares, but NVTC staff estimate that this could total anywhere from \$80 to \$182 million based on assumptions as of October 2023.

Figure 1. WMATA’s Projected FY 2025 and Future Operating Funding Gap



Projection as of June 2023

Source: WMATA Finance and Capital Committee Presentation, June 2023

NVTC’s local jurisdictions have limited fiscal tools with which to generate additional revenue and are facing financial headwinds as the impact of telework ripples through the commercial office

market and depresses commercial office assessments.¹² Every dollar the Commonwealth invests in transit in Northern Virginia generates an additional \$1.60 in statewide revenue, a 160% return on investment.¹³ NVTC recommends that the General Assembly leverage this return on investment by providing additional state aid to close 50% of the Virginia operating budget gap, to be matched by increased funding from local jurisdictions, for two years. Depending on the size of the operating subsidy gap, NVTC's local jurisdictions cannot close the budget gap for two years on their own without putting local transit projects and operations at risk, and a two-year temporary funding solution will allow WMATA's ridership recovery to continue while the region develops permanent solutions.

3. Seek a commitment from federal, state, regional and local funding partners to develop long-term, sustainable, dedicated funding to meet WMATA's capital and operating needs.

Recommendation directed to NVTC and the Virginia General Assembly.

The above recommendations - re-baselining the FY 2025 operating subsidy and seeking additional state aid - will only provide a temporary solution to WMATA's operating funding gap for one or two years. Assuming these temporary efforts are successful, WMATA's underlying, structural operating funding model will still present a long-term problem that must be solved, and a capital funding cliff looms on the horizon as dedicated capital funding bond capacity is projected to be exhausted in FY 2029 or earlier. While these near-term actions are being taken to stabilize WMATA's fiscal condition and avoid catastrophic service cuts in the near-term, federal, state, regional and local partners and NVTC must commit to developing long-term, sustainable, dedicated funding to meet WMATA's capital and operating needs.

4. Restore the federal employee presence in the WMATA system by returning federal government workers to the office and securing a replacement for the region's losses in fares from riders using federal transit benefits.

Recommendation directed to the Federal Government.

Prior to the pandemic, federal employees were the backbone of WMATA's ridership and fare revenue, accounting for approximately 40% of WMATA's daily commuters.¹⁴ WMATA estimates that it received \$100 million in fare revenue from federal employees in FY 2019. Since 2020, federal employee ridership recovery has lagged behind other customers returning to WMATA, and there are 95,000 fewer weekday bus and rail trips by federal employees now compared to FY 2019. Each additional day per week that federal employees ride Metro represents an additional \$20 million in annual fare revenue.¹⁵ If federal employee ridership returns to prior levels, WMATA would receive approximately \$50 million in additional fare revenue in FY 2025.

Federal agencies still budget and provide transit benefits to their employees which provide a tremendous incentive for federal employees to ride transit to work. These transit benefits are used across the major transit providers in the region: WMATA, MARC, VRE, OmniRide and other local transit agencies. Transit agencies including WMATA, however, only receive this revenue if federal employees ride and tap to pay their fare. The significant expansion of telework among federal employees has greatly reduced their use of WMATA and transit in general, and unused transit benefits are recouped by each respective agency.

NVTC encourages federal return-to-office policies that encourage transit use throughout the work week and for the federal government to secure a replacement for the region’s losses in fares from riders using federal transit benefits.

Mid- to Long-Term Recommendations

Recommendation	Focus Area	Directed to
1. Manage labor cost escalation through reforms to pension and other post-employment benefits (OPEB) <ul style="list-style-type: none"> • Increase worker contributions to pensions and OPEB • Limit or prohibit overtime earnings towards retirement pay • Implement Office of the Inspector General (OIG) findings to improve controls and governance and explore alternative retirement plans 	Structural Cost Growth	WMATA and Labor Unions
2. Seek Amendments to the federal Wolf Act that would require consideration of WMATA’s fiscal condition and jurisdictions’ ability to pay in binding arbitration		Congress
3. Establish a revised Virginia and Maryland legislative operating assistance growth cap that addresses the unintended consequences of the current cap		VA, MD and WMATA Board
4. Improve farebox recovery by raising fares for Metrorail and Metrobus	Operational and Financial Accountability	WMATA Board
5. Formalize the functions and scope of a WMATA Board audit committee to enhance oversight via a coordinated jurisdictional audit	Oversight	VA, MD, WMATA Board and DC
6. Secure one or more sustainable and reliable sources of dedicated revenues to support additional operating funding	Structural Funding Deficit	DC, MD, VA and NVTC
7. Establish a rainy-day fund at WMATA		WMATA Board and Funding Jurisdictions
8. Secure one or more sustainable and reliable sources of dedicated revenues to support additional capital funding	Capital	DC, MD, VA and NVTC
9. Sustain NVTC’s technical, policy, financial and legislative efforts to support the implementation of recommendations	Other	NVTC

Focus Area: Structural Cost Growth

As is common in the transit industry, approximately 70% of WMATA’s operating costs are personnel related.¹⁶ While the region searches for dedicated revenues to help address WMATA’s

structural funding deficits, it is important to align labor cost increases to a rate of increase that parallels the growth of existing funding sources as well as any future dedicated revenue streams. Because of the nature of collective bargaining agreements (CBAs) between WMATA and its labor unions, WMATA cannot unilaterally implement these recommendations, as any changes to CBAs would result from either negotiated or arbitrated agreements with WMATA’s labor union partners.

1. Manage labor cost escalation through reforms to pension and OPEB that are in alignment with national averages.

Recommendation directed to WMATA and labor unions in collective bargaining process.

Prior reports on WMATA, like the *Review of Operating, Governance, and Financial Conditions at the Washington Metropolitan Area Transit Authority* authored by former Transportation Secretary Ray LaHood in 2017 (“2017 LaHood report”), found that WMATA’s hourly labor costs are mostly average when compared to large peer transit agencies but recommended several areas to manage costs and increase productivity in labor contracts that remain largely unfulfilled today.¹⁷

a. Increase worker contributions to pensions and OPEB to reflect national averages.

Recommendation directed to WMATA and labor unions in collective bargaining process.

The 2017 LaHood report found that WMATA’s unionized workers contribute about 3% of pay towards their pension, which is well below the national average for workers with similar pensions.¹⁸

b. Limit or prohibit overtime earnings towards retirement pay.

Recommendation directed to WMATA and labor unions in collective bargaining process.

The 2017 LaHood report found that WMATA counts workers’ overtime earnings toward retirement benefits with no cap, which many other agencies either cap or prohibit.¹⁹

c. Implement OIG findings to improve controls and governance and explore alternative retirement plans for new employees in the next collective bargaining agreement.

Recommendation directed to WMATA and labor unions in collective bargaining process.

In 2022, WMATA’s OIG found that improvements were needed in governance of WMATA’s defined benefit pension plans and that examination of alternative retirements for new employees was needed. WMATA staff agreed with the findings and recommendations of this investigation and noted that it would need to be addressed in the next round of collective bargaining, which is currently underway.²⁰

2. Seek amendments to the federal Wolf Act that would require consideration of WMATA’s fiscal condition and jurisdictions’ ability to pay in binding arbitration.

Recommendation directed to Congress.

Collective bargaining agreements (CBA) are negotiated between management and labor, and if both parties agree, the result is called a negotiated CBA. If both sides cannot agree, then the WMATA Compact calls for both parties to enter binding arbitration, where, if negotiations continue at an impasse, an arbitration panel will determine the outcome.²¹ The National Capital Area Interest

Arbitration Standards Act of 1995, known as the “Wolf Act,” governs the actions of arbiters in labor disputes involving transit agencies operating in the national capital area.²² WMATA has found that in prior cases the arbiter has not adequately considered WMATA’s financial capacity and the ability of the jurisdictions to pay. Amending the Wolf Act to require consideration of WMATA’s financial capacity and the ability of the jurisdictions to pay as part of the arbitration process is an important component of resolving the long-term structural operating gap that WMATA faces.

3. Establish a revised Virginia and Maryland legislative operating assistance growth cap to reflect a new operating funding structure and restore accountability to Metro’s operating subsidy allocation process to help address unintended consequences of the current cap.

Recommendation directed to the Commonwealth of Virginia, State of Maryland, and WMATA Board.

Virginia’s 3% cap on the increase in annual operating assistance to WMATA was included as part of the 2018 dedicated capital funding legislation.²³ Maryland implemented a nearly identical cap at the same time, while the District of Columbia has no cap on operating assistance to WMATA. When the cap was implemented, WMATA had a pre-pandemic financial model of relatively high farebox revenues (over \$700 million in fare revenues in FY 2019) and low inflation (below 3%). At the direction of the General Assembly in 2020, NVTC convened a working group to produce the 3% Cap Report.²⁴ The report found that no additional changes were needed to the cap at the time and recommended the no legislative changes be considered before the cap has been in place for five WMATA budget development cycles. The report recommended that NVTC continue to study and evaluate the cap and also noted several unintended consequences that continue to this day.

The unintended consequences of the cap are that it has altered WMATA’s subsidy allocation process in a way that distorts the amount of subsidy owed from the amount of service received. This distortion reduces transparency and accountability to the funding jurisdictions in the budget process. The 3% percent cap is the primary driver, in addition to an outdated Metrobus subsidy allocation formula, for why Virginia is paying more for Metrobus service while getting less service.²⁵ As WMATA is a regional system, it is not possible to cap one jurisdiction’s operating subsidy growth without directly or indirectly capping the entire system. Addressing these unintended consequences is important because NVTC jurisdictions need to understand the true costs of WMATA services so they can make informed decisions about local bus and/or paratransit services.

Through the 2023 Metro Operating and Reform Working Group process, NVTC and its jurisdictions found that the cap is a useful tool, but it should be revised to accommodate a new post-pandemic financial model and to resolve its unintended consequences. Accomplishing these objectives with the legislative caps will require ongoing coordination and engagement with Maryland, the Commonwealth and WMATA to ensure success.

Focus Area: Operational and Financial Accountability

NVTC’s Metro Operating Funding and Reform Working Group found that transparency and public reporting at WMATA has improved since 2018 and that WMATA is above average in these areas when compared to peer transit agencies.²⁶ Nonetheless, there are still several areas for improvement at WMATA and from the region.

4. Improve farebox recovery by raising fares for Metrorail and Metrobus.

Recommendation directed to the WMATA Board.

Fare revenue is a vital component of any major rail and bus system and increasing fare revenue can improve operational accountability to the funding jurisdictions. Recent fare policy changes at WMATA that include transfer discount and a low-income fare pass provide an opportunity to increase rail and bus fares while factoring in equity concerns. Metrorail farebox recovery was 70% in FY 2012 before it dropped and stabilized around 50% in FY 2019.²⁷ While ridership is showing a steady recovery after the pandemic, the pre-pandemic revenue model of high farebox recovery from peak-hour, long-distance fares is gone, and WMATA projects a Metrorail farebox recovery rate of 24% in FY 2024.²⁸ Metrobus farebox recovery was 25% in FY 2016 and declined to 19% in FY 2019.²⁹ With dramatically increasing levels of fare evasion on Metrobus, farebox recovery has declined to 9% in the FY 2024 budget after improving from pandemic-era lows of 3%.³⁰

While two local transit systems in Northern Virginia, Alexandria’s DASH and Fairfax City’s CUE have free fares which were initiated with support from the Virginia Department of Rail and Public Transportation’s (DRPT) Transit Ridership Incentive Program (TRIP), Metrorail and Metrobus charge for fares across the region, including in Virginia. The last major fare increase was in FY 2018 when regular Metrobus fares were increased to \$2.00 and peak Metrorail fares were increased to \$2.25 to \$6.00 depending on distance.³¹ As of FY 2024, regular Metrobus fares are \$2.00 and Metrorail fares range from \$2.00 to \$6.00 depending on distance (peak and off-peak fares have been consolidated and the base fare for rail was reduced). In addition, Metrorail fares saw a decrease to a flat fare of \$2.00 after 9:30 p.m. on weekdays and on weekends to encourage ridership. In the aggregate, the FY 2024 fare changes advanced the Board’s fare policy goal of fare simplification and is expected to result in a net increase in fare revenue.³² If the FY 2018 fare levels shown above were adjusted for inflation, they would be \$2.44 for Metrobus and \$2.74 - \$7.31 for Metrorail. The 2017 LaHood report noted that Metrobus fares were below that of peer agencies and presented a scenario with a fare increase to \$2.10. In reviewing the same transit agencies cited in the 2017 LaHood report, their current bus fares average \$2.18 – placing Metrobus below its peers.

Focus Area: Oversight

5. Formalize the functions and scope of an WMATA Board audit committee to enhance oversight via a coordinated jurisdictional audit.

Recommendation directed to the Commonwealth of Virginia, State of Maryland, District of Columbia and WMATA Board.

WMATA, as a federally funded public transit agency, is subject to a number of audits and oversight efforts by external organizations. For example, congressionally mandated oversight actions are guided by and/or directly conducted by the Federal Transit Administration and include procurement, asset management and financial management oversight. The funding jurisdictions of the WMATA Compact exercise oversight through their WMATA Board members, and they also have the right to conduct audits of WMATA. In the past these audits have typically covered areas of jurisdictional concern, like the subsidy allocation process. In any organization, it is important to have the appropriate controls in place to ensure that staff are following the proper procedures. Audits directed by individual funding jurisdictions have historically been intermittent and lacked coordination among the other Compact funding jurisdictions.

Auditing is a vital component of oversight and, in a complex funding and governance structure like WMATA, the funding jurisdictions have a role to play in auditing WMATA's jurisdictional subsidy and budget process. At present, jurisdictional audits lack consistent objectives, do not share the same scope of work and have the potential to yield different findings with conflicting recommendations. Multiple uncoordinated audits also pose an additional administrative burden for WMATA, who must spend staff time responding to jurisdictional audits which often ask for the same information.

WMATA's OIG serves as an independent and objective unit of the Authority by conducting and supervising audits, program evaluations and investigations relating to internal Authority activities. WMATA also has an internal function for quality assurance, internal compliance and oversight (QICO). At a WMATA Board level, the Executive Committee conducts the functions of an audit committee, and these responsibilities are spelled out in periodic updates to committee roles and responsibilities.³³

NVTC recommends the funding jurisdictions exercise their audit rights in a coordinated fashion that adds value and minimizes WMATA's administrative burden. To accomplish this, NVTC recommends the WMATA Board create an advisory committee (which is allowable per the WMATA Compact and would require either action by the Board or amendments to the WMATA Board Bylaws) composed of key regional financial staff. This advisory committee would represent a steering committee of jurisdictional interests in any audit effort that could be managed by WMATA staff. As part of this effort, the WMATA Board could formalize its already active and ongoing audit activities by amending its bylaws accordingly and assigning the audit committee the responsibility to liaise with a new jurisdictional audit committee.

Focus Area: Structural Funding Deficit

While WMATA can and should look for operating efficiencies and cost savings, consider fare increases, service reductions and transferring eligible preventive maintenance expenses from the capital budget to the operating budget, these tools cannot close the projected operating gap and maintain core transit services without additional funding from the jurisdictions. Overreliance on any of the aforementioned tools risks jeopardizing WMATA's ridership recovery and long-term sustainability of the capital budget.

In May 2020, the WMATA Board reduced the total jurisdictional operating subsidy by \$134.7 million and in the FY 2022 budget the WMATA Board chose not to implement a 3% base subsidy increase. These cumulative reductions by way of direct reduction and foregone increases to jurisdictional subsidies were intended to relieve the fiscal pressure jurisdictions anticipated with the onset and continuation of the COVID-19 pandemic. Since that time, WMATA has added seven new rail stations to the system while asking for less subsidy from the jurisdictions - when adjusted for inflation - than it did in FY 2020. Federal aid both made this disconnect possible and provided WMATA with funding to weather the worst of the pandemic impacts, but with its pending exhaustion, the funding jurisdictions and WMATA are faced with difficult choices.

The recommendations below reflect the need for actions that address the structural challenges of how WMATA is funded.

6. Secure one or more sustainable and reliable sources of dedicated revenues to support additional operating funding.

Recommendation directed to the Commonwealth of Virginia, State of Maryland, the District of Columbia and NVTC.

Given the impacts of the pandemic (inflation, ridership, and the jurisdictional subsidy reduction) and WMATA’s structural funding issues, new dedicated operating funding will be a critical component of any long-term solution. In establishing dedicated operating funding for WMATA, there are many ways to structure that revenue and how it flows to WMATA. NVTC recommends that any dedicated revenues for WMATA in Virginia be collected and managed at NVTC before conveyance to WMATA.

As the recipient of the regional gas tax and state aid for WMATA and the appointing authority for the Virginia members of WMATA Board, NVTC plays a vital funding and governance role with WMATA. Per the WMATA Compact, NVTC, with the consent of its local governments, is also an eligible direct funding partner to WMATA.³⁴ With these critical funding and governance functions, any new Virginia dedicated funding for WMATA—especially if raised from the Northern Virginia Transportation District—should be directed to NVTC to convey to WMATA. Over-reliance on a single revenue stream can convey risk during economic cycles, so NVTC also recommends securing one or more sustainable and reliable sources of dedicated revenues.

Due to the multitude of transit agencies in the Northern Virginia Transportation District, NVTC recommends that these new revenues support all transit operators in the Northern Virginia Transportation District, including WMATA, and that NVTC develop a technical and policy framework for NVTC to manage the funds. This framework could include a waterfall of funding priorities that could benefit all transit providers in the transportation district, starting with the establishment of a dedicated transit operating fund at NVTC to convey Virginia’s portion of dedicated operating funding from NVTC to WMATA and leverage matching funding from the District of Columbia and State of Maryland. In any potential revenue structure for dedicated operating funding, NVTC recommends that WMATA use new regional dedicated operating funding to create predictable jurisdictional operating subsidy increases, as the current subsidy calculation process yields uncertainty for NVTC jurisdictions.

Defining “Dedicated Funding”

Dedicated funding can take many forms for peer transit agencies similar to WMATA. It includes a range of models and funding structures, from transit agencies with taxing authority that directly receive streams of revenue, to agencies with that receive a share of revenues either from a voter-approved tax measure (like in California) or from a regional funding body (like in Chicago).

NVTC recommends the following criteria in any discussion of dedicated funding for Metro:

- Revenue that is in a lockbox, flows on an uninterrupted basis to WMATA from its source or from an intermediate organization, exists outside of the quarterly subsidy payment process, and is not subject to traditional annual appropriations.
- Revenue that integrates into a regional accord for new Metro funding, with proportionality to MD and DC revenues. NVTC does not have a recommendation for Virginia’s share of any dedicated revenues at this time but supports any allocation or share that recognizes the unique way in which Virginia participates in and demands WMATA services.

If it is necessary for WMATA to provide additional reporting as a part of any funding package, NVTC recommends that regional stakeholders review WMATA’s current reporting infrastructure and develop a unified set of reporting requirements. Being required to provide slightly different information to different regional stakeholders increases WMATA’s administrative burden and reduces operational efficiency.

7. Establish a rainy-day fund at WMATA and adopt a rainy-day fund management policy.

Recommendation directed to the WMATA Board and the Compact Funding Jurisdictions.

Unlike most peer transit agencies or state and local governments in Virginia, WMATA does not have an operating contingency reserve fund. This means that WMATA is poorly positioned to handle unpredictable financial shocks and in those circumstances is reliant on its funding jurisdictions, who have placed an operating assistance cap on WMATA, to weather these unforeseen circumstances. Since WMATA does not have dedicated operating funding, the funding jurisdictions all appropriate funding to WMATA through their annual budget process and an unforeseen ask of WMATA to its funding jurisdictions creates budgetary unpredictability that is challenging for all parties and would present legal problems with the legislative operating caps. As part of any dedicated operating funding accord, WMATA should utilize this new funding to establish a rainy-day fund. As part of its oversight role to WMATA, the WMATA Board should adopt management policy for the rainy-day fund that sets parameters and policy for WMATA staff to follow. A rainy-day fund was identified in WMATA’s 2019 strategic plan, “Keeping Metro, Safe, Reliable, and Affordable,” but was not implemented by the region.³⁵

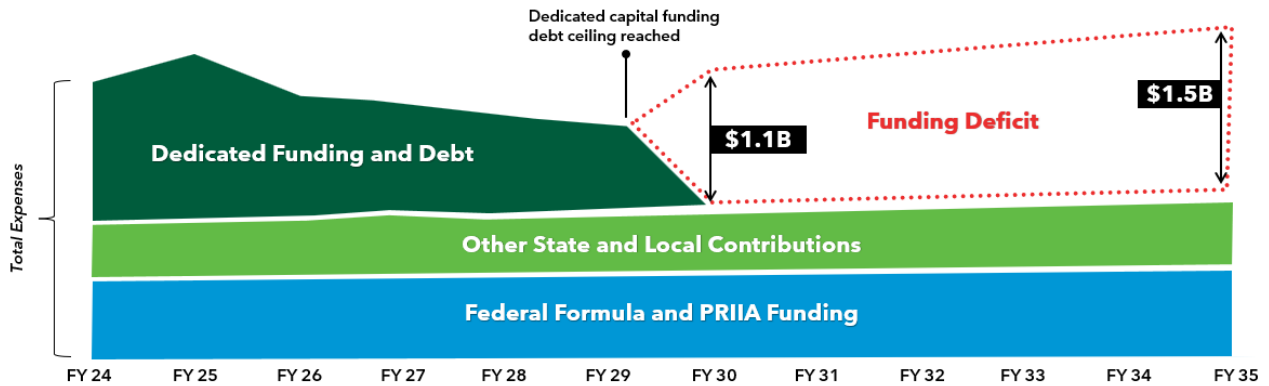
Focus Area: Capital

8. Secure one or more sustainable and reliable sources of dedicated revenues to support additional capital funding.

Recommendation directed to the Commonwealth of Virginia, State of Maryland, District of Columbia and NVTC.

The historic regional accord that led to dedicated capital funding for WMATA was made just over five years ago in 2018. As part of that framework, WMATA noted it had a 10-year capital need of \$15.5 billion and asked the region for a dedicated funding stream in which to bond in order to ramp up the capital program.³⁶ WMATA achieved the goals it promised the region it would accomplish with dedicated capital funding: capping increases to annual jurisdictional capital contributions to 3%, investing \$15.5 billion over 10 years for critical capital projects and increasing annual investments to \$1.5 billion. WMATA reached \$1.5 billion in annual capital expenditures in FY 2019, and between FY 2019 and FY 2023 has expended \$9.48 billion and averaged \$1.9 billion per year. Dedicated capital funding debt drives the acceleration of the capital program and allows WMATA the predictability to undertake large, multi-year state of good repair projects. This dedicated capital funding debt has always had a future date in which the bonding capacity is anticipated to be exhausted, necessitating that all future dedicated capital funding revenues go to paying debt service. In summer 2023, this was projected to be in FY 2029 (Figure 2).³⁷ Depending on the policy choices surrounding transferring eligible preventive maintenance expenses from the operating budget to the capital budget, this exhaustion date could arrive earlier than FY 2029.

Figure 2: WMATA’s Long-Term Capital Budget Outlook



Source: WMATA Finance and Capital Committee Presentation, October 26, 2023.

Note: Figure assumes no additional transfer of eligible preventive maintenance (PM) expenses beyond historic levels from the operating to the capital budget in FY 2025. If additional PM funds are transferred in FY 2025, the dedicated capital funding debt ceiling could be reached in FY 2028 or earlier instead of FY 2029.

While FY 2029 can appear far away, it is well within the range of WMATA’s next six-year capital improvement plan, which spans from FY 2025–2030. Because WMATA embarks on large, multi-year state of good repair projects, it must now begin deciding which projects it does not have the funding capacity to undertake. While they are not as immediate as an operating fiscal cliff in the next fiscal year, each year of delay in securing additional dedicated capital revenues yields greater and greater consequences on WMATA’s ability to plan and execute large state of good repair projects in its capital program. As the WMATA Board and the region develop temporary solutions to stabilize WMATA’s short-term operating finances, NVTC recommends that any regional accord around dedicated operating revenues also include additional dedicated capital revenues. WMATA should help the region understand the trajectory and scale of its state of good repair, modernization and other needs to inform the scale and type of funding ask.

Focus Area: Other

9. Sustain NVTC’s technical, policy, financial and legislative efforts to support the implementation of these Metro Funding, Accountability and Reform recommendations.

Recommendation directed to NVTC.

As the region looks to stabilize WMATA’s short-term operating outlook, it must simultaneously develop permanent operating and capital funding solutions. Several recommendations identified in this report should be part of any regional accord, but they will take a significant amount of staff time to advance - especially those that require complex multi-party negotiations. For Virginia-specific recommendations, NVTC and/or DRPT should lead efforts where relevant. Some efforts will require regional coordination through the Metropolitan Washington Council of Governments or WMATA. Some of the topics may include (but are not limited to): continuing to develop permanent operating and/or capital funding solutions, recommending operating reporting requirements, advancing audit concepts, refining revenue structure recommendations and developing long-term recommendations for the legislative 3% operating cap.

Ongoing Efforts and Accomplishments

The following section is comprised of recommendations or actions identified by NVTC where WMATA either has active and ongoing efforts in the related area and/or has produced significant accomplishments in the last few years. NVTC staff have provided updates on these efforts and accomplishments.

Action	Focus Area	Responsible Entity
1. Communicate the results of an efficiency and accountability program	Structural Cost Growth	WMATA
2. Continue to increase non-fare revenues		
3. Mitigate and report on the occurrence and fiscal impacts of fare evasion	Operational and Financial Accountability	
4. Redesign the Metrobus network to find efficiencies and cost savings		
5. Update the way WMATA allocates Metrobus subsidies		
6. Continue to enhance the physical safety and security of customers		
7. Continue efforts to improve transparency and reporting		

Focus Area: Structural Cost Growth

1. **Communicate the results of an efficiency and accountability program.**

Recommendation directed to WMATA.

Before Northern Virginia jurisdictions can provide substantial new funding revenues to WMATA, the agency must demonstrate its commitment to reducing costs and finding savings in the areas it can control. As part of the Metro Operating Funding and Reform Working Group, NVTC’s consultants found numerous examples of peer transit agencies finding savings and cost efficiencies as one part of the solution to developing a post-pandemic financial model. For example, the Southeastern Pennsylvania Transportation Authority (SEPTA) in Philadelphia established an efficiency and accountability program in 2020 to offer a systematic and sustainable approach to creating operational efficiencies.³⁸ The program’s inaugural transformation plan provided a comprehensive list of initiatives that were collectively estimated to have \$102 million in recurring annual benefits, and the program provides an annual progress report to the SEPTA Board.³⁹

WMATA has a similar effort underway. Since FY 2018, WMATA has found a cumulative \$308 million in savings due to cost-efficiencies and management actions. In 2023, the WMATA Board directed management to find additional savings, and WMATA staff created an internal taskforce that found additional \$95 million in one-time savings in FY 2023 and FY 2024 and \$50 million recurring savings that are available in FY 2025.⁴⁰ These efforts, which were publicly conveyed to the WMATA

Board's Finance and Capital Committee in September 2023, include detailed information on consolidating call centers, accelerating customer adoption of paratransit alternatives, mobile drug testing and badging, reductions to the non-revenue vehicle fleet size, reducing consulting services, digital transformation and improved asset management. WMATA also cited potential areas for costs savings that rely on actions taken by jurisdictional partners, such as aligning energy rate policies, implementing bus priority lanes and associated enforcement mechanisms, reciprocity in police certification across DC, MD and VA, and elevator/escalator regulatory requirements and fee waivers. These efforts demonstrate WMATA's commitment to fiscal stewardship and set the stage for the broader funding discussion. WMATA should continue to look for cost savings and efficiencies and communicate them to its Finance and Capital Committee and funding partners as part of the annual budget process.

2. Continue to increase non-fare revenues.

Recommendation directed to WMATA.

Non-fare revenues account for a small portion of operating revenues for transit agencies in the U.S. yet are one of the tools used to increase revenues and make the system more efficient. In FY 2024, WMATA's non-fare revenues were budgeted to account for 4.4% of operating expenses and totaled \$77.2 million.⁴¹ Non-fare revenues for WMATA include joint development projects, advertising, parking, fiber optics, property leases and other non-transit revenues.

WMATA has one of the most robust joint development programs in the U.S. among transit agencies. Since 1975, WMATA has completed 55 joint development projects that collectively generate \$194 million in annual state and local tax revenue and close to five million additional Metro trips annually.⁴² Completed joint development projects accumulate between \$8-11 million in annual lease revenue to WMATA.⁴³ WMATA should continue to expand joint development as well as advertising and parking revenues by utilizing its 10-Year Strategic Plan for Joint Development and growing ridership trends. Jurisdictional partners play a role in expanding joint development by providing supportive land use and zoning tools and policies, investing in site infrastructure and providing other incentives.

WMATA should explore procurable revenue driving options such as physical and data infrastructure. Land is WMATA's most valuable physical asset and while great strides have been made through the various joint development projects over the years, there is an opportunity to convert underutilized parking lots not slated for joint development. WMATA could lease or rent parking spaces to fleet operators, to tour bus companies or for special events on weekends. WMATA's most valuable data comes from SmarTrip cards and accounts. There are six million SmarTrip cards in circulation⁴⁴ and the SmarTrip app generates valuable information to advertisers and can be monetized. There will be many factors to consider like ensuring this effort does not violate privacy policies, but there is potential in this space to create a long-term, stable revenue stream for WMATA.

Focus Area: Operational and Financial Accountability

3. *Mitigate and report on the occurrence and fiscal impacts of fare evasion.*

Recommendation directed to WMATA.

Enforcing fare payment is critical to creating a safe, secure and financially sustainable transit system. Along with the sharp decline in ridership during the pandemic, WMATA also saw an increase in fare evasion. Between January 2023 and June 2023, the average percentage of Metrorail riders who evade the fare was 12% during the week and 14% on the weekends.⁴⁵ This breaks down by jurisdiction in Virginia, Maryland and the District of Columbia at 5%, 19% and 14%, respectively. The Metro Transit Police Department (MTPD), not bus operators or station managers, is responsible for enforcing fare payment, and MTPD must follow the fare evasion laws of each respective state or local government within which they operate. These laws vary from a civil or a criminal offense in Virginia and Maryland jurisdictions, depending on the city or county. In the District of Columbia, fare evasion was a criminal offense until the District decriminalized fare evasion to a civil offense in 2019. After nearly four years, the District only recently created an adjudication process to allow MTPD to enforce fare evasion as a civil fine.

Over the last year, WMATA has made great strides in working to mitigate and enforce fare evasion across the system. In October 2022, WMATA announced the launch of a warning campaign aimed at deterring fare evasion, with enforcement efforts that began in November 2022. Furthermore, WMATA continues to install new faregates to mitigate fare evasion. These faregates are 55 inches tall and include an L-shape door panel that extends over the faregate to minimize gaps between the openings. In August 2023, WMATA completed the first installations at six Metrorail stations and released preliminary data finding that the new faregates are reducing fare evasion by more than 70%.⁴⁶ WMATA will continue installing the new faregates until they are in every station across the system.

WMATA should report on the occurrence and fiscal impacts of fare evasion so that the WMATA Board, funding partners and policymakers can make informed policy decisions. As newer faregates are installed across the Metrorail system, NVTC recommends WMATA provide periodic briefings to the Finance and Capital Committee on the fiscal impacts of fare evasion. In the fall of 2023, WMATA began providing data on the occurrence of fare evasion on Metrorail on its public data portal.⁴⁷ NVTC encourages WMATA to extend this commitment to transparency on fare evasion data on Metrobus.

4. *Redesign the Metrobus network to find efficiencies and cost savings.*

Recommendation directed to WMATA.

Historically, Metrobus and Metrorail have operated as two separate systems.⁴⁸ This was driven by relatively low fares for Metrobus, a partial transfer discount that penalized transfers between bus and rail and policy decisions by the region and the WMATA Board that intentionally operated Metrobus routes that duplicated Metrorail service. The 2017 LaHood report recommended a comprehensive reset of the Metrobus system that re-examines the entire system of bus routes, schedules and operating practices to find efficiencies, save money and improve service.⁴⁹ WMATA began a comprehensive redesign process with the launch of the Better Bus Network Redesign in

the fall of 2022, which aims to build a more efficient bus network for Metrobus, the City of Fairfax’s CUE system and Prince George’s County’s The Bus.

In 2023, the Better Bus Network Redesign developed a draft visionary network toward which the region could grow incrementally as resources become available. In 2024, WMATA will begin engagement with the region on a Year One Network bus network that utilizes current resources available to Metrobus and that offers the WMATA Board the opportunity to achieve the goals set out in the LaHood report. With a fully funded transfer discount, the Bus Network Redesign can allow WMATA to move from two siloed transit systems into a more integrated transit system. While the goal of the effort is to develop a more efficient bus network, NVTC recommends that the WMATA Board implement a network that also realizes cost savings.

5. Update the way WMATA allocates Metrobus subsidies.

Recommendation directed to WMATA.

Since its founding WMATA has used a subsidy allocation formula to determine how costs to operate Metrobus service are allocated among the Compact funding jurisdictions.⁵⁰ The Metrobus service network has changed significantly since the last formula update in 1998, and it has changed even further with recent changes during and after the pandemic. The underlying fundamentals of the current formula have created a broken system that: is inconsistent and unpredictable to partners; provides distorted incentives around service provision; inhibits the use of external grant sources to pay for service; and makes targeted service changes and how they are paid for unnecessarily complex and fraught with veto points. The 3% operating subsidy cap has exacerbated many of these issues and significant Metrobus service changes since the pandemic have resulted in an even greater distortion between service provision and individual jurisdictions’ subsidies.

An update to the Metrobus subsidy allocation formula is a critical component of the Better Bus Network Redesign effort currently underway by WMATA.⁵¹ NVTC strongly recommends that the WMATA Board adopt and implement a new Metrobus subsidy allocation formula that better links the amount of service with the amount of subsidy as soon as practicable.

6. Continue to enhance the physical safety and security of customers.

Recommendation directed to WMATA.

WMATA and the Metropolitan Transit Police Department (MTPD) have implemented specific crime-reduction strategies to address crime and disorder within the entire WMATA system.⁵² Specifically, these include increased police visibility, enforcement activities, local partnerships, enhanced community relations programs and the continued Problem-Oriented Policing approach to address crime and public safety. In February 2023, District of Columbia Mayor Muriel Bowser and Metro General Manager and Chief Executive Officer Randy Clarke announced a joint partnership between MTPD and the DC Metropolitan Police Department to increase police presence throughout the WMATA system, particularly during rush hour.⁵³ MTPD also has partnerships with Alexandria, Cheverly, Greenbelt, and the Metropolitan Washington Airports Authority and WMATA deploys special police officers to provide high visibility policing at certain stations.

MTPD has hired crisis intervention specialists who are deployed daily throughout the system, with priority locations driven by police data. The crisis intervention team adds more visibility to the system, conducts wellness checks and provides resources to customers experiencing a mental health crisis.⁵⁴ In addition, all MTPD officers carry naloxone, a lifesaving drug to prevent death and drug overdoses.⁵⁵ WMATA also holds monthly Youth Advisory Council Meetings and pop-up events in the community and delivered 210 anti-theft steering wheel locks.⁵⁶ Between 2022 and year-to-date 2023, general enforcement (warnings, summonses/citations, arrests) and fare enforcement are up 274% and 1,208%, respectively.⁵⁷ Increased enforcement has led to a 6% decrease in Part I felony and Part II misdemeanor crimes.⁵⁸

WMATA should continue to enhance its safety and security efforts to engage the community, target enforcement efforts and increase police visibility on buses and trains and in stations as well as continue partnerships with local jurisdictions to change the trajectory of crime on the system.

7. Continue efforts to improve transparency and reporting.

Recommendation directed to WMATA.

Since 2018, WMATA has provided or improved upon data and reporting, most notably through the following:

- Capital Program Documents: Quarterly Capital Improvement Plan (CIP) Progress reports, Capital Needs Forecast, Detailed CIPs, etc.⁵⁹
- Ridership Data Portal: Metrorail, Metrobus, and parking ridership data, trends, and snapshots, including tap and no-tap data for Metrorail.⁶⁰
- MetroPulse: An interactive web tool that provides real-time customer info and system performance data.⁶¹
- Financial and Performance Quarterly Reports: Improvements to the quality and quantity of Quarterly Financial reports and Performance reports.⁶²
- Metrobus Annual Line Performance Report: reporting on the performance of bus service against the metrics in the Metrobus Service guidelines.⁶³
- Open Data Hub: links to interactive dashboards, performance reporting, downloadable data and guidance on how to get the most out of Metro's data resources.⁶⁴

Through legislation, grant agreements, and Board direction, WMATA provides a great deal of reporting to federal, state, regional and local stakeholders. NVTC recommends that WMATA continue its ongoing efforts to improve transparency and reporting. NVTC suggests that WMATA continue publishing information in open data portals, as this promotes transparency and can reduce the administrative burden of generating reports. When compared to peers, an area for improvement is for WMATA to continue making its website more user friendly for the volume of reports and data it generates. New York MTA's new website provides a peer example with a transparency landing page that consolidates performance data and related information.⁶⁵

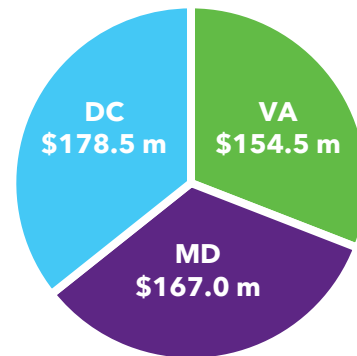
2. Use of Dedicated Capital Funds

In 2018, the Commonwealth of Virginia, the State of Maryland and the District of Columbia worked together to commit \$500 million a year in dedicated funding for capital investments at WMATA. Virginia’s annual portion of this dedicated capital funding is \$154.5 million, with the District of Columbia and State of Maryland providing the remaining portions (Figure 3). This dedicated capital funding strengthens WMATA’s ability to embark on large, multi-year capital investments designed to address significant state of good repair needs. WMATA provides detailed reporting and information about its capital program on its website.⁶⁶

Background on the WMATA Capital Fund

The WMATA Capital Fund is Virginia’s share of regional dedicated capital funding that was established in 2018. Virginia’s dedicated capital funding supports WMATA’s capital investments and project delivery across the system and can be used for any capital purpose. Of the \$154.5 million from Virginia, most of the funding is bondable and is provided to an unrestricted account at WMATA. Funding that is not bondable is provided to a restricted account at WMATA. The Department of Rail and Public Transportation (DRPT) provides the funding directly to WMATA through a grant agreement.⁶⁷

Figure 3. Regional Share of the \$500 Million in Dedicated Capital Funding



Sources of Revenue for the WMATA Capital Fund

The WMATA Capital Fund is managed by DRPT and it is composed of mostly local revenues or regional revenue streams that are derived from the Northern Virginia Transportation District. On an annual basis, the WMATA Capital Fund consists of the following sources:

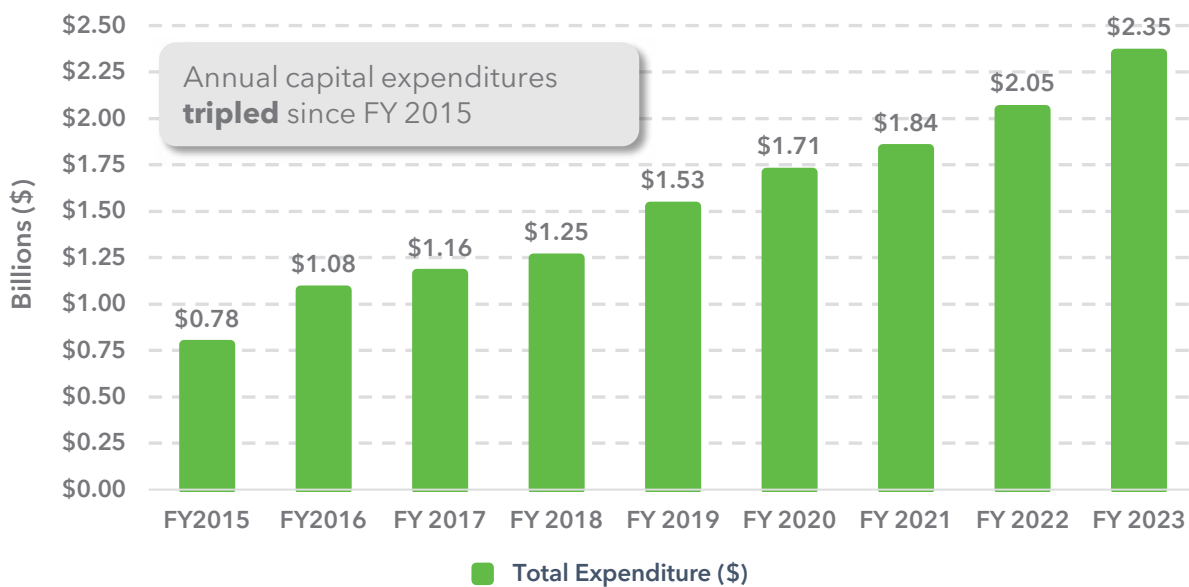
- Local Support: The cities of Alexandria, Fairfax and Falls Church and the counties of Arlington, Fairfax and Loudoun directly contribute a total of \$27.12 million in local funding directly to DRPT. The allocation of the \$27.12 million between the cities and counties is determined by their respective shares of WMATA’s capital budget.
- Regional Gas Tax: A fixed portion, \$22.183 million, of the regional gas tax in the Northern Virginia Transportation District is directed to the WMATA Capital Fund.
- Regional Grantors Tax and Regional Transit Occupancy Tax: Within the Northern Virginia Transportation District, the revenues created by a 3% transient occupancy tax and \$0.10 per \$100 of assessed value grantor’s tax are directed to the WMATA Capital Fund. These sources are revenue streams, so they do not provide a fixed amount into the fund.

- **Restricted Account:** This account is not bondable and is composed of state funds. It comprises a fixed \$20 million in state-wide recordation taxes from the Northern Virginia Transportation District Fund and a portion of the state-wide Motor Vehicle Rental Tax.

Background on WMATA’s Capital Program

In FY 2016, WMATA’s overdue state of good repair needs were estimated at \$6.473 billion and were estimated to drop to \$4.1 billion by FY 2024.⁶⁸ Over the last decade, however, WMATA ramped up its annual capital expenditures to deliver major construction projects that address the state of good repair backlog and other modernization needs. With a sustained focus on capital renewal made possible by the ability to issue bonds backed by dedicated capital funding, WMATA has more than doubled its capital expenditures to a record high \$2.35 billion in FY 2023 (Figure 4).⁶⁹ Since the funding’s inception, WMATA has authorized over \$2.5 billion in dedicated capital funding bonds, which will be paid for with future dedicated capital funding revenues.^{70 71} Dedicated capital funding debt capacity is anticipated to be exhausted by FY 2029. At this exhaustion point the dedicated funding revenue streams will be almost entirely allocated to paying debt service and will not be able to support further expansion of the capital program. Depending on the decisions of the WMATA Board during the FY 2025 budget process and financial market conditions, this exhaustion point could instead be reached by FY 2027 or FY 2028.⁷²

Figure 4: WMATA Annual Capital Expenditures from FY 2015 to FY 2023



Source: WMATA FY 2015-2023 financial reports

WMATA uses several sources to fund its capital program including federal funding, regional dedicated funding, state and local contributions, and other sources. As required by law, NVTC must include the uses of funds from the WMATA Capital Fund (Virginia’s dedicated capital funding) from the prior fiscal year in this report. Table 1 shows the actual expenditures of the fund for FY 2023 by Capital Improvement Plan (CIP) Program Area. WMATA provides additional information on progress made in the overall capital program during FY 2023 in WMATA’s Quarter 4 FY 2023 Capital Improvement Program Progress Report.⁷³

Table 1: FY 2023 Expenditures from the Virginia WMATA Capital Fund by CIP Program

CIP Category	CIP Program	FY 2023 Actual Expenditures (millions)
Railcar Investments	Railcar Acquisition	\$0.59
	Railcar Maintenance/Overhaul	\$18.77
	Railcar Maintenance Facilities	\$0.09
	Total	\$19.44
Rail Systems Investments	Power	\$1.84
	Signals & Communication	\$18.89
	Total	\$20.73
Track and Structures Rehabilitation Improvements	Fixed Rail	\$11.83
	Structures	\$6.35
	Total	\$18.17
Stations and Passenger Facilities Investments	Platforms & Structures	\$28.71
	Vertical Transportation	\$0.77
	Station Systems	\$2.62
	Total	\$32.09
Bus and Paratransit Investments	Bus and Paratransit Acquisition	\$0.71
	Bus Maintenance/Overhaul	\$2.23
	Bus Maintenance Facilities	\$0.15
	Bus Passenger Facilities/Investments	\$1.11
	Total	\$4.21
Business Support Investments	Information Technology	\$13.58
	Metro Transit Police Department	\$0.51
	Support Equipment/Services	\$7.80
	Total	\$21.89
Total FY 2023 Virginia Share of Dedicated Funding expended as of June 30, 2023		\$116.5
Debt Service		\$30.4
Remainder of Dedicated Capital Funding expended after FY 2023		\$7.6
Total FY 2023 Virginia Share of Dedicated Funding		\$154.5

Source: WMATA⁷⁴

Note: Totals may not add due to rounding. Due to the timing of the publication of this report, these expenditures are preliminary and do not represent final audited expenditures.

In FY 2023, WMATA invested more than \$2.3 billion in capital projects with a priority to invest in state of good repair projects. Significant FY 2023 capital accomplishments supported by dedicated capital funding included:

Platform Rehabilitation Project

In the first quarter of FY 2023, WMATA completed the four-year Platform Improvement Project. The project rehabilitated 20 stations, 11 of which were in Virginia. In FY 2023, WMATA also rehabilitated seven elevators and 19 escalators and completely replaced 33 escalators.

CIP program category: Stations and Passenger Facilities Investments

Yellow Line Tunnel and Bridge Rehabilitation

In FY 2023, WMATA completed rehabilitation of the Yellow Line Tunnel and Bridge between Pentagon and L'Enfant Plaza Station. The project addressed the structural degradation of the Yellow Line Tunnel and Bridge, which were both constructed over 40 years ago and near the end of their useful life expectancy. This work will ensure both structures continue to function safely for years to come.

The Yellow Line Tunnel and Bridge Rehabilitation was one of many track and structure rehabilitation projects completed by WMATA in FY 2023. In that year, WMATA also completed 1,175 square feet of concrete restoration, 416 linear feet of deck joint replacements, and rehabilitated 12,756 linear feet of grout pads.

CIP program category: Track and structures rehabilitation

Metrobus Fleet Reliability

In FY 2023, WMATA acquired 54 new clean diesel 40-ft buses and one battery-electric 60-ft bus, completed 22 bus rehabilitations, and rebuilt 16 engine assemblies, 20 bus energy storage systems, 18 transmissions and 29 fare boxes. Bus reliability was just below target for FY 2023 but showed a positive trend over most of the year. Following global supply chain challenges, WMATA was able to order enough parts to put 50 buses through its "midlife overhaul" program, which will extend the lifespan of buses and increase Metrobus fleet reliability.

CIP program category: Bus and Paratransit Investments

Bus Garage Modernization Program

Pantograph and charger infrastructure to charge 60-foot electric buses was installed at the Shepherd Parkway Garage in FY 2023 and will support battery-electric buses expected to be delivered in FY 2024. These buses will be among the first zero-emission buses (ZEB) tested in Virginia, Maryland and the District of Columbia and are an important step in WMATA reaching its goal of having a zero-emission bus fleet by 2042. Construction activities are continuing at the Northern Bus Garage Facility, which will be rebuilt to accommodate up to 150 buses and will support electric bus operations and maintenance.

CIP program category: Bus and paratransit investments

Upgraded Power and Automatic Train Operation

In FY 2023, WMATA made further progress on the four-year effort to replace equipment at 12 Traction Power Substations and nine Tie Breaker Stations. These upgrades will allow the operation of more eight-car trains in passenger service, minimize potential speed restrictions and reduce the risk of safety incidents. WMATA also continued work on the Return to Automatic Train Operation (ATO) project in FY 2023. ATO aligns with WMATA's safety goals and will lead to a decrease in red signal overturns which are the result of human error. It also provides energy saving enhancements through optimized acceleration and braking.

CIP program category: Rail systems investments

High Priority Track Rehabilitation Work

Four Orange Line Metrorail stations in Virginia–Vienna, Dunn Loring, West Falls Church and East Falls Church—were shut down in order to replace steel rail between Ballston-MU and Vienna as well as install fiber-optic cables. Vienna to West Falls Church was shut down from June 3 through June 25, with East Falls Church and West Falls Church reopening on June 26 and Vienna and Dunn Loring reopening July 16. Nearly 1,800 tons of rail, each piece stretching the length of a platform, were brought in and the old rail removed. The rail replacement and fiber-optic installation between Vienna and West Falls Church will ensure safety and increase system reliability. In FY 2023, WMATA also replaced 8,799 crossties, 3,543 third rail insulators and 6,290 direct fixation fasteners.

CIP program category: Track and structures rehabilitation investments

Integrated Command and Communications Center

In FY 2023, WMATA continued work on outfitting of the new Metro Integrated Command and Communications Center (MICC) at the new Metro Building at Eisenhower Avenue Station to enhance internal operations and improve the customer experience. The MICC will help streamline communications among WMATA's various operational divisions.

CIP program category: Business and operations support investments

Railcar Fleet Rehabilitation and Acquisition

The investigation of the 7000-series wheelsets continued in FY 2023 as a response to the October 2021 derailment and WMATA plans to replace all the wheelsets on the 7000-series fleet. With concurrence from the Washington Metrorail Safety Commission, WMATA completed its Return-to-Service Plan which allowed the 7000-series railcars back to near budgeted service levels. The 8000-series railcars are being developed with the addition of open gangways and a switch from stainless steel to aluminum car shells. The 8000-series railcars will replace the aging 2000 and 3000-series railcars.

CIP program category: Railcar and railcar facilities investments

3. Safety, Reliability, Financial Performance and Ridership Data

This chapter provides reporting on key safety, reliability, financial and ridership metrics. Data included in this chapter (Table 2) come from the National Transit Database (NTD) and WMATA Metro Performance Reports (MPR). Some data points have a lag of 12 to 18 months, meaning that for this report all data sources cover a period that reflects the impacts of the COVID-19 pandemic; all data sources are provided on either a calendar or fiscal year basis and some cover more years than others. All data sources also reflect periods that include the impacts of the October 2021 Blue Line Derailment and subsequent removal of service of the 7000-series railcars. Only reliability data, which covers FY 2023, includes a period with a gradual and sustained return to service of the 7000-series railcars. These data also include the effects of major capital program work that required station shutdowns and/or significant alterations to service, such as the rail replacement work on the western end of the Orange Line that started in June 2023. The pandemic and Blue Line derailment have impacted each metric as discussed in this chapter. Figure 5 provides a timeline of key events that impact the presented statistics and where they fall into fiscal and calendar years.

Figure 5: Timeline of Service and Ridership Impacts, FY 2020 - FY 2023

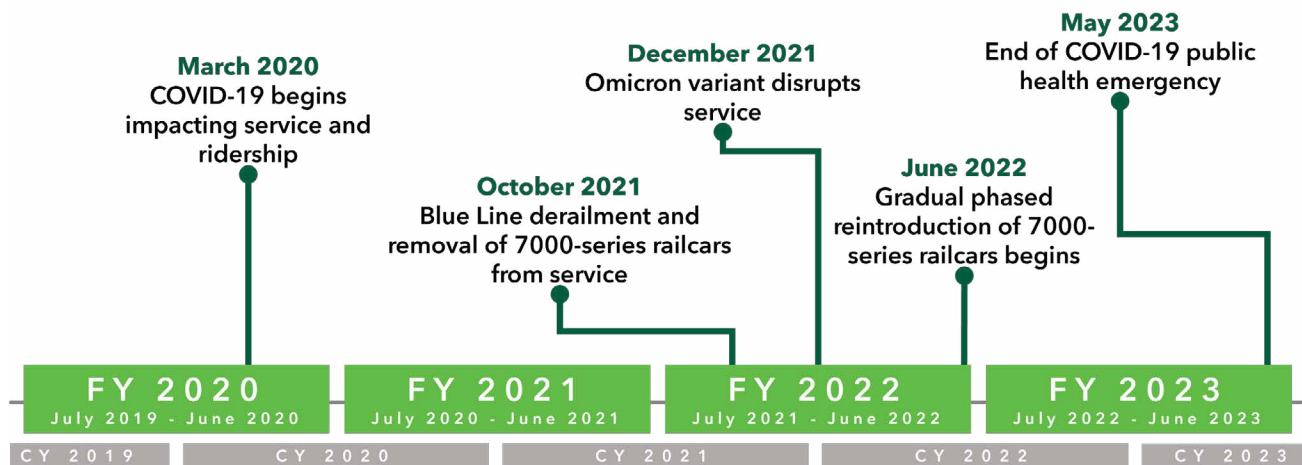


Table 2: Data Sources and Years Presented in this Report

Report Category	Latest Year for which Data is Publicly Available	Data Source
Safety	Calendar Year 2022 (January 1, 2022 to December 30, 2022)	NTD
Reliability	Fiscal Year 2023 (July 1, 2022 to June 30, 2023)	MPR
Financial Performance	Fiscal Year 2022 (July 1, 2021 to June 30, 2022)	NTD
Ridership	Fiscal Year 2022 (July 1, 2021 to June 30, 2022)	NTD

Safety

Documentation of safety data for Metrorail and Metrobus is required by §33.2-3402 of the Code of Virginia, pursuant to Chapter 854 of the 2018 Virginia Acts of Assembly. Safety data are collected by each individual transit agency and reported to the NTD, which provides common and reporting definitions and has a robust data quality assurance and auditing process. Transit systems seek to minimize the frequency of all safety events. The Safety & Security (S&S) Time Series presents safety and security data reported to NTD, through the S&S-40 form (Major events) and the S&S-50 form (Non-Major events). NTD measures transit safety by summarizing the total occurrences, Major and Non-Major, of certain safety events for rail and bus operations that include collisions, derailments (for rail only), fatalities,⁷⁵ fire, injuries⁷⁶ and security events.⁷⁷

The NTD provides safety data on a calendar year basis, unlike all other data presented in this report that is reported on a fiscal year basis. The counts represented in Table 3 and Table 4 are total counts for each category from when they were accessed from NTD. This time series data is subject to a validation process and current and previous years' data may be revised by transit agencies based upon additional data on its operations or upon request by NTD analysts.⁷⁸ The following tables show the data as it was accessed in August 2023 and may show slightly different results for past calendar years than that shown in previous NVTC reports. It is important to note that safety data provided in this section includes calendar years 2020, 2021, and 2022, which reflect ridership and service impacts due to the COVID-19 pandemic. CY 2021 and CY 2022 data included the October 2021 Blue Line derailment and subsequent removal of 7000-series railcars from service.

Table 3 summarizes the total count of each type of Metrorail safety event for calendar years 2019, 2020, 2021 and 2022.

Table 3: Metrorail Safety

NTD Category	Safety Event	Count, CY 2019	Count, CY 2020	Count, CY 2021	Count, CY 2022
Events	Collision	12	10	9	7
	Derailment	2	2	4	5
	Security Event	78	49	70	73
	Fire	71	39	43	39
Fatalities⁷⁹	Fatality	8	6	6	3
Injuries	Injury	389	188	205	231

Source: WMATA National Transit Database Report, Form S&S-40 and S&S-50.⁸⁰ Accessed August 17, 2023.

Table 4 summarizes the total count of each Metrobus safety event for calendar years 2019, 2020, 2021 and 2022.

Table 4: Metrobus Safety

NTD Category	Safety Event	Count, CY 2019	Count, CY 2020	Count, CY 2021	Count, CY 2022
Events	Collision	203	98	137	149
	Derailment	N/A	N/A	N/A	N/A
	Security Event	59	31	36	43
	Fire	4	1	4	3
Fatalities⁸¹	Fatality	0	1	6	4
Injuries	Injury	535	238	330	320

Source: WMATA National Transit Database Report, Form S&S-40 and S&S-50⁸² Accessed August 30, 2022.

Reliability

Documentation of the reliability of Metrorail and Metrobus is required by §33.2-3402 of the Code of Virginia, pursuant to Chapter 854 of the 2018 Virginia Acts of Assembly. Reliability data are collected and reported by each individual transit agency and reliability data in this report are from the FY 2023 Metro Performance Report.⁸³ The reliability of a transit system may be measured by its punctuality and equipment dependability. Reliability metrics used by WMATA include:

1. **On-time performance (OTP)** is the rate at which a transit system carries passengers to their destination on time and is used to evaluate the timeliness of travel for both rail and bus operations.
2. **Mean distance between failures (MDBF)** is the average number of miles traveled before a railcar or bus experiences a failure. Some railcar failures do not result in a delay of service. For Metrobus, a failure implies an interruption of revenue service.⁸⁴

Reliability data is obtained from the annual Metro Performance Reports, produced by WMATA, which report data on a fiscal year basis. The data included in this report is for fiscal years 2020, 2021, 2022 and 2023 and covers the entire relevant fiscal year (from July 1 to June 30 of that respective fiscal year) unless otherwise noted.

On-Time Performance

On-time performance (OTP) is reported for fiscal years 2020, 2021, 2022 and 2023. OTP is measured differently for Metrorail and Metrobus.

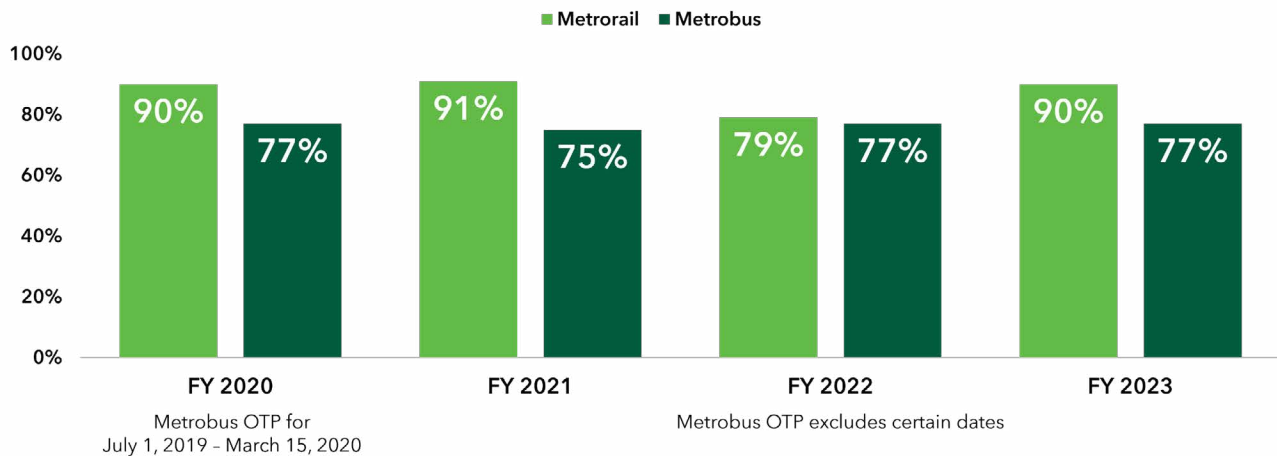
Metrorail customer OTP measures the percentage of customers who complete their journey within the maximum amount of time it should take per WMATA service standards. These standards vary by line, time of day and day of the week, and are informed by a customer’s entry and exit from the system. A description of the measurement methodology is contained in the appendix.⁸⁵ Figure 6 summarizes Metrorail OTP in FY 2020, FY 2021, FY 2022 and FY 2023. Following the October 2021 derailment and removal of 7000-series trains from service, WMATA saw a decrease in Metrorail OTP from 91% in FY 2021 to 79% in FY 2022. Wait times were doubled as Metrorail service was cut in half, but OTP began to recover as 7000-series trains were reintroduced and service

increased in the second half of FY 2022 and into FY 2023. This improvement is reflected in the FY 2023 Metrorail OTP of 90%.

FY 2020 Metrobus data are for a pre-pandemic period of July 1, 2019 to March 15, 2020. FY 2022 data excludes three days of data due to data collection errors as well as data from January 1, 2022 to February 6, 2022 due to operator absences from the Omicron surge that required a quick move to a Saturday schedule during the week that prevented accurate measurement of on-time performance. All other data are reported for the full fiscal year.⁸⁶ A description of the measurement methodology is contained in the appendix.

Figure 6 also summarizes Metrobus OTP in FY 2020, FY 2021, FY 2022 and FY 2023. Metrobus OTP remained consistent at 77% OTP between FY 2022 and FY 2023. The pandemic altered traffic conditions and staffing availability, both of which impact Metrobus OTP. WMATA has focused on efforts to improve the customer experience, including collaboration of staff to address bus bunching, piloting electronic departure signs at Braddock Road Station, and installing new fareboxes and rear-door fare targets. These efforts will all reduce wait times at stops and improve OTP.⁸⁷

Figure 6: On-Time Performance by Mode



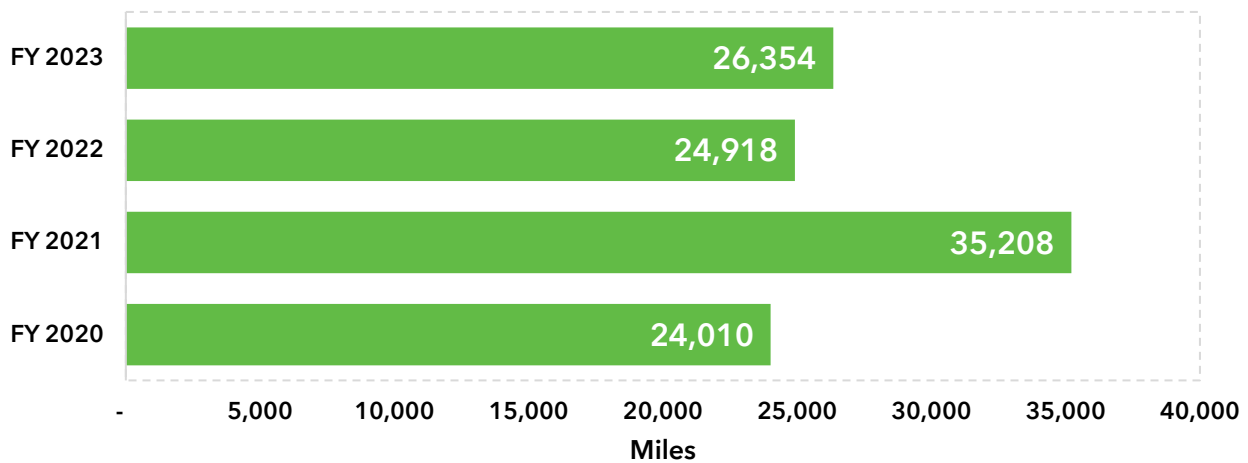
Source: Metro Performance Report FY 2023

Mean Distance between Failures

Mean distance between failure (MDBF) indicates the average number of miles traveled between vehicle failures. For rail, a car failure can occur without disrupting service or causing delay, instead resulting in discomfort or inconvenience. A bus failure is defined by a mechanical failure that interrupts revenue service.⁸⁸ Beginning in FY 2023, the Metro Performance Report reports fleet reliability for both Metrobus and Metrorail using the mean distance between failures (MDBF) metric. WMATA previously reported railcar reliability for Metrorail using the mean distance between delays (MDBD) metric and replaced it with MDBF to align with internal and external reporting and align with FTA definitions, as MDBF is now an FTA safety measure. The following figures show MDBF for all years from FY 2020 to FY 2023. A higher MDBF values indicates greater reliability of Metro railcar and bus equipment.

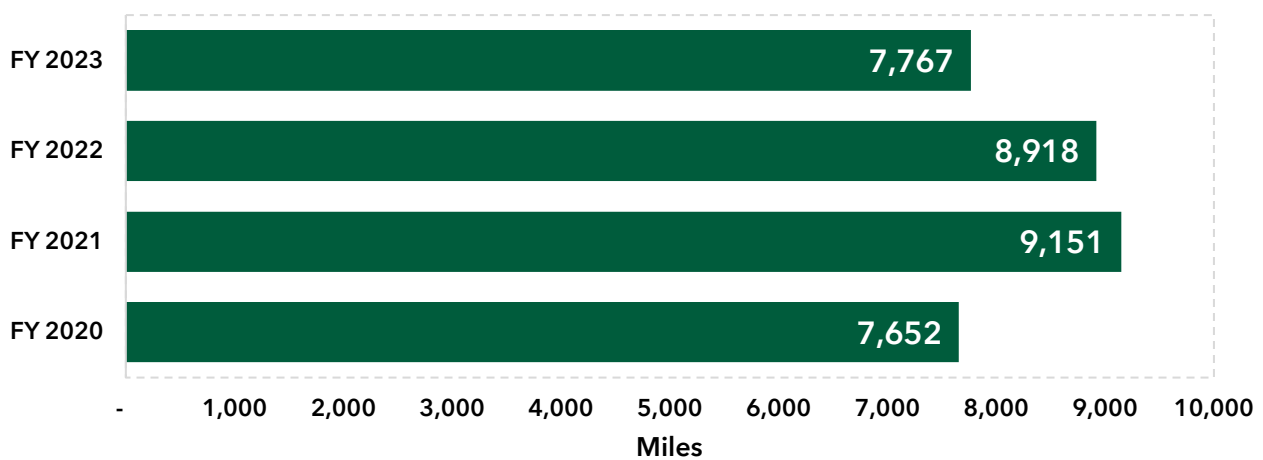
Figure 7 and Figure 8 summarize the Metrorail and Metrobus reliability figures for FY 2020, FY 2021, FY 2022 and FY 2023. Metrorail fleet reliability has increased in FY 2023, recovering from a decline in FY 2022 due to the Blue Line derailment and removal of 7000-series railcars. As the 7000-series cars were gradually returned to service in FY 2023, Metrorail fleet reliability increased as these cars are more reliable than the older 2000-, 3000- and 6000-series railcars that Metrorail relied on after the derailment. This trend is expected to continue as more of the newer railcars are returned to service. The older series railcars typically perform less reliably than the newer railcars but have provided most of the Metrorail service since the incident and are performing better with improved maintenance and inspection practices. Metrobus equipment reliability for FY 2023 was overall lower than the previous year, though throughout the year MDBF increased. WMATA continues to take action to improve fleet reliability by replacing aging buses and overhauling vehicles to improve performance in the second half of their life.⁸⁹

Figure 7: Metrorail Equipment Reliability, MDBF



Source: Metro Performance Report FY 2023

Figure 8: Metrobus Equipment Reliability, MDBF



Source: Metro Performance Report FY 2023

Financial Performance

Metrorail and Metrobus financial performance measures are required by §33.2-3401 of the Code of Virginia, pursuant to Chapter 854 of the 2018 Virginia Acts of Assembly. Financial and ridership data are collected by each individual transit agency and reported to the National Transit Database (NTD) which provides common definitions, reporting definitions, and has a robust data quality assurance and auditing process. Financial performance measures include the following three measures:

1. Metrorail Farebox Recovery and Metrobus Farebox Recovery.
2. Metrorail Service per Rider and Metrobus Service per Rider.
3. Cost per Metrorail Service Hour and Cost per Metrobus Service Hour.

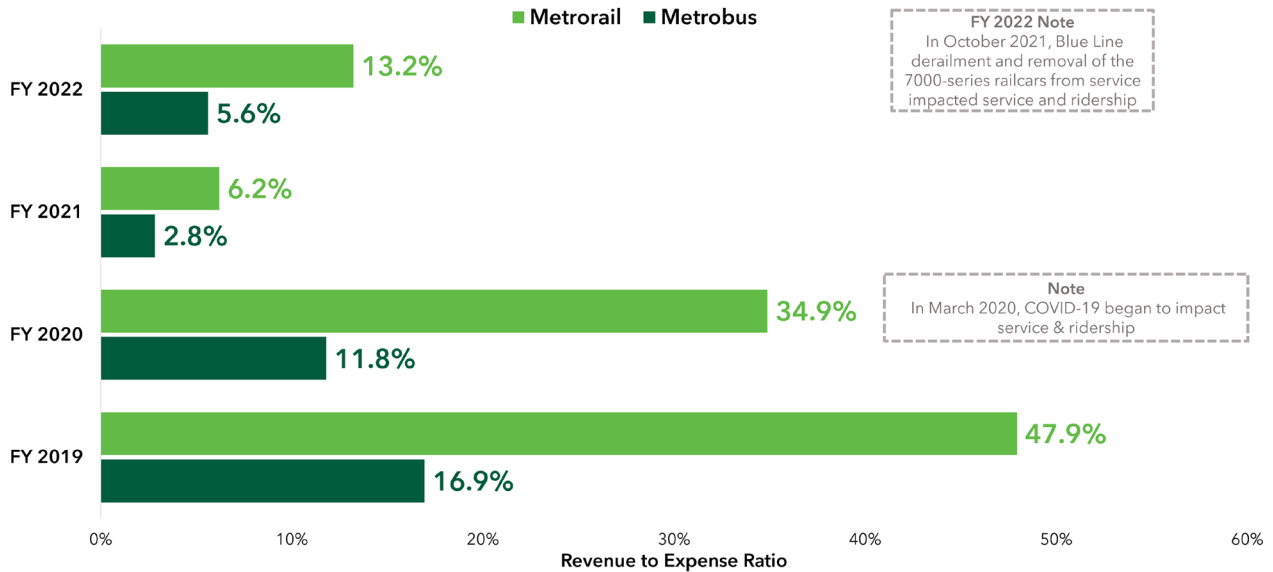
NTD FY 2022 data is reported for each of the above measures and includes calculations for both Metrorail and Metrobus. For Metrobus, data presented includes both services that are directly operated by WMATA and those which are operated by a contracted provider.⁹⁰ It is also important to note that due to robust auditing and review processes, NTD data is typically released at least one or more years after the fiscal year it represents. Data provided in this section includes FY 2020, FY 2021 and FY 2022 and these years reflect the COVID-19 pandemic's impacts on service and ridership. At various points during the pandemic, WMATA adjusted Metrorail and Metrobus service levels to respond to COVID safety protocols, workforce availability and the demand for service amidst significantly reduced ridership. This resulted in an overall decline of Metrorail and Metrobus service hours in FY 2020 and 2021 when compared to pre-pandemic years. These data also reflect the impacts of the October 2021 Blue Line derailment and subsequent removal from service of the 7000-series railcars. WMATA began a gradual and phased reintroduction of the 7000-series railcars in June 2022.

Farebox Recovery

Farebox recovery indicates how much of an agency's operating costs are recovered through passenger fare revenues. A higher recovery ratio indicates that the transit agency recoups a larger share of its operating costs through passenger revenue. Because rail systems generally have higher fares and higher ridership than bus systems, farebox recovery tends to be higher for rail systems than for bus systems.

Per Figure 9, Metrorail farebox recovery was 13.2% and Metrobus farebox recovery was 5.6% in FY 2022. The COVID-19 pandemic had a major impact on the entire Metro system's passenger revenues in FY 2020, FY 2021, and FY 2022 as ridership dropped to its lowest point in FY 2021. Additionally, as a COVID safety precaution, Metrobus instituted rear-door boarding and waived fares from March 2020 until January 2021.⁹¹ In FY 2022, the system began to recover with both Metrorail and Metrobus farebox recovery increasing from the previous year, but this recovery was slowed due to the Blue Line derailment in October 2021 and the subsequent removal of the 7000-series railcars from service.

Figure 9: Metrorail and Metrobus Farebox Recovery



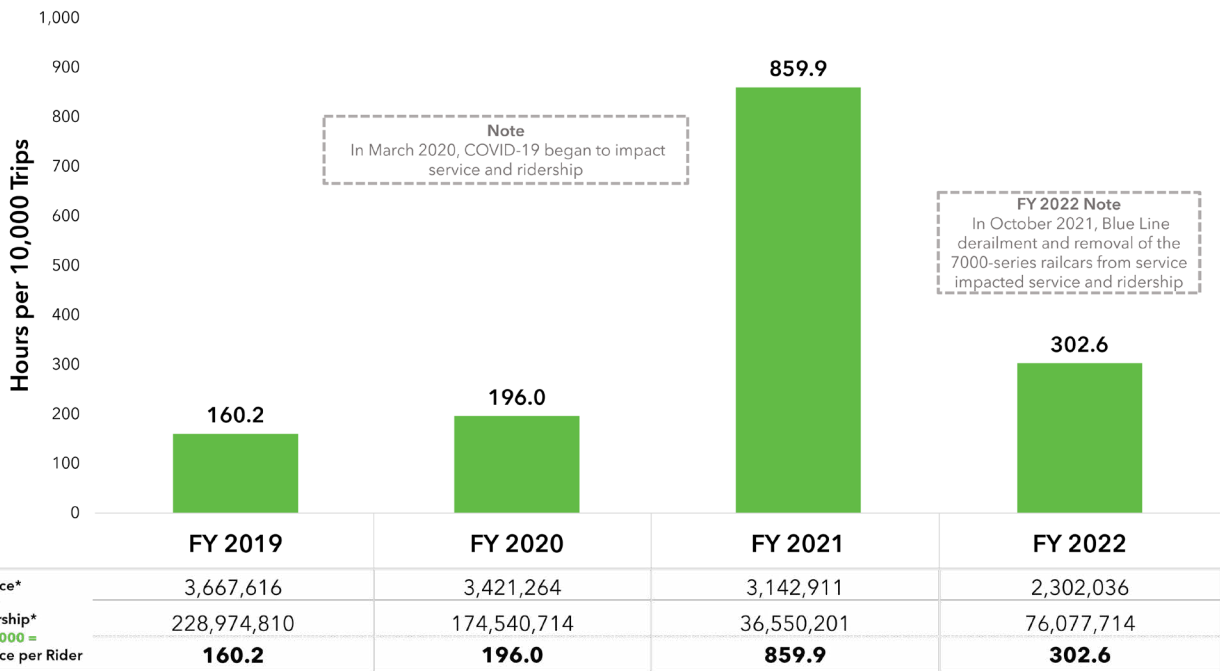
Source: National Transit Database⁹²

Service per Rider

Service per rider indicates the number of railcar or bus service hours offered per 10,000 passenger trips. This figure summarizes how efficiently an agency is transporting passengers. Agencies strive to strike a balance between serving as many passengers as possible while providing service at a reasonable cost. A low service per rider number indicates that relatively few hours of service are required to serve 10,000 passengers, which indicates higher efficiency.

Figures 10 and 11 depict Metrorail and Metrobus service per rider for the four most recent fiscal years available. FY 2022 Metrorail service per rider was 302.59 hours per 10,000 trips, and Metrobus service per rider was 452.17 hours per 10,000 trips. Since this ratio reflects the total hours of service divided by the number of riders, significant changes to either input will cause corresponding increases or decreases to the service per rider metric. In FY 2021, service per rider increased for both Metrorail and Metrobus, as ridership dropped significantly for both modes due to the pandemic but more dramatically for Metrorail. While there were COVID-19 related service disruptions in FY 2021 as WMATA adjusted its service patterns, WMATA ran relatively high service levels for most of FY 2021 to provide bus and rail service for essential workers. With the Blue Line derailment in October 2021 and the subsequent removal of the 7000-series railcars from service, WMATA ran significantly less service on Metrorail in FY 2022 than in FY 2021.

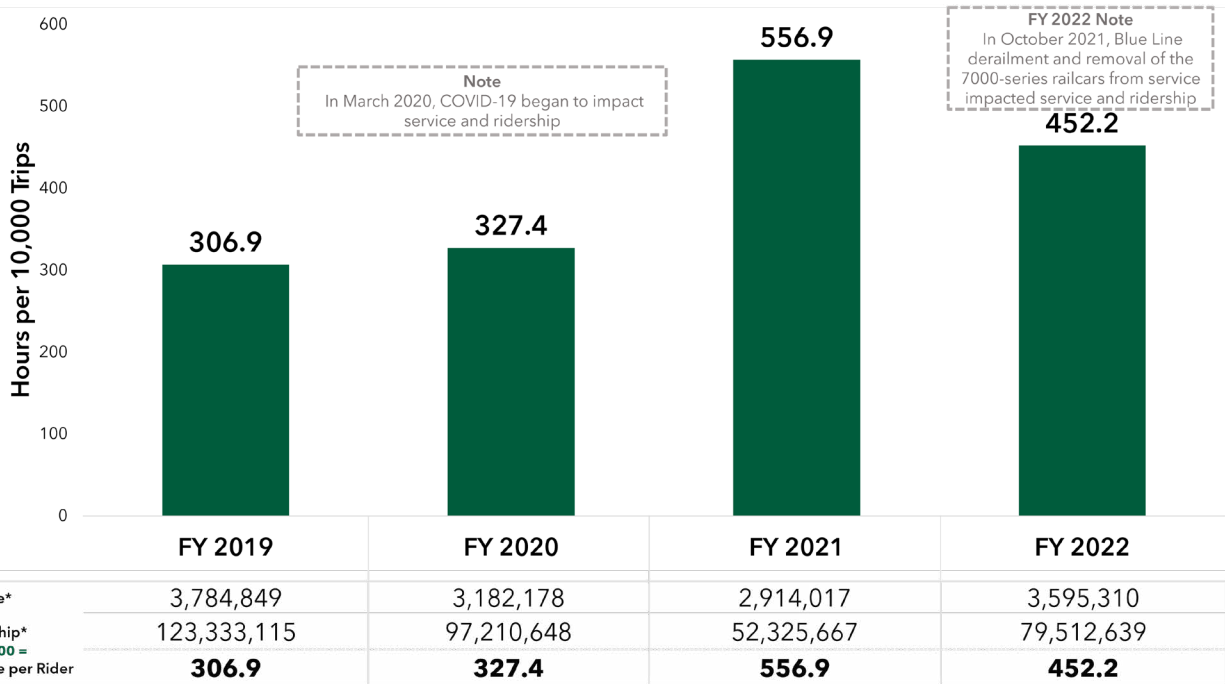
Figure 10: Metrorail Service per Rider



*Service is measured by vehicle revenue hours. Ridership is measured in unlinked passenger trips.

Source: National Transit Database⁹³

Figure 11: Metrobus Service per Rider



*Service is measured by vehicle revenue hours. Ridership is measured in unlinked passenger trips.

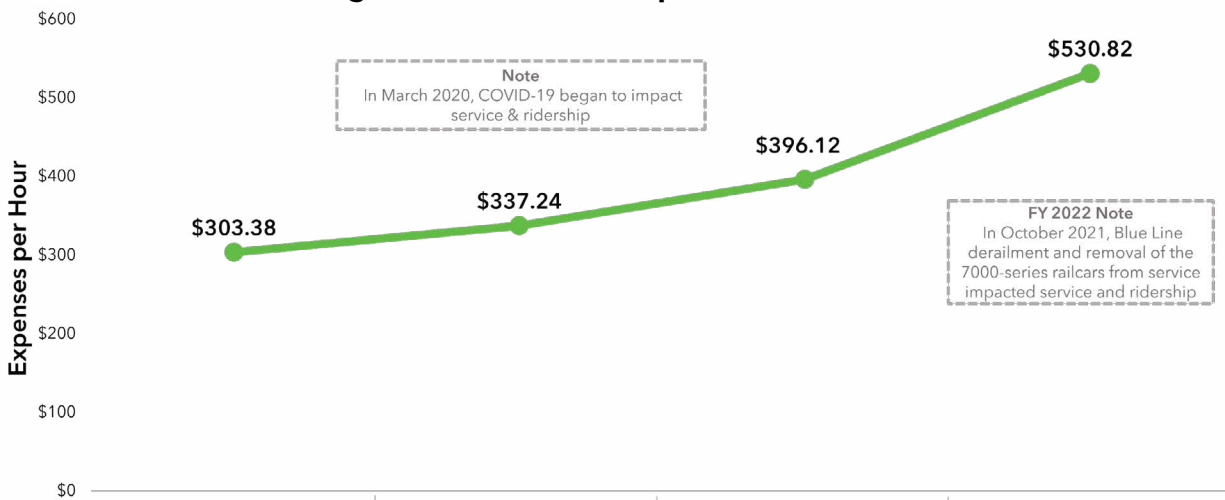
Source: National Transit Database⁹⁴

Cost per Service Hour

The cost per Metrorail service hour is the average cost associated with the operation and maintenance of one railcar for each hour of passenger revenue service. A lower number indicates a lower hourly cost to operate each railcar. Heavy rail services in the U.S. generally have a substantially higher cost per service hour than bus services because they use larger vehicles over shorter service miles.⁹⁵ The cost per Metrobus service hour is the approximate cost associated with the operation and maintenance of a vehicle for each hour of revenue service. A lower number indicates a lower average hourly cost to operate each bus.

Per Figure 12, the cost per Metrorail service hour was \$530.12, and, per Figure 13, the cost per Metrobus service hour was \$235.24 in FY 2022. Since this ratio reflects the total expenses divided by the number of revenue service hours, significant changes to either input will cause corresponding increases or decreases to cost per service hour metric. The increase in Metrorail cost per service hour between FY 2021 and FY 2022 reflects the October 2021 derailment and the subsequent removal of 7000-series trains from service. With 7000-series cars removed from service, the total Metrorail service hours decreased for FY 2022, causing the cost per service hour to increase. Alternately, the cost per Metrobus service hour decreased between FY 2021 and FY 2022. In looking at these trends more broadly, it is important to remember that the congressional intent of federal pandemic aid for transit agencies was to avoid layoffs, so in fiscal years in which WMATA was utilizing federal pandemic aid even if less service was being run it would not yield significant cost savings.

Figure 12: Metrorail Cost per Service Hour

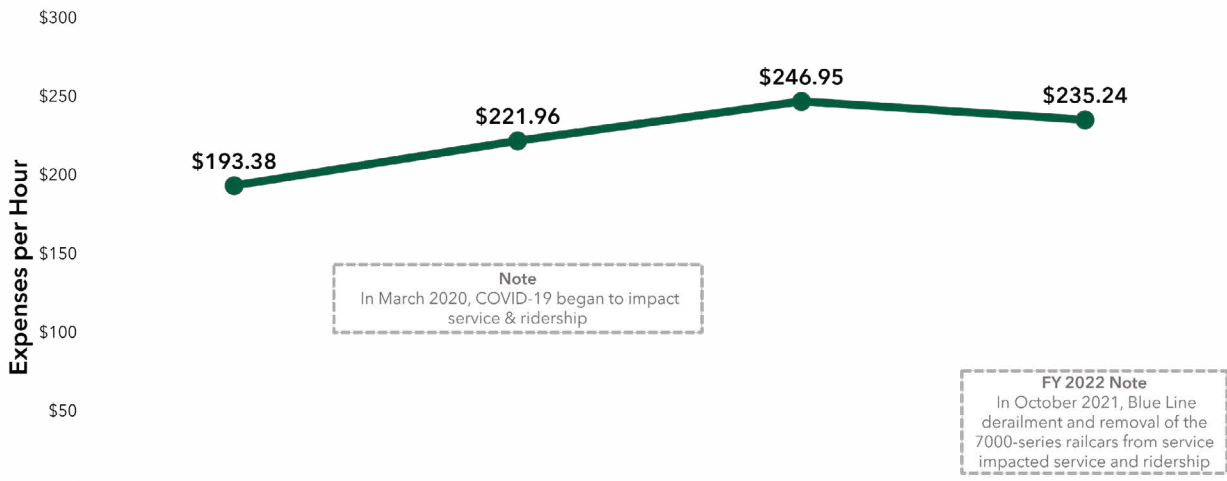


	FY 2019	FY 2020	FY 2021	FY 2022
Cost*	\$1,112,675,403	\$1,153,775,048	\$1,244,974,967	\$1,221,960,685
+ Service*	3,667,616	3,421,264	3,142,911	2,302,036
= Cost per Service Hour	\$303.38	\$337.24	\$396.12	\$530.82

*Cost is measured by total operating expenses. Service is measured by vehicle revenue hours.

Source: National Transit Database⁹⁶

Figure 13: Metrobus Cost per Service Hour



	FY 2019	FY 2020	FY 2021	FY 2022
Cost* +	\$731,946,008	\$706,322,337	\$719,628,976	\$845,757,291
Service* =	3,784,849	3,182,178	2,914,017	3,595,310
Cost per Service Hour	\$193.38	\$221.96	\$246.95	\$235.24

*Cost is measured by total operating expenses. Service is measured by vehicle revenue hours.

Source: National Transit Database⁹⁷

Ridership

Documentation of Metrorail and Metrobus ridership is required by §33.2-3401 of the Code of Virginia, pursuant to Chapter 854 of the 2018 Virginia Acts of Assembly. Financial and ridership data are collected by each individual transit agency and reported to the National Transit Database (NTD) which provides common and reporting definitions, and has a robust data quality assurance and auditing process. Because public transit services exist to transport passengers, transit systems seek to maximize patronage, measured in passengers. This section summarizes Metrorail and Metrobus ridership, which is measured by the NTD using:

1. Unlinked Passenger Trips (UPT)
2. Passenger Miles Traveled (PMT)

For Metrobus, data presented includes both services that are directly operated by WMATA and those which are operated by a contracted provider.⁹⁸ It is also important to note that due to robust auditing and review processes, NTD data is typically released at least one year or more after the fiscal year it represents. Data provided in this section include FY 2020, FY 2021 and FY 2022 and reflect impacts on ridership due to the COVID-19 pandemic and implementation of safety protocols by WMATA beginning in March 2020.

Unlinked Passenger Trips

Unlinked passenger trips (UPT) indicates the number of passengers boarding vehicles and illustrates the overall number of passengers passing through the total Metro system. A higher UPT reflects greater use of transit services. This section provides FY 2022 UPT data for Metrorail and Metrobus. The official NTD definition for this ridership metric is included in the Appendix.

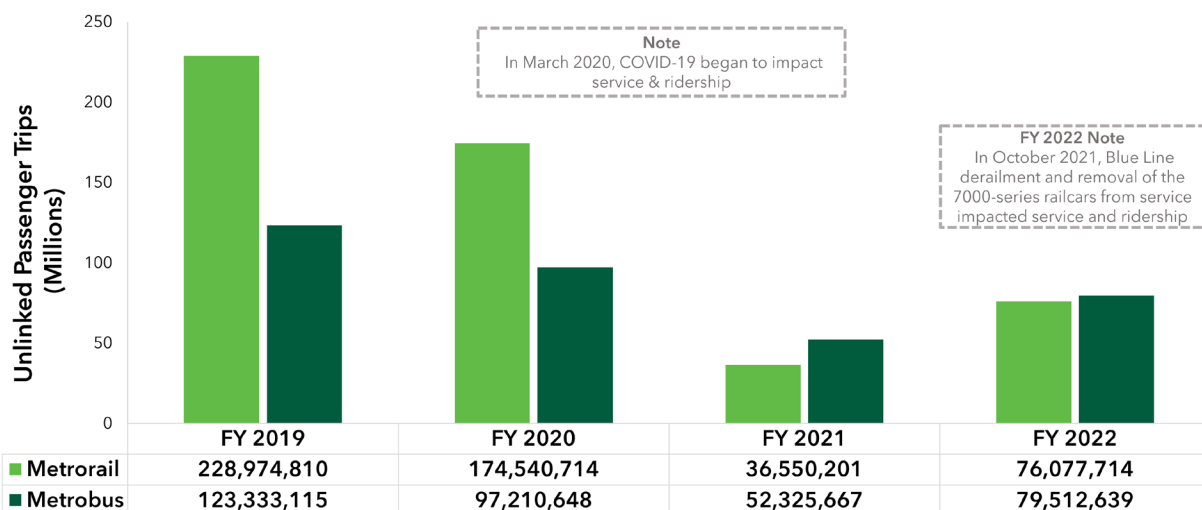
Per Figure 14, there were 76,077,714 Metrorail unlinked passenger trips and 79,512,639 Metrobus unlinked passenger trips in FY 2022. Both Metrobus and Metrorail increased from FY 2021, when ridership was severely impacted by the COVID-19 pandemic. However, WMATA saw challenges to ridership recovery in FY 2022 with the derailment of a Blue Line train in October 2021 and the removal of the 7000-series railcars from service which caused significant reductions in Metrorail service.

Passenger Miles Traveled

Passenger miles traveled (PMT) indicates the total sum of miles traveled by all passengers aboard the transit service. A single passenger traveling 10 miles by bus would count as 10 passenger miles traveled. As with UPT, a higher PMT figure indicates greater patronage of transit services, providing insight into both UPT and distances traveled by passengers.

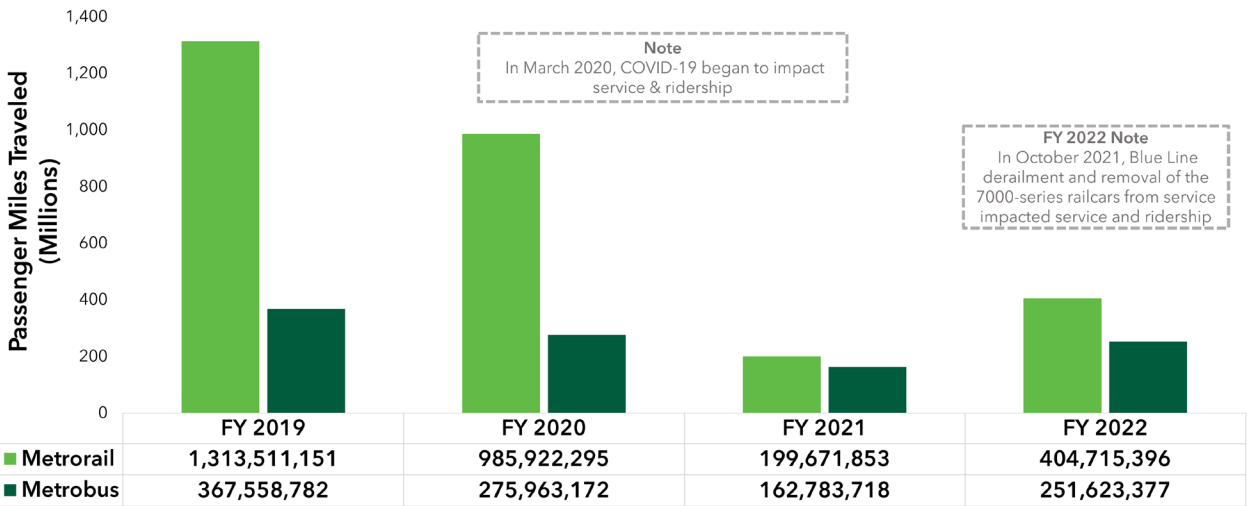
Per Figure 15, in FY 2022 the total passenger miles traveled for Metrorail was 404,715,396 and Metrobus was 251,623,377. Metrobus and Metrorail ridership began recovering from the impacts of the COVID-19 pandemic in FY 2022. However, WMATA saw challenges to ridership recovery in FY 2022 with the derailment of a Blue Line train in October 2021 and the removal of the 7000-series railcars from service, which caused significant reductions in Metrorail service.

Figure 14: Metrorail and Metrobus Ridership, UPT



Source: National Transit Database⁹⁹

Figure 15: Metrorail and Metrobus Ridership, PMT



Source: National Transit Database¹⁰⁰

Appendix

This appendix includes definitions and sources for the terminology used throughout the report. To provide a holistic picture of WMATA’s safety, reliability, financial and ridership performance, the definitions below have been aggregated from the following sources as indicated in the footnotes:

1. When not indicated otherwise, definitions are taken directly from the NTD Glossary.¹⁰¹
2. For metrics without an NTD definition, a definition is taken from WMATA’s Metro Performance Report (MPR).¹⁰² MPR definitions also include an explanation of what each metric means and why it is important to their strategy. These explanations are included along with the definitions.
3. To build a complete understanding of each MPR definition, WMATA provided NVTC with clarifications, which are denoted with the footnote “Provided by WMATA.”

Collision

A vehicle/vessel accident in which there is an impact of a transit vehicle/vessel with: another transit vehicle, a non-transit vehicle, a fixed object, a person(s) (suicide/attempted suicide included), an animal, a rail vehicle, a vessel or a dock.

Cost per Service Hour¹⁰³

The average cost to operate one vehicle/passenger car for one hour of passenger service. Calculated for each mode by taking the total operating expenses and dividing by total vehicle revenue hours.

Derailments

Non-collision incidents in which one or more wheels of a vehicle unintentionally leaves the rails.

Failure, Metrobus

WMATA counts buses as failures due to mechanical problems that resulted in lost or interrupted trips. Therefore, only bus maintenance chargeables (BMCs) are counted.

- Major failures are BMCs that may leave the bus stranded on the street or result in grossly unsafe operation. Examples: brakes, door interlock, generator, smoke/fire, large fluid leaks, engine or transmission shutdown, broken wipers on rainy days. (“Accidents” caused by mechanical failure (i.e., brakes not engaging) are counted as major.)
- Minor failures are BMCs that may be deemed unsafe by the operator, manufacturer or engineers to protect the bus from irreparable damage. Examples: engine/transmission malfunction indicators, windshield, mirrors, unsafe interior or exterior body issues.

Failure, Metrorail

WMATA defines a railcar failure as a mechanical failure that requires corrective maintenance. Failures related to operator error or customer behavior, e.g., doors that fail because they were held open by customers, are not counted. Not all failures prevent vehicles from completing scheduled revenue trips or starting the next scheduled revenue trips. In some cases, corrective maintenance can be conducted after the scheduled trips are completed. A delay is a failure that causes a train to hold in place for more than four minutes.

Farebox Recovery Ratio¹⁰⁴

The portion of operating expenses that are paid for by fare revenues. This metric is calculated as: *Fare Revenue ÷ Operating Expenses*.

Fare Revenue

All income received directly from passengers, paid either in cash or through pre-paid tickets, passes, etc. It includes donations from those passengers who donate money on the vehicle. It includes the reduced fares paid by passengers in a user-side subsidy arrangement.

Fatality

A death or suicide confirmed within 30 days of a reported incident. Does not include deaths in or on transit property that are a result of illness or other natural causes.

Fire

Uncontrolled combustion made evident by flame that requires suppression by equipment or personnel.

Headway

The time interval between vehicles moving in the same direction on a route.

Injury

Any damage or harm to persons as a result of an event that requires immediate medical attention away from the scene.

Linked Passenger Trips¹⁰⁵

A linked passenger trip is counted when a customer enters through a faregate. In an example where a customer transfers between two trains to complete their travel one trip is counted. Metrorail reports linked passenger trips.

Labor (Cost)¹⁰⁶

The pay and allowances due employees in exchange for the labor they provide on behalf of the transit agency. The labor allowances include payments made directly to the employee arising from the performance of a piece of work.

Major Event Report (S&S-40)¹⁰⁷

The Major Event Report (S&S-40) captures detailed information on severe safety and security events that occur within a transit environment. Agencies must complete one S&S-40 per reportable event, regardless of how many thresholds an event meets. A reportable event is one that meets any NTD reporting threshold (detailed below) and occurs on transit right-of-way or infrastructure, at a transit revenue facility, at a maintenance facility or rail yard, during a transit-related maintenance activity, or involves a transit revenue vehicle.

Mean Distance between Delays¹⁰⁸

The average number of miles traveled before a railcar experiences a failure that leads to a delay of four or more minutes. This is equivalently expressed as: *Total railcar revenue miles ÷ Number of failures during revenue service resulting in delays of four or more minutes*.

Some car failures result in inconvenience or discomfort but do not always result in a delay of service, such as hot cars. Mean distance between delays includes those failures that had an impact on customer on-time performance.

Mean Distance between Failures¹⁰⁹

The average number of miles traveled before a mechanical breakdown requiring the bus to be removed from service or deviate from the schedule. This can also be expressed as: *Total revenue miles ÷ Total number of failures.*

Mean distance between failures is used to monitor trends in vehicle breakdowns that cause buses to go out of service and to plan corrective actions. Factors that influence fleet reliability include vehicle age, quality of maintenance program, original vehicle quality and road conditions affected by inclement weather and road construction.

National Transit Database¹¹⁰

A reporting system run by the Federal Transit Administration that collects public transportation financial and operating information.

Non-Major Monthly Summary (S&S-50)¹¹¹

The Non-Major Monthly Summary Report captures monthly summary information on minor fires and other less severe safety events that are not reportable as Major Events.

Non-Labor Costs

The costs associated with operating expenses including fuel/lube, tires, tubes, utilities, casualty/liability costs, taxes and other materials.¹¹²

On-Time Performance (Metrobus)¹¹³

Bus on-time performance (OTP) communicates the reliability of bus service, which is a key driver of customer satisfaction and ridership. For schedule-based routes, OTP measures adherence to the published route schedule for delivered service. For headway-based routes, OTP measures the adherence to headways, or the time customers wait between buses. Headway-based routes include routes 70, 79, X2, 90, 92, 16Y and Metroway.

Metrobus measured OTP using schedule-based methodology until FY 2020. After a pilot in FY 2019, OTP was measured using a blended schedule- and headway-based methodology beginning in FY 2020 and continuing through September 2021. Beginning in October 2021, WMATA returned to measuring all routes on a schedule-based methodology.

Factors that can affect OTP include traffic congestion, detours, inclement weather, scheduling, vehicle reliability, operational behavior or delays caused by passengers. Measurements are calculated as follows:

Percentage of bus service delivered on-time

Schedule-based routes = Number of time points delivered on time based on a window of 2 minutes early and 7 minutes late ÷ Total number of time points delivered.

*Headway-based routes = Number of time points delivered.
within the scheduled headway + 3 minutes ÷ Total number of time points delivered.*

Fiscal Year	Data Availability
FY 2019	Not available due to quality errors
FY 2020	Available from July 1, 2019 until March 15, 2020, as the beginning of the pandemic significantly reduced service
FY 2021	Available for entire fiscal year
FY 2022	Excludes data from 9/6/2021, 1/1/2022 - 2/6/2022, 3/3/2022, and 5/30/2022
FY 2023	Available for entire fiscal year

On-Time Performance (Metrorail)¹¹⁴

Metrorail customer OTP measures the percentage of customers who complete their journey within the maximum amount of time it should take per WMATA service standards. Actual journey time is calculated from the time a customer taps a SmarTrip card to enter the system, to the time when a SmarTrip card is tapped to exit. Factors that can affect OTP include infrastructure conditions, missed dispatches, railcar delays (e.g., doors), or delays caused by sick passengers. Station stops are tracked system-wide, except for terminal and turn-back stations. Measurements are calculated as follows:

Number of customer trips with travel times less than or equal to expected travel times ÷ number of customer trips.

Operating Expenses

These expenses include labor and non-labor costs and services for operating and maintaining the mode, including general administration costs. Labor costs are fully loaded, meaning they include fringe benefit costs (directly paid to employees as well as indirectly, e.g., payments to pension funds) in addition to wages and salary costs.¹¹⁵

Passenger Miles Traveled (PMT)¹¹⁶

The cumulative sum of the distances ridden by each passenger.

Ridership

Ridership is a measure of total service consumed and an indicator of value to the region. Drivers of this indicator include service quality and accessibility.

Passenger trips are defined as follows:

- Metrorail reports passenger trips. A passenger trip is counted when a customer enters through a faregate. In an example where a customer transfers between two trains to complete their travel one trip is counted.
- Metrobus reports passenger boardings. A passenger boarding is counted via the onboard Automatic Passenger Counter (APC) when a customer boards a Metrobus. In an example where a customer transfers between two Metrobuses to complete their travel two trips are

counted. Metrobus totals also include shuttles to accommodate rail station shutdowns and other track work.

Revenue Service (Hours)

The time when a vehicle is available to the public and there is an expectation of carrying passengers. These passengers either directly, pay fares, are subsidized by public policy, or provide payment through some contractual arrangement. Vehicles operated in fare-free service are considered in revenue service. Revenue service includes layover and recovery time and excludes deadhead,¹¹⁷ vehicle maintenance testing, school bus service and charter service.

Security Event

An occurrence of a bomb threat, bombing, arson, hijacking, sabotage, cyber security event, assault, robbery, rape, burglary, suicide, attempted suicide (not involving a transit vehicle), larceny, theft, vandalism, homicide, CBR (chemical/biological/radiological) or nuclear release or other event.

Service per Rider¹¹⁸

A performance metric that measures the ratio of vehicle revenue hours to unlinked passenger trips. Note that in this report, this ratio is scaled by a factor of 10,000 for readability. The metric is calculated as:

$$(Total\ Vehicle\ Revenue\ Hours \div Number\ of\ Unlinked\ Trips) \times 10,000.$$

Time Point

A time point is a bus stop where there are frequent boardings and alighting that has a scheduled time that the bus should arrive for each trip. The Metrobus schedule is built by calculating the running time between each time point. Adherence to schedule is measured as the bus leaves each time point except the last timepoint for each run. Time point is used in the definition of on-time performance for Metrobus.

Unlinked Passenger Trips (UPT)

The number of passengers who board public transportation vehicles. Passengers are counted each time they board vehicles no matter how many vehicles they use to travel from their origin to their destination.

Passenger trips are defined as follows:¹¹⁹

- Metrorail reports passenger trips. A passenger trip is counted when a customer enters through a faregate. In an example where a customer transfers between two trains to complete their travel two unlinked passenger trips are counted.
- Metrobus reports passenger boardings. A passenger boarding is counted via the onboard Automatic Passenger Counter (APC) when a customer boards a Metrobus. In an example where a customer transfers between two Metrobuses to complete their travel, two trips are counted. Metrobus totals also include shuttles to accommodate rail station shutdowns and other track work.

Vehicle Revenue Hours

Vehicle revenue hours are the amount of time the bus operates in revenue service. Vehicle revenue hours include layover and recovery time and exclude deadhead, operator training, vehicle maintenance testing, and school bus and charter services.

- ¹ NVTC. "Value of Northern Virginia Transit to the Commonwealth." June 2023. <https://novatransit.org/uploads/Projects/TransitValue/060123_NVTC%20Value%20of%20NoVa%20Transit_Full%20Technical%20Report.pdf>
- ² WMATA. Future Financial Planning. June 22, 2023. <<https://www.wmata.com/about/board/meetings/board-pdfs/upload/3A-Future-Financial-Planning-0621.pdf>>
- ³ WMATA. Future Financial Planning. June 22, 2023. <<https://www.wmata.com/about/board/meetings/board-pdfs/upload/3A-Future-Financial-Planning-0621.pdf>>
- ⁴ WMATA. Metro Financial Planning. September 28, 2023. <<https://www.wmata.com/about/board/meetings/board-pdfs/upload/3A-Metro-Financial-Planning-0925.pdf>>
- ⁵ WMATA. "FY 2019 Q4 Progress Report." <https://www.wmata.com/about/records/upload/FY2019-Q4-Management-Report_FINAL.pdf>
- ⁶ WMATA. "Metro Financial Planning Update." September 28, 2023. <<https://www.wmata.com/about/board/meetings/board-pdfs/upload/3A-Metro-Financial-Planning-0925.pdf>>
- ⁷ WMATA. Approved FY 2024 Budget. <<https://www.wmata.com/about/records/upload/FY2024-Approved-Budget-FINAL-20230723.pdf>>
- ⁸ NVTC Report on Virginia's 3% Cap on the Growth in Operating Assistance Payments to WMATA, November 2020. <https://www.novatransit.org/uploads/WMATAs/NVTC_3PctCap_FullReport_WEB.pdf>
- ⁹ Code of Virginia § 33.2-1526.1 (K). <<https://law.lis.virginia.gov/vacode/title33.2/chapter15/section33.2-1526.1>>
- ¹⁰ Jurisdictional WMATA operating and capital requirements include the following jurisdictional payment obligations to WMATA: jurisdictional operating subsidies, debt service requirements on WMATA issued jurisdictional debt, jurisdictional capital subsidies, and project planning..
- ¹¹ WMATA. "Metro Financial Planning: FY2025 Service, Fares, and Capital Planning Update." Finance and Capital Committee Meeting. October 26, 2023. <<https://www.wmata.com/about/board/meetings/board-pdfs/upload/3A-FY2025-Service-Fares-and-Capital-Planning-Update-vF.pdf>>
- ¹² ARLnow. "Rising costs, mortgage rates and office vacancies putting pressure on upcoming county budget." December 20, 2022. <<https://www.arlnow.com/2022/12/20/rising-costs-mortgage-rates-and-office-vacancies-putting-pressure-on-upcoming-county-budget/>>
- ¹³ NVTC. "Value of Northern Virginia Transit to the Commonwealth." June 2023. <https://novatransit.org/uploads/Projects/TransitValue/060123_NVTC%20Value%20of%20NoVa%20Transit_Full%20Technical%20Report.pdf>
- ¹⁴ The Washington Post. "Federal workers were the backbone of Metro. Their absence is taking a toll on the system." September 25, 2021. <<https://www.washingtonpost.com/transportation/2021/09/25/metro-pandemic-federal-worker-commuters/>>
- ¹⁵ WMATA. "Metro Financial Planning." Finance and Capital Committee Meeting. September 28, 2023. <<https://www.wmata.com/about/board/meetings/board-pdfs/upload/3A-Metro-Financial-Planning-0925.pdf>>
- ¹⁶ WMATA. "FY 2024 Budget." July 1, 2023. <<https://www.wmata.com/about/records/upload/FY2024-Approved-Budget-FINAL-20231006.pdf>>
- ¹⁷ "LaHood Report". December 5, 2017. <<https://novatransit.org/uploads/LinkedDocs/2017/LaHood%20Report%20Final.pdf>>
- ¹⁸ WMATA. "Agreement Between Washington Metropolitan Area Transit authority and Local Union 689 of the Amalgamated Transit Union AFL-CIO." July 1, 2020. <<https://www.wmata.com/about/records/upload/L689-CBA-2020-2024-2.pdf>>
- ¹⁹ "LaHood Report." December 5, 2017. <<https://novatransit.org/uploads/LinkedDocs/2017/LaHood%20Report%20Final.pdf>>
- ²⁰ Office of the Inspector General. "Audit of WMATA's Defined Benefit Pension Plans." July 28, 2022. <https://wmataoig.gov/wp-content/uploads/2022/07/Audit-of-WMATAs-Defined-Benefit-Pension-Plans-IG-Final_Redacted.pdf>
- ²¹ WMATA. "WMATA Compact." February 20, 1967. <https://www.wmata.com/about/board/upload/Compact_Annotated_2009_final.pdf>
- ²² Congress.gov. "Text - H.R.1463 - 104th Congress (1995-1996): National Capital Area Interest Arbitration Standards Act of 1995." April 19, 1995. <<http://www.congress.gov>>
- ²³ Virginia Legislative Information System. Virginia Acts of Assembly - 2018 Reconvened Session. Chapter 854. <<https://lis.virginia.gov/cgi-bin/legp604.exe?181+ful+CHAP0854+pdf#page=1&zoom=auto,-175,792.>>. Complete and current code is provided in Section 33.2-1526.1 of the Virginia Code <<https://law.lis.virginia.gov/vacode/title33.2/chapter15/section33.2-1526.1/>>
- ²⁴ NVTC Report on Virginia's 3% Cap on the Growth in Operating Assistance Payments to WMATA, November 2020. <https://www.novatransit.org/uploads/WMATAs/NVTC_3PctCap_FullReport_WEB.pdf>
- ²⁵ NVTC. NVTC WMATA Committee Presentation, September 21, 2023. <<https://novatransit.org/uploads/meetings/2023/WMATASept2023presentation.pdf>>
- ²⁶ NVTC. NVTC WMATA Committee Presentation, September 21, 2023. <<https://novatransit.org/uploads/meetings/2023/WMATASept2023presentation.pdf>>
- ²⁷ WMATA. "FY 2015 Budget." July 1, 2014. <https://www.wmata.com/about/records/public_docs/upload/FY2015-Approved-Budget-Book.pdf>; WMATA. "FY 2022 Budget." July 1, 2021. <https://www.wmata.com/about/records/upload/FY2022-Approved_Budget_Final_071421.pdf>

- ²⁸ WMATA. "FY 2024 Budget." July 1, 2023. <<https://www.wmata.com/about/records/upload/FY2024-Approved-Budget-FINAL-20231006.pdf>>
- ²⁹ WMATA. "FY 2019 Budget." July 1, 2018. https://www.wmata.com/about/records/public_docs/upload/FY2019-Approved-Budget.pdf; WMATA. "FY 2022 Budget." July 1, 2021. <https://www.wmata.com/about/records/upload/FY2022-Approved-Budget_Final_071421.pdf>
- ³⁰ WMATA. "FY 2024 Budget." July 1, 2023. <<https://www.wmata.com/about/records/upload/FY2024-Approved-Budget-FINAL-20231006.pdf>>
- ³¹ WMATA. "History of Fare Increases." July 7, 2017. <https://www.wmata.com/about/records/public_docs/upload/History-of-Fare-Increases-FY2018.pdf>
- ³² WMATA. "Fare Policy Principles." October 28, 2021. <<https://www.wmata.com/about/board/meetings/board-pdfs/upload/10C-Fare-Policy-Principles-FINALIZED.pdf>>
- ³³ WMATA. "Board Committee Assignments." September 14, 2023. <<https://www.wmata.com/about/board/meetings/board-pdfs/upload/3-2023-09-14-Committee-Assignments-Draft.pdf>>
- ³⁴ WMATA. "WMATA Compact." February 20, 1967. <https://www.wmata.com/about/board/upload/Compact_Annotated_2009_final.pdf>
- ³⁵ WMATA. "Keeping Metro Safe, Reliable & Affordable." Jan 1, 2019. <<https://www.wmata.com/initiatives/strategic-plans/upload/KMSRA-Strategic-Plan-Jan-2019.pdf>>
- ³⁶ WMATA. "Keeping Metro Safe, Reliable and Affordable." Finance and Capital Committee Meeting. September 14, 2017. <<https://www.wmata.com/about/board/meetings/board-pdfs/upload/3B-KMSRA-Final-09-13-TO-POST.pdf>>
- ³⁷ WMATA. "Future Financial Planning FY2025-2035." Finance and Capital Committee Meeting. June 22, 2023. <<https://www.wmata.com/about/board/meetings/board-pdfs/upload/3A-Future-Financial-Planning-0621.pdf>>
- ³⁸ SEPTA. "Transformation Office." <<https://planning.septa.org/transformation-office/>>
- ³⁹ SEPTA. "Transformation Office Annual Progress Report." March 28, 2023. <https://planning.septa.org/wp-content/uploads/2023/03/TransformationOfficeAnnualReport_final.pdf>
- ⁴⁰ WMATA. "Metro Financial Planning." September 28, 2021. <<https://www.wmata.com/about/board/meetings/board-pdfs/upload/3A-Metro-Financial-Planning-0925.pdf>>
- ⁴¹ WMATA. "FY 2024 Budget." July 1, 2023. <<https://www.wmata.com/about/records/upload/FY2024-Approved-Budget-FINAL-20231006.pdf>>
- ⁴² WMATA. "10-Year Strategic Plan for Joint Development." April 7, 2022. <<https://www.wmata.com/business/real-estate/upload/WMATA-10-Year-Strategic-Plan-for-Joint-Development.pdf>>
- ⁴³ WMATA. "Sale and Annual Lease Revenues from Existing Joint Development." Analysis of Metro financial reports for calendar year 2021
- ⁴⁴ WMATA. "Metro begins phasing out older SmarTrip cards as part of upgrades to faregates and fare payment technology." April 9, 2021. <<https://www.wmata.com/about/news/Metro-begins-phasing-out-older-SmarTrip-cards.cfm>>
- ⁴⁵ WMATA. "Systemwide Average by Month January - June 2023" - <https://www.wmata.com/initiatives/ridership-portal/>
- ⁴⁶ WMATA. "Metro's new, higher faregates reducing fare evasion by more than 70 percent." August 22, 2023. <<https://www.wmata.com/about/news/New-faregates-reducing-fare-evasion.cfm>>
- ⁴⁷ WMATA. "Ridership Data Portal." <<https://www.wmata.com/initiatives/ridership-portal/>>
- ⁴⁸ Office of the Inspector General. "Special Project Report: Comparison of Performance of the Washington Metropolitan Area Transit Authority (WMATA) to the Chicago Transit Authority (CTA)." May 13, 2021. <<https://wmataoig.gov/wp-content/uploads/2021/06/Special-Project-Report-CTA-WMATA-Comparison-IG-Final.pdf>>
- ⁴⁹ "LaHood Report." December 5, 2017. <<https://novatransit.org/uploads/LinkedDocs/2017/LaHood%20Report%20Final.pdf>>
- ⁵⁰ WMATA. "GM/CEO's FY2024 Proposed Operating and Capital Budget." December 8, 2022. <<https://www.wmata.com/about/board/meetings/board-pdfs/upload/3A-GM-CEO-FY24-Proposed-Budget-vF.pdf#page=14>>
- ⁵¹ WMATA. "Better Bus Initiative." <<https://wmata.com/initiatives/plans/Better-Bus/>>
- ⁵² WMATA. "MTPD Public Safety Update." October 12, 2023. <<https://www.wmata.com/about/board/meetings/board-pdfs/upload/3B-MTPD-Public-Safety-Update.pdf>>
- ⁵³ WMATA. "DC Mayor Muriel Bowser and Metro General Manager and CEO Randy Clarke announce new partnership between Metro Transit Police and DC Metropolitan Police to enhance public safety on Metro." February 28, 2022. <<https://www.wmata.com/about/news/MTPD-MPD-partnership.cfm>>
- ⁵⁴ WMATA. "MTPD Public Safety Update." October 12, 2023. <<https://www.wmata.com/about/board/meetings/board-pdfs/upload/3B-MTPD-Public-Safety-Update.pdf>>
- ⁵⁵ WMATA. "Metro Performance Report: Silver Line Spotlight." Safety and Operations Committee Meeting. May 11, 2023. <<https://www.wmata.com/about/board/meetings/board-pdfs/upload/3B-Metro-Performance-Report-Silver-Line-Spotlight-v2.pdf>>
- ⁵⁶ WMATA. "Metro Performance Report: Silver Line Spotlight." Safety and Operations Committee Meeting. May 11, 2023. <<https://www.wmata.com/about/board/meetings/board-pdfs/upload/3B-Metro-Performance-Report-Silver-Line-Spotlight-v2.pdf>>
- ⁵⁷ WMATA. "MTPD Public Safety Update." Safety and Operations Committee Meeting. October 12, 2023. <<https://www.wmata.com/about/board/meetings/board-pdfs/upload/3B-MTPD-Public-Safety-Update.pdf>>
- ⁵⁸ WMATA. "MTPD Public Safety Update." Safety and Operations Committee Meeting. October 12, 2023. <<https://www.wmata.com/about/board/meetings/board-pdfs/upload/3B-MTPD-Public-Safety-Update.pdf>>

⁵⁹ WMATA. "Capital Program Documents." <<https://wmata.com/initiatives/capital-improvement-program/Capital-Program-Documents.cfm>>

⁶⁰ WMATA. "Ridership Data Portal." <<https://wmata.com/initiatives/ridership-portal/>>

⁶¹ WMATA. "MetroPulse." <<https://metropulse.wmata.com/>>

⁶² WMATA. "Public Records." <<https://www.wmata.com/about/records/public-records.cfm>>

⁶³ WMATA. "Annual Line Performance Report, FY 2022." <<https://www.wmata.com/initiatives/plans/upload/ALPR-FY2022.pdf>>; WMATA. "Bus Service Guidelines – Metrobus." December 2020. <<https://www.wmata.com/initiatives/plans/upload/Final-MetroBus-Service-Guidelines-2020-12.pdf>>

⁶⁴ WMATA. "Open Data Hub." <<https://www.wmata.com/initiatives/open-data-hub/>>

⁶⁵ NY MTA. "Transparency." <<https://new.mta.info/transparency>>

⁶⁶ WMATA. "Capital Program Documents." <<https://wmata.com/initiatives/capital-improvement-program/Capital-Program-Documents.cfm>>

⁶⁷ WMATA. "VA Dedicated funding grant agreement." <<https://wmata.com/initiatives/capital-improvement-program/upload/VA-Dedicated-Funding-Agreement.pdf>>

⁶⁸ WMATA. "Metro Financial Planning: FY 2025 Service, Fares, and Capital Planning Update." October 26, 2023. <<https://wmata.com/about/board/meetings/board-pdfs/upload/3A-FY2025-Service-Fares-and-Capital-Planning-Update-vF.pdf>>

⁶⁹ WMATA. "Capital Improvement Program Progress Report – FY 2023 4th Quarter." September 2023. <<https://www.wmata.com/initiatives/capital-improvement-program/Capital-Program-Documents.cfm>>

⁷⁰ WMATA. "FY 2024 Budget." July 1, 2023. <<https://www.wmata.com/about/records/upload/FY2024-Approved-Budget-FINAL-20230723.pdf>>

⁷¹ WMATA. "Second Lien Dedicated Revenue Bonds Series 2023A." Finance and Capital Committee. July 13, 2023. <<https://www.wmata.com/about/board/meetings/board-pdfs/upload/3A-Second-Lien-Dedicated-Revenue-Bonds-Series-2023A.pdf>>

⁷² WMATA. "Metro Financial Planning Update." September 28, 2023. <<https://www.wmata.com/about/board/meetings/board-pdfs/upload/3A-Metro-Financial-Planning-0925.pdf>>

⁷³ WMATA. "Capital Improvement Program Progress Report – FY 2023 4th Quarter." September 2023. <<https://www.wmata.com/initiatives/capital-improvement-program/Capital-Program-Documents.cfm>>

⁷⁴ WMATA. "Capital Improvement Program Progress Report – FY 2023 4th Quarter." September 2023. <<https://www.wmata.com/initiatives/capital-improvement-program/Capital-Program-Documents.cfm>>

⁷⁵ Fatality [e.g. "A death or suicide confirmed within 30 days of a reported event. Does not include deaths in or on transit property that are a result of illness or other natural causes.]. Federal Transit Administration. "National Transit Database (NTD) Glossary." September 28, 2023. <<https://www.transit.dot.gov/ntd/national-transit-database-ntd-glossary#F>>

⁷⁶ Injury [e.g. "Any damage or harm to persons as a result of an event that requires immediate medical attention away from the scene."]. Federal Transit Administration. "National Transit Database (NTD) Glossary." September 28, 2023. <<https://www.transit.dot.gov/ntd/national-transit-database-ntd-glossary#I>>

⁷⁷ Security event [e.g. "An occurrence of a bomb threat, bombing, arson, hijacking, sabotage, cyber security event, assault, robbery, rape, burglary, suicide, attempted suicide (not involving a transit vehicle), larceny, theft, vandalism, homicide, CBR (chemical/biological/radiological) or nuclear release, or other event."]. Federal Transit Administration. "National Transit Database (NTD) Glossary." September 28, 2023. <<https://www.transit.dot.gov/ntd/national-transit-database-ntd-glossary#S>>

⁷⁸ Federal Transit Administration. "Safety & Security Time Series Data: Read Me." <www.transit.dot.gov/ntd/data-product/safety-security-time-series-data>

⁷⁹ NTD reported fatalities include suicides.

⁸⁰ S&S-40 and S&S-50 are the NTD Report Forms <<https://www.transit.dot.gov/ntd/data-product/safety-security-time-series-data>> Reference "S&S-40, Major Event Report" and "S&S-50, Non-Major Event Report" in the Appendix

⁸¹ NTD reported fatalities include suicides.

⁸² S&S-40 and S&S-50 are the NTD Report Forms <<https://www.transit.dot.gov/ntd/data-product/safety-security-time-series-data>> Reference "S&S-40, Major Event Report" and "S&S-50, Non-Major Event Report" in the Appendix

⁸³ WMATA. "FY 2023 Metro Performance Report." September 26, 2023. <https://www.wmata.com/about/records/upload/MetroPerformanceReport_FY23Q4_1Report_20230922.pdf>

⁸⁴ WMATA. "FY 2023 Metro Performance Report Appendix" September 28, 2023. <https://www.wmata.com/about/records/upload/MetroPerformanceReport_FY23Q4_1Report_20230922.pdf>

⁸⁵ Ibid.

⁸⁶ Due to data collection errors, 9/6/2021, 3/3/2022, and 5/30/2022 were excluded from the FY 2022 Metro Performance report for Metrobus on-time performance.

⁸⁷ WMATA. "FY 2023 Metro Performance Report." September 26, 2023. <https://www.wmata.com/about/records/upload/MetroPerformanceReport_FY23Q4_1Report_20230922.pdf>

⁸⁸ Ibid.

⁸⁹ Ibid.

⁹⁰ FY 2019-2022 Metrobus data includes services operated by contracted provider.

⁹¹ WMATA. "FY 2021 Revised Budget Public Hearing." <<https://wmata.com/about/board/meetings/board-pdfs/upload/3A-FY2021-Revised-Budget-Public-Hearing-FINALIZED.pdf>>

⁹² WMATA NTD data from form TS2.1-Service Data and Operating Expenses time Series by Mode <<https://www.transit.dot.gov/ntd/data-product/ts21-service-data-and-operating-expenses-time-series-mode-2>>

⁹³ WMATA NTD data from form TS2.1-Service Data and Operating Expenses time Series by Mode <<https://www.transit.dot.gov/ntd/data-product/ts21-service-data-and-operating-expenses-time-series-mode-2>>

⁹⁴ WMATA NTD data from form TS2.1-Service Data and Operating Expenses time Series by Mode <<https://www.transit.dot.gov/ntd/data-product/ts21-service-data-and-operating-expenses-time-series-mode-2>>

⁹⁵ American Public Transportation Association (APTA). "2021 Public Transportation Fact Book. 72nd Edition" p. 26. May 2021. <<https://www.apta.com/wp-content/uploads/APTA-2021-Fact-Book.pdf>>

⁹⁶ WMATA NTD data from form TS2.1-Service Data and Operating Expenses time Series by Mode <<https://www.transit.dot.gov/ntd/data-product/ts21-service-data-and-operating-expenses-time-series-mode-2>>

⁹⁷ WMATA NTD data from form TS2.1-Service Data and Operating Expenses time Series by Mode <<https://www.transit.dot.gov/ntd/data-product/ts21-service-data-and-operating-expenses-time-series-mode-2>>

⁹⁸ FY 2019 Metrobus data includes services operated by contracted provider.

⁹⁹ WMATA NTD data from form TS2.1-Service Data and Operating Expenses time Series by Mode <<https://www.transit.dot.gov/ntd/data-product/ts21-service-data-and-operating-expenses-time-series-mode-2>>

¹⁰⁰ Ibid.

¹⁰¹ FTA. "National Transit Database (NTD) Glossary." May 20, 2020

¹⁰² WMATA. "Metro Performance Report." Fiscal Year 2020.

<https://www.wmata.com/about/records/scorecard/upload/MetroPerformanceReport_Q3FY2020.pdf>

¹⁰³ Federal Transit Administration (FTA). "2019 Metrics." <<https://www.transit.dot.gov/ntd/data-product/2019-metrics>>

¹⁰⁴ Instead of farebox recovery ratio, the Federal Transit Administration (FTA) uses the term 'recovery ratio' per the FTA 2019 Metrics: www.transit.dot.gov/ntd/data-product/2019-metrics. This definition is adapted from the FTA Metrics list.

¹⁰⁵ WMATA. "Metro Performance Report." Fiscal Year 2020.

¹⁰⁶ The NTD uses 'labor' as the metric for labor cost. < <https://www.transit.dot.gov/ntd/national-transit-database-ntd-glossary#S>>

¹⁰⁷ Adapted from: National Transit Database. "NTD Safety & Security Reporting Manual." p. 16. 2020.

<<https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/ntd/146986/2020-ntd-safety-and-security-policy-manual.pdf> >

¹⁰⁸ WMATA. "Metro Performance Report." Fiscal Year 2020.

¹⁰⁹ Ibid

¹¹⁰ Adapted from: FTA. "National Transit Database (NTD) Glossary." November 1, 2023.

¹¹¹ Adapted from: National Transit Database. "NTD Safety & Security Reporting Manual." p. 55. 2020.

<<https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/ntd/146986/2020-ntd-safety-and-security-policy-manual.pdf> >

¹¹² Categories under Operating Expenses are based on NTD Definition. Federal Transit Administration. "The 2020 Reporting Policy Manual for the National Transit Database." October 2020. <https://www.transit.dot.gov/sites/fta.dot.gov/files/2020-10/2020%20NTD%20Reporting%20Policy%20Manual_1.pdf>

¹¹³ WMATA. Washington Metropolitan Area Transit Authority. "Metro Performance Report." p. 48. Fiscal Year 2019.

<https://www.wmata.com/about/records/scorecard/upload/MetroPerformanceReport_Q3FY2020.pdf>

¹¹⁴ Ibid.

¹¹⁵ Federal Transit Administration. "The 2020 Reporting Policy Manual for the National Transit Database." p. 90. October 2020.

<https://www.transit.dot.gov/sites/fta.dot.gov/files/2020-10/2020%20NTD%20Reporting%20Policy%20Manual_1.pdf>

¹¹⁶ Federal Transit Administration. "The 2020 Reporting Policy Manual for the National Transit Database." p. 129. October 2020.

<https://www.transit.dot.gov/sites/fta.dot.gov/files/2020-10/2020%20NTD%20Reporting%20Policy%20Manual_1.pdf>

¹¹⁷ Federal Transit Administration. "The 2020 Reporting Policy Manual for the National Transit Database." p. 114. October 2020.

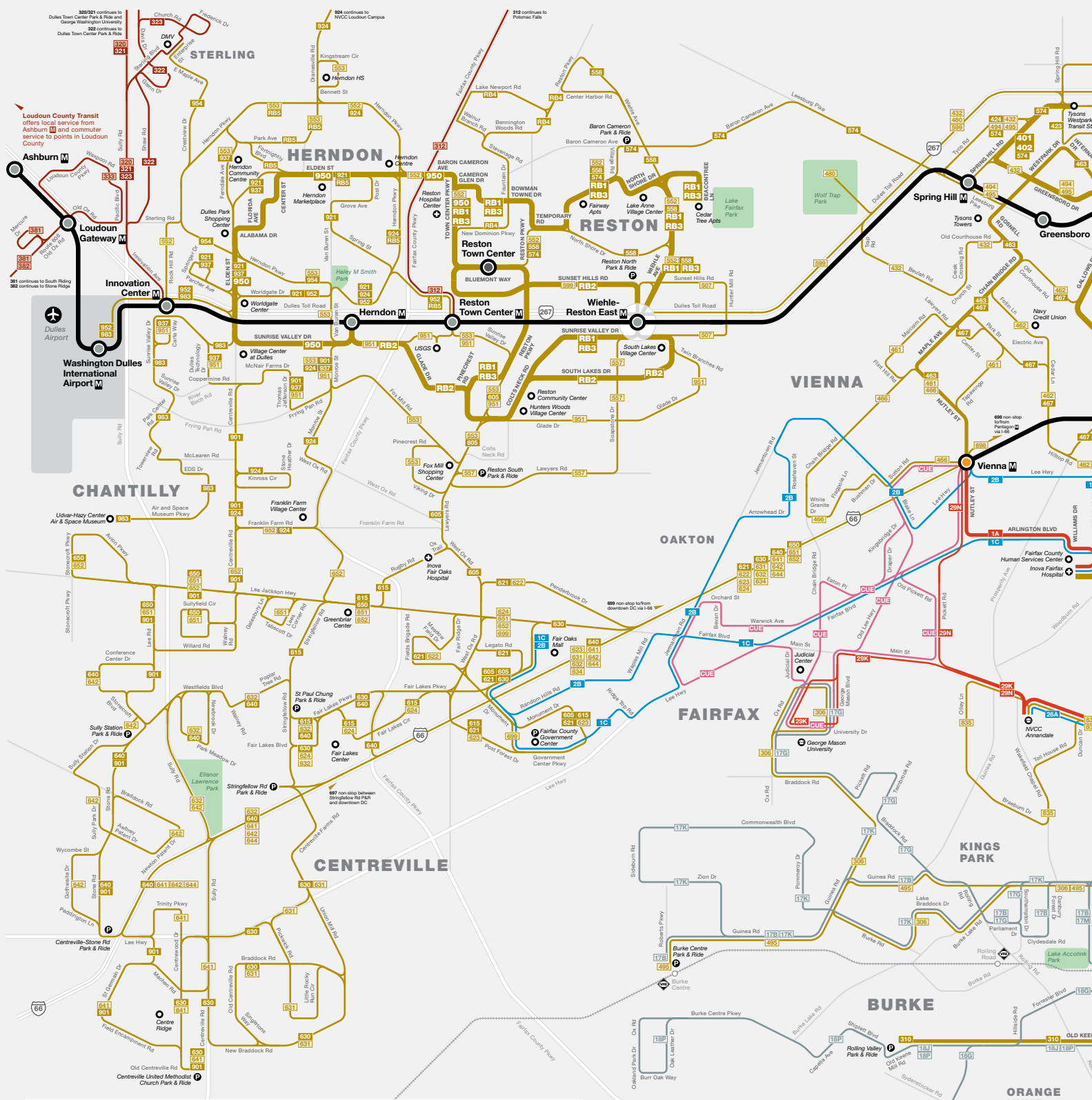
<https://www.transit.dot.gov/sites/fta.dot.gov/files/2020-10/2020%20NTD%20Reporting%20Policy%20Manual_1.pdf>

¹¹⁸ Department of Rail and Public Transportation (DRPT). "Review of WMATA Operating, Governance and Financial Conditions."

March 2018. <www.drpt.virginia.gov/media/2320/full-report.pdf>

¹¹⁹ WMATA. Washington Metropolitan Area Transit Authority. "Metro Performance Report." p. 44. Fiscal Year 2019.

<https://www.wmata.com/about/records/scorecard/upload/MetroPerformanceReport_Q3FY2020.pdf>



MAP LEGEND

Rail Lines

- Metro Rail Station and Line M
- Commuter Railroad and Station

Map Symbols

- Transit Hub
- Park & Ride Lot
- Airport
- Hospital
- College/University
- Other Point of Interest

Metrobus Frequent Service

- 28A
- 12
- 1A
- 20

On most routes, less frequent service also operates during early morning and late night times.

Metrobus Routes

- 16A Metrobus Frequent Route Branch
Less frequent service. Times vary by route.
- 29K Metrobus Local Route
Less frequent service, with some evening and weekend service available.
- 18P Metrobus Commuter Route
Weekday peak-hour service linking residential areas to Metro Rail stations and employment centers.
- 18Y MetroExtra Route
Limited stops for a faster ride. Days, times and service levels vary by route.

Bus Routes Operated by City/County Systems

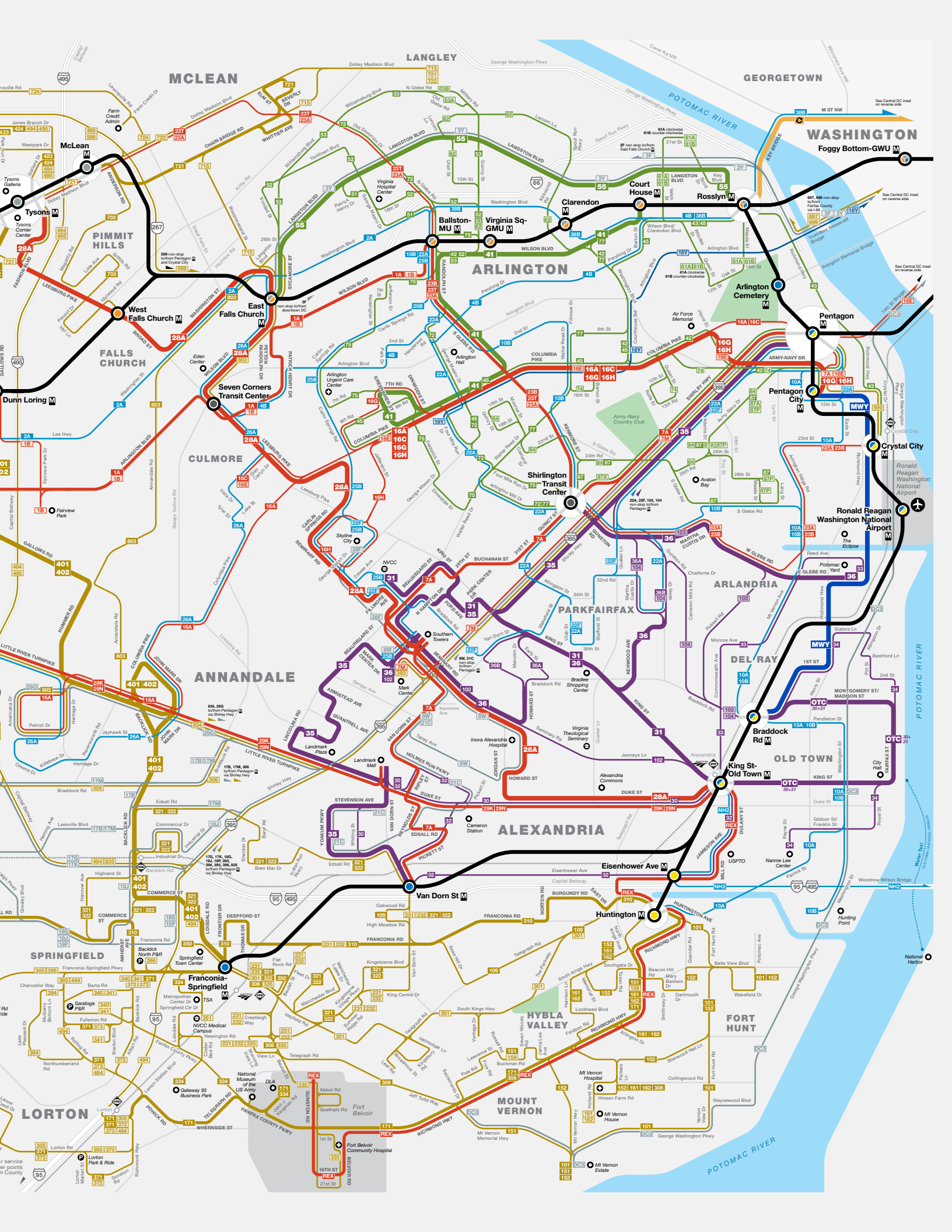
Thicker line indicates frequent service.

- 55-45 ART - Arlington Transit
- 35-30 DASH - Alexandria Transit Co.
- 401-630 Fairfax Connector
- CUE DC Circulator
- B12 City of Fairfax CUE Bus
- Loudoun County Transit

On all route types, a lowlighted badge indicates a route segment with limited or peak-only service hours.

September 2022
Consult other Metrobus System Maps for service in Montgomery County, MD, Prince George's County, MD and Washington, DC.
This map provides an overview of bus and rail services. For detailed information on each route, please refer to individual schedules.
wmata.com 202.637.7000

PRTC OmniRide offers commuter service from Dale City, Dumfries and other areas in Prince William County, VA.



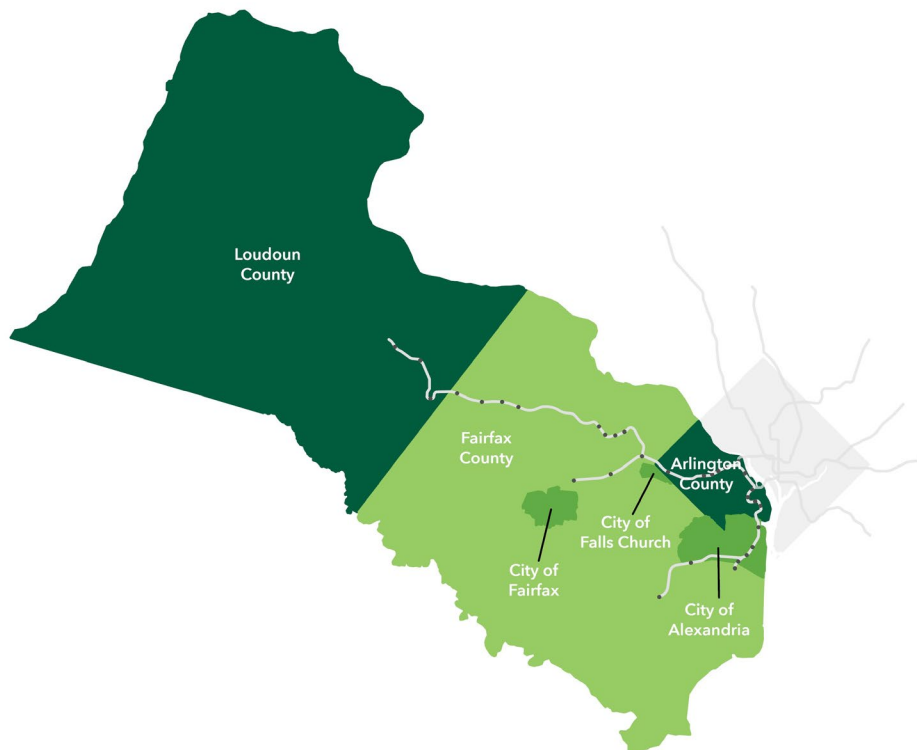
About NVTC

The Northern Virginia Transportation Commission (NVTC) was established to manage the Northern Virginia Transportation District and is charged with the funding and stewardship of the Washington Metropolitan Area Transit Authority (WMATA) on behalf of the jurisdictions of Arlington County, City of Alexandria, City of Falls Church, Fairfax County, City of Fairfax and Loudoun County. Founded in 1964, in part to represent the interests of the Commonwealth during the creation of Metrorail, NVTC continues to serve as Virginia’s voice on the WMATA Board of Directors through its appointments to the panel. The WMATA Board determines the authority’s policy and provides oversight for funding, operations and the expansion of transit facilities.

NVTC also manages more than \$200 million in state assistance to WMATA on behalf of its jurisdictions. NVTC ensures that all its jurisdictions’ voices are represented on the WMATA Board, coordinates regional transit efforts that directly affect systems serving Northern Virginia and engages in regional transportation planning, data analysis and reporting, which provides direct benefits to WMATA and the related Northern Virginia transit network.

NVTC also administers the Commuter Choice Program, which invests toll revenue into multi-modal and transit projects along the I-66 Inside the Beltway and I-395/95 corridors, and co-owns the Virginia Railway Express (VRE), which provides commuter rail service connecting Northern Virginia to the District of Columbia.

The Northern Virginia Transportation District





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Submitted to the
Governor and
General Assembly
December 2023