STATE OF PUBLIC TRANSPORTATION 2023 REPORT

An annual review of public transportation in the National Capital Region

August 2025

National Capital Region
Transportation Planning Board

STATE OF PUBLIC TRANSPORTATION | 2023 REPORT
Prepared for the TPB Regional Public Transportation Subcommittee
August 2025

ABOUT THE TPB
The National Capital Region Transportation Planning Board (TPB) is the federally designated metropolitan planning organization (MPO) for metropolitan Washington. It is responsible for developing and carrying out a continuing, cooperative, and comprehensive transportation planning process in the metropolitan area. Members of the TPB include representatives of the transportation agencies of the states of Maryland and Virginia and the District of Columbia, 24 local governments, the Washington Metropolitan Area Transit Authority, the Maryland and Virginia General Assemblies, and nonvoting members from the Metropolitan Washington Airports Authority and federal agencies. The TPB is staffed by the Department of Transportation Planning at the Metropolitan Washington Council of Governments (COG).

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TABLE OF CONTENTS

FIGURES AND TABLES

PART 1 - SUMMARY

This section provides a general summary of the state of public transportation operations within the National Capital Region in 2023.

A marketing display at the Metro Center Metrorail station for WMATA's new low-income fare program, Metro LIFT. (Pierre Gaunaurd/TPB)

PURPOSE

The purpose of this report is to provide a concise overview of the state of regional public transportation in the National Capital Region (NCR) in calendar year (CY) 2023, as well as analysis of the fiscal year (FY) 2022 NCR ridership and financial data published by the Federal Transit Administration (FTA) in October 2023. The report first provides an overview of key performance and operating characteristics, then summarizes recent transit sustainability and resilience efforts by local agencies, profiles regional transit providers, and, finally, summarizes operations and planning activities that took place in public transportation across the NCR, including at the National Capital Region Transportation Planning Board (TPB).

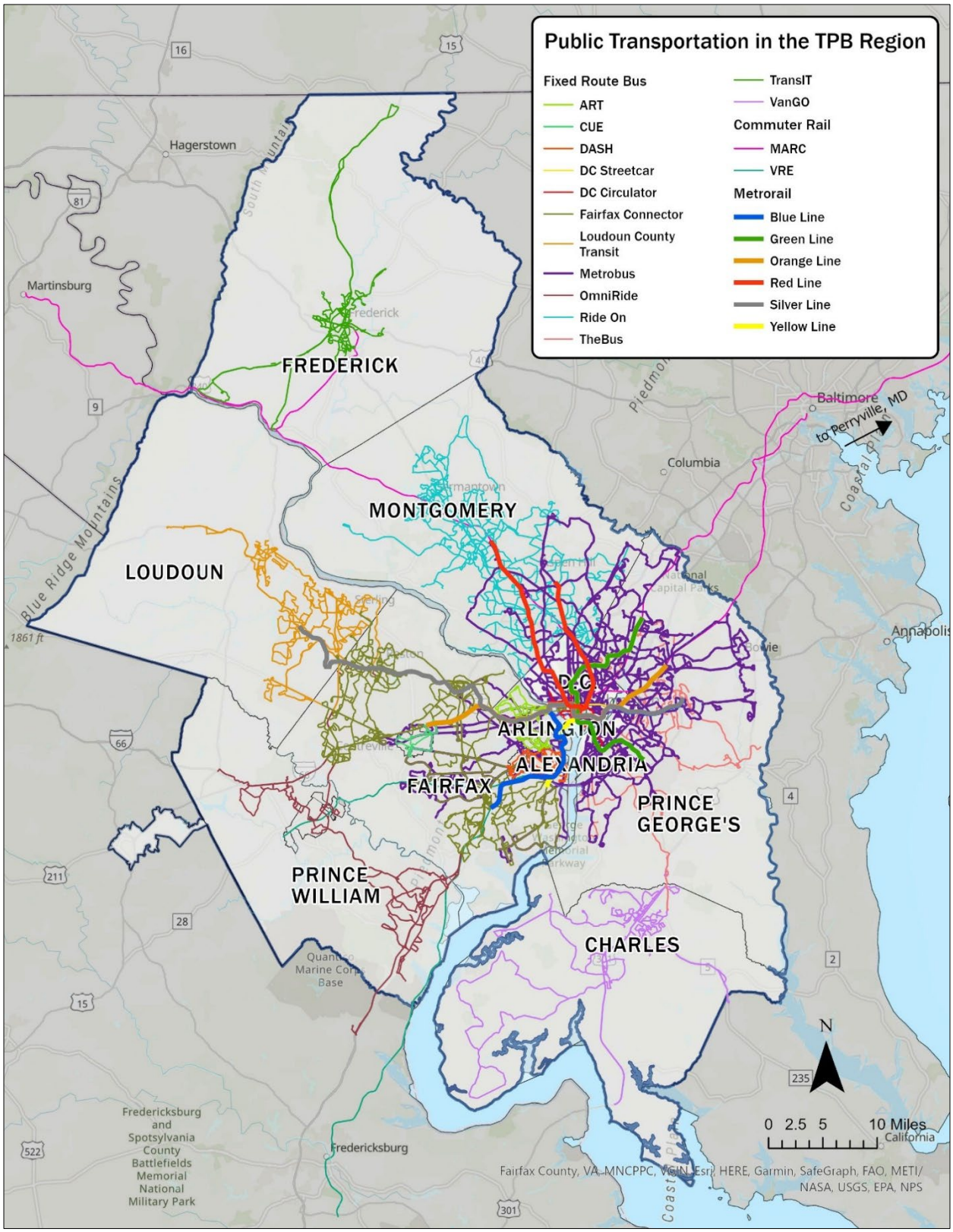
SUMMARY

Public transportation is a vital component to improving livability, environmental and economic quality of life for the region. Benefits include providing access to jobs, goods, and services for millions of residents, allowing more vibrant and meaningful social interaction during daily travel, serving as an alternative to single-occupancy vehicles, reducing congestion, and offsetting greenhouse gas emissions. Within the TPB region, riders continued to return to public transportation after the blanket disruption caused by the COVID-19 pandemic. As the habits and routines of customers continued to change, many agencies adjusted their services to focus resources strategically and address shifts in demand. An example is the renewed focus on improving on-time performance and service frequency as more people returned to the office on weekdays and used the system during off-peak times.

In 2023, approximately 9 percent of commuters used public transportation within the Washington-Arlington-Alexandria Metropolitan Statistical Area (which includes areas outside of the TPB region), a jump from 6.6 percent the prior year.[1] Of those using public transportation, approximately 36 percent of commuters rode bus transit to get to work, whereas 58 percent took Metrorail, and the balance used other rail, streetcar, or ferry services according to Census Bureau estimates.[2] However, FY 2022 data reported in the National Transit Database (NTD) showed that 58 percent of unlinked passenger trips in the NCR are by local bus and Metrobus, making that the primary form of public transportation, regardless of trip purpose.[3] In total, the NTD reported that in FY 2022 there were over 191 million unlinked passenger trips on public transportation across the region, a 78 million trip increase from FY 2021, but still approximately 41 percent less than in FY 2020.[4]

Four primary modes of public transportation operate in the region: rail, bus, microtransit, and paratransit. At the end of calendar year (CY) 2023, there were 14 agencies providing public transportation that were based in the NCR and running service independent of another operator. Some like the District Department of Transportation (DDOT), Loudoun County Transit (LCT), the Maryland Transit Administration (MTA), OmniRide, and the Washington Metropolitan Area Transit Authority (WMATA) operated multiple modes of service. In total, these 14 agencies were responsible for 12 local and regional bus, 4 microtransit, 3 commuter bus, and 2 commuter rail services, in addition to multiple paratransit services, and heavy rail and streetcar systems. Figure 1 features the fixed route service lines of the NCR's bus, heavy rail, and commuter rail operators displayed over a map of the region. The following provides more information on each respective mode of public transportation in the NCR's transit network.

Figure 1: Major Public Transportation Providers in the TPB Region



Rail

Rail offers high-capacity, high-quality transit along major corridors. The NCR's largest public transportation provider, WMATA, operates the Metrorail heavy rail service, which is historically the backbone of the region's transit system and is still recovering from significant decreases in ridership due to pandemic-related changes in travel behavior. In May 2023, the system's 98th station, Potomac Yard, opened in Alexandria, VA. This new stop is an infill station along the Blue and Yellow lines, adding access to passengers in an increasingly vibrant area and to well-established nearby communities. The region's rail network will expand further when the Purple Line light rail in Maryland is completed (expected 2027).

There are also two commuter rail services extending access to the region's core. MTA operates the Maryland Area Rail Commuter (MARC) rail service in Maryland and in Virginia, the Virginia Railway Express (VRE) is a service of the Potomac and Rappahannock Transportation Commission (PRTC) and the Northern Virginia Transportation Commission (NVTC). Although both providers operate almost entirely within their respective states, each offers service in Washington, DC, meeting at Union Station. MTA and VRE both serve stations outside the NCR as well, offering convenient connections into the area from major population centers otherwise likely accessible for commuters only via a car.

In addition, there are two miles of streetcar service in Washington, DC, along one line that traverses the H street and Benning Road, NE corridors.

Bus

Bus transit (local and regional service) provides access across the NCR and carried 58 percent of all transit trips in FY 2022. This is a nine percent drop in mode share from FY 2021 due to an increase in Metrorail trips, not the result of less trips via bus. In fact, total unlinked passenger trips on fixed-route bus services rose approximately 50 percent year-over-year. Twelve agencies operate local bus transit, forming a regional network that continues to be the primary means of public transportation for most travelers, as well as connecting many passengers to Metrorail and commuter rail stations. The region's transportation network is supplemented by longer-distance commuter buses. Local and regional bus operators take advantage of bus rapid transit (BRT) and other bus priority strategies expanding within the region to improve service efficiency and frequency.

Microtransit

A modern form of demand response transit, microtransit (also known as On-Demand Transit or ODT) offers customers the opportunity to book a trip between flexible pick-up and drop-off points that are set based on the needs of multiple riders on a route. Typically, microtransit operates within designated service zones, utilizes small vehicles, and depends on customers using a mobile app to schedule and manage rides. What makes these services unique is the technological convenience of booking trips through an app, with ride options available within hours or minutes. This contrasts with how many Dial-A-Ride services have operated traditionally where customers typically need to schedule the trip at least 24 hours in advance via a phone reservation.

In CY 2023, the NCR featured four microtransit services: the District of Columbia's Neighborhood Connect, Montgomery County's Ride On Flex, Prince William County's OmniRide Connect, and Prince George's County's Link.

Paratransit

Paratransit supplements bus and rail fixed-route service by offering on-demand or shuttle services for customers with disabilities or qualifying individuals facing challenges accessing fixed-route service. MetroAccess is the largest paratransit operator and provides most service in DC and Maryland, while several Virginia jurisdictions operate their own local services. Paratransit providers must meet certain operating requirements under the Americans with Disabilities Act (ADA).

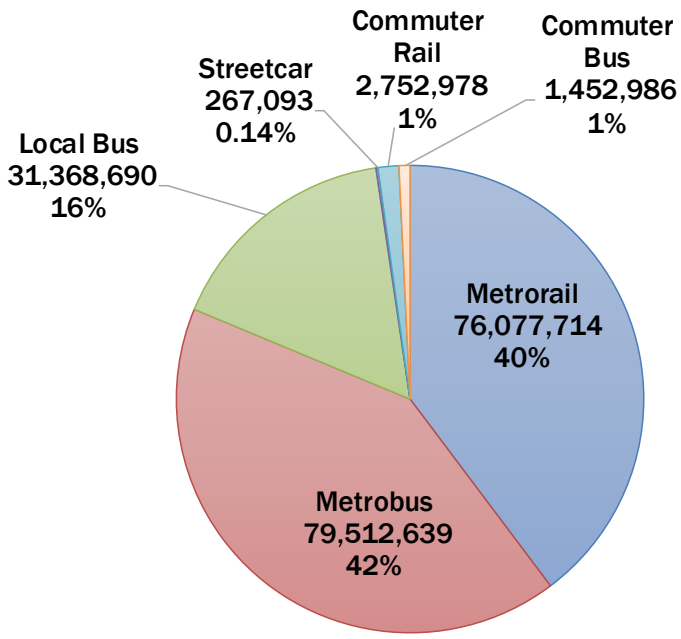
Other Modes and Providers of Public Transportation

Beyond the services operated by government agencies, other providers that operate within the NCR include: transit services based outside of the NCR area, private coach operators, taxicabs, university-transportation programs, private shuttle services, Transportation Network Companies (TNCs), and more.

TRANSIT MODE SHARE OF NETWORK RIDERSHIP

Figure 2 provides a breakdown of the annual transit ridership by mode in the NCR Capital Region. In FY 2022, 82 percent of all public transportation rides in the region were delivered by WMATA. Although the recent trend of a majority of WMATA trips being taken on Metrobus continued, there was a significant jump in Metrorail trips, more than double the amount in FY 2021. As more commuters returned to the office and off-peak and weekend customers used the train for trips into DC or elsewhere, Metrorail regained a large share of total ridership. Local bus operators and the DC Streetcar made up 16 percent of the annual public transportation trips in the region. Commuter rail and commuter bus accounted for only two percent of the annual public transit trips combined.

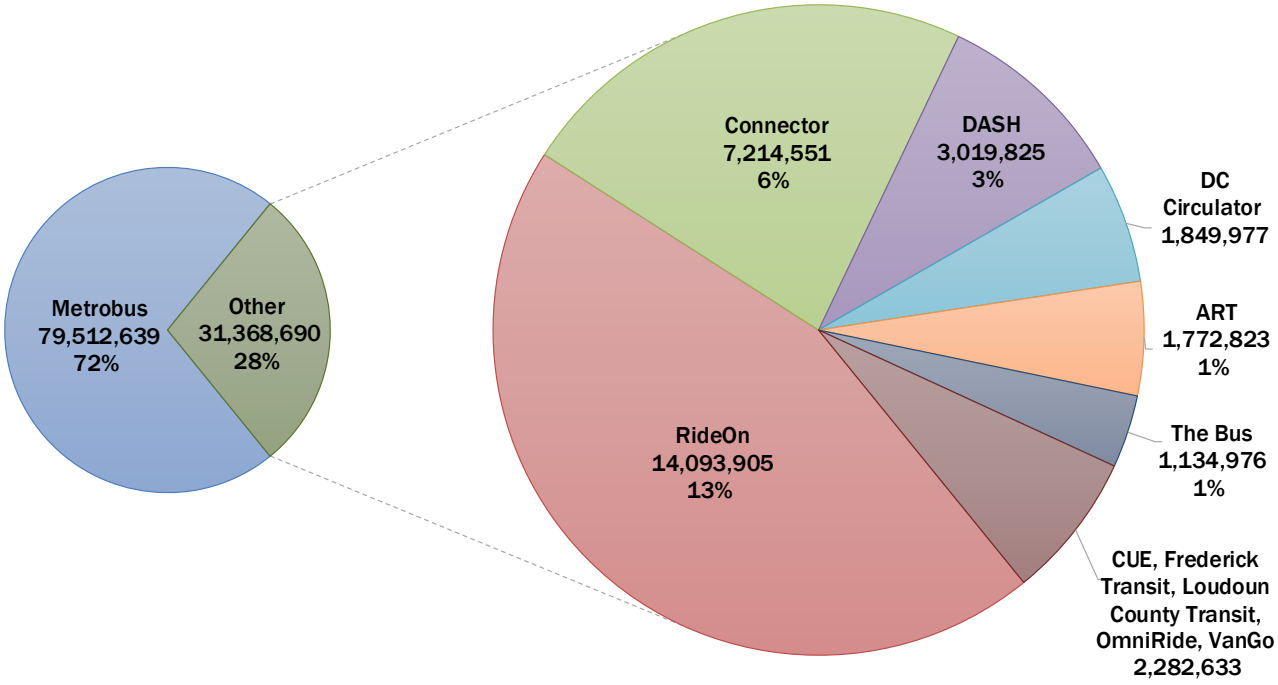
Figure 2: NCR Unlinked Annual Trips by Mode (Percentage), 2022 NTD



As shown in Figure 2, Metrobus recorded 79.5 million trips across the region in FY 2022 and served the most trips of any bus operator. All local (non-Metrobus) bus operators in aggregate provided over 31 million unlinked passenger trips combined in FY 2022, almost 10 million more trips than in FY 2021. Figure 3 illustrates the percentage share of ridership by operator for FY 2022. Montgomery County's Ride On ranked second in total bus trips in the region behind Metrobus, with over 14 million passenger trips in FY 2022. Fairfax Connector remained the third largest bus operator in the region with more than seven million trips. These top three agencies account for 92 percent of local bus trips

in the NCR, with the remaining ten local bus service operators providing just over ten million trips. Figure 1 shows the routes and geographies each of these operators serve in the region.

Figure 3: NCR Local Agency Bus Trips by Agency (Percentage), 2022 NTD



PART 2 – PUBLIC TRANSPORTATION AGENCY PROFILES

The following section contains individual profile sheets for each agency in the region that operates fixed-route bus, commuter bus, and commuter rail service. These profile sheets include an overview of the agency, recent accomplishments, system characteristics such as fleet and facility data, and provider data including operating costs, fare revenue, and ridership.

OmniRide commuter bus stopped at an intersection in Arlington, VA. (Pierre Gaunaurd/TPB)

Frederick County Transit Bus at the city's Transit Center and MARC station. (Pierre Gaunaurd/TPB)

Platform and mezzanine levels of the Farragut North Metrorail station. (Pierre Gaunaurd/TPB)

Key

In the System Snapshot section of each Operator Profile, the abbreviations in the Service category mean the following:

CB - Commuter Bus
CR - Commuter Rail
DR - Demand Response (Microtransit and/or Paratransit)
MB - Fixed-Route Local Bus
HR - Heavy Rail (Metrorail)
SR - Streetcar

Agency Profiles

DISTRICT OF COLUMBIA

District Department of Transportation (DDOT) - DC Circulator

https://dccirculator.com/

Overview

The DC Circulator, operated by DDOT, began operating in 2005 as a local transit service intended to complement the existing Metrobus and Metrorail operations serving the Washington, DC metropolitan area. In conjunction with regional partners, DDOT's goal is to promote economic activity by facilitating visitor access to neighborhoods in Washington, DC and to improve mobility for downtown workers during the workday.

Annual Review

Celebrated the service's eighteen year anniversary.

Commenced a process to replace Circulator's electric bus chargers with more reliable units, including innovative battery-powered chargers and newer models of the existing chargers.

System Snapshot

Service	MB
Fleet	73
Stops	149
Routes	6
Depots	3

Provider Data

Source: National Transit Database FY18-22

DC Circulator bus stopped to pick up passengers. (Pierre Gaunaurd/TPB)

District Department of Transportation (DDOT) - DC Streetcar

https://dcstreetcar.com/

System Snapshot

Service	SR
Fleet	6
Stops	15
Routes	1
Depots	1

Overview

The DC Streetcar is a surface streetcar network in Washington, DC It currently consists of a single 2.2-mile line running in mixed traffic along H Street and Benning Road in the city's Northeast quadrant. It operates as a free service with the goals of linking neighborhoods with a modern, convenient, and attractive transportation alternative, reducing parking demand, traffic congestion, and air pollution, plus encouraging economic development and affordable housing options along streetcar corridors.

Annual Review

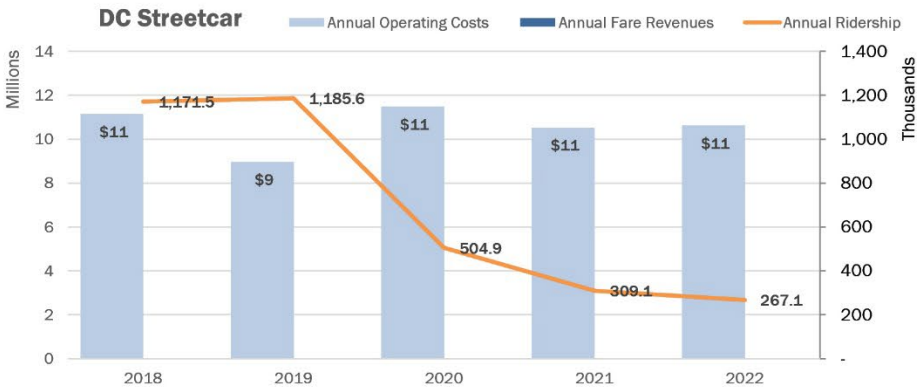
Celebrated the service's seven year anniversary.

Installed updated station maps across the system to improve wayfinding and customer communication.

Led the nation in ridership recovery in 2023 among light-rail services with an over 100 percent increase from 2022. Note: 2023 ridership data is not reflected in the table below.

DC Council delayed the availability of construction funding for the streetcar's proposed extension to the Benning Road Metrorail station by two years to FY2026.

Provider Data



Source: National Transit Database FY18-22

DC Streetcar moving along H Street, NE in Washington, DC. (DDOT/DC Streetcar)

Agency Profiles

MARYLAND

Charles County Transit Services - VanGO

https://www.charlescountymd.gov/services/transportation/vango-public-transportation

System Snapshot

Service	MB, DR
Fleet	43
Stops	325
Routes	13
Depots	1

Overview

Charles County operates VanGo, a public transit network of 13 fixed routes connecting urban and rural areas of the county. ADA service is available to those with disabilities preventing them from using fixed route service. Subscription service is also available to ADA eligible residents traveling to dialysis centers or senior centers on a regular basis. VanGO also operates a very limited paratransit service beyond the ¾ mile ADA service area for citizens age 60 and above who do not have transportation available.

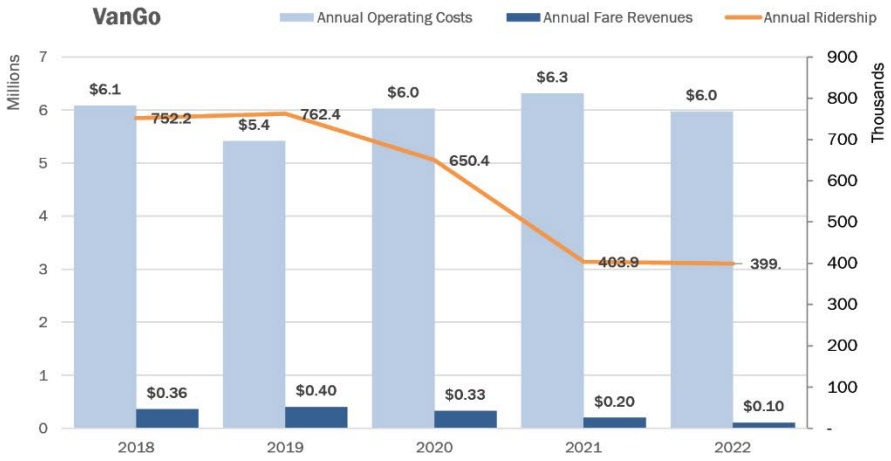
Recent Accomplishments

Began to see ridership levels return to pre COVID levels in FY23. Fixed route ridership is approximately 600,000 and paratransit is approximately 50,000 annually. Demand for paratransit services is growing faster than fixed route demand.

Raised driver starting pay significantly to address driver shortages.

Phased out DoubleMap and replaced with TripShot for public bus finder applications.

Provider Data



Source: National Transit Database FY18-22

VanGO buses parked at the agency's depot. (Pierre Gaunaurd/TPB)

Transit Services of Frederick County

https://www.frederickcountymd.gov/105/Transit-Services

Overview

Transit Services of Frederick County is an award-winning public transit organization, reducing auto emissions and traffic congestion, and improving the quality of life for residents of Frederick County. Connector buses operate in the City of Frederick and the urbanized areas of Frederick County. Six routes can deviate within ¾ mile of the route for passengers who are unable to board the bus at a regular stop. Shuttles serve our more rural communities. as well as commuters. and paratransit provides service countywide, supplemented by a Taxi Access Program (TAP). Finally, Transit provides commuter education/assistance, and implements TDM strategies.

Recent Accomplishments

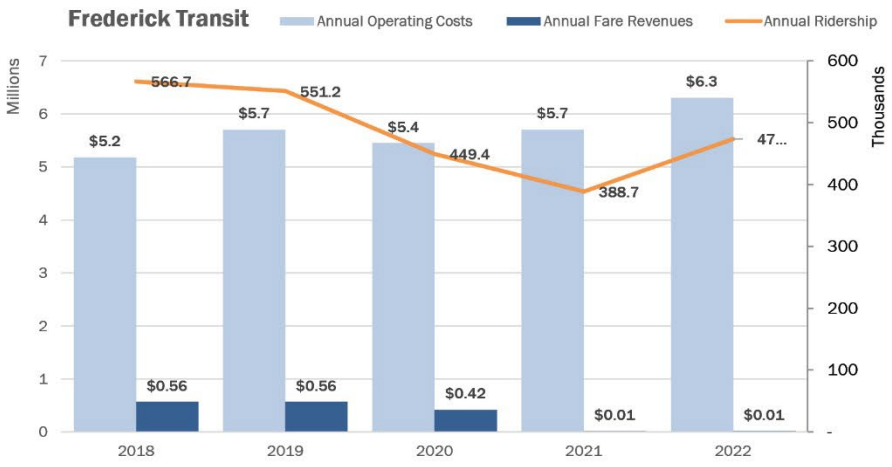
Continued to grow ridership, surpassing levels from the beginning of the pandemic, and reaching over 700k rides.

Expanded Transit's rural shuttles with improved routing, new stops, and introduced Saturday service.

Launched three major American Rescue Plan Act of 2021 (ARPA) projects focused on improving technology, bus stops and transfer facilities, and redesigning routes. Shelters, benches, and infoboxes have been deployed systemwide.

Began an Adopt-a-Stop Program and gained three adopters at four locations.

Provider Data



Source: National Transit Database FY18-22

System Snapshot

Service	MB, DR
Fleet	57
Stops	400
Routes	17
Depots	1

Row of Frederick County transit buses parked at the Frederick city transit center. (Pierre Gaunautd/TPB)

Montgomery County Transit - Ride On

https://www.montgomerycountymd.gov/DOT-Transit/

System Snapshot

Service	MB, DR
Fleet	389
Stops	4,802
Routes	83
Depots	3

Overview

The Montgomery County Division of Transit Services plans, schedules, and manages the County's Ride On bus system. The Ride On system is designed to complement the transit services of other providers in the region. The County also manages Xtra: a popular limited stop service, Flex: the first on-demand service in the region, FLASH: a bus rapid transit-like service, and related transit infrastructure including almost 500 bus shelters, over 4,800 bus stops, 700 benches and multiple Park & Ride lots.

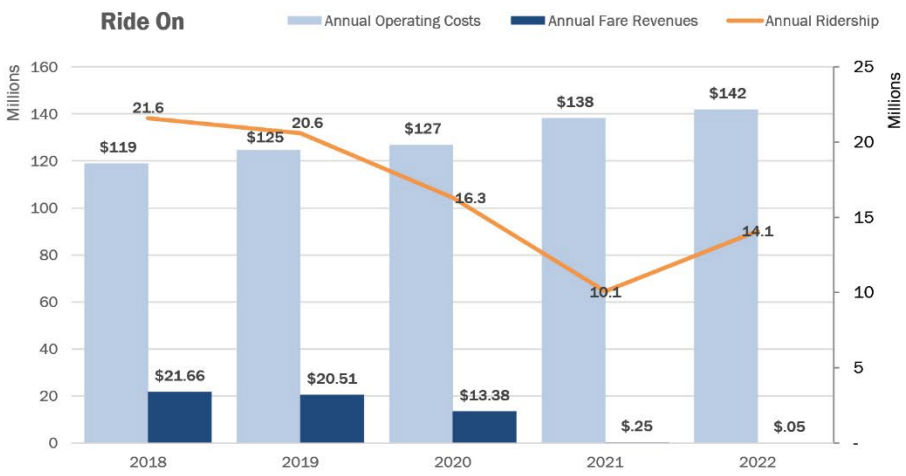
Recent Accomplishments

Conducted public outreach as part of the Ride On Reimagined bus network redesign. This initiative is a system-wide assessment of routes, current needs, future demand, and develops a plan to implement a more efficient and effective transit network in the county. Completion expected in 2024.

Reintroduced courtesy stops at passenger requests after 9pm in order to improve the customer's experience and convenience.

Experienced double digit increases in ridership year over year during summer 2023, buoyed by better bus service performance.

Provider Data



Source: National Transit Database FY18-22

Ride On buses parked. (Montgomery County DOT/Ride On)

Prince George's County Transit - TheBus

https://www.princegeorgescountymd.gov/1120/Countys-TheBus

Overview

Prince George's County operates TheBus, a fixed route bus system for the county with 28 routes. A microtransit service called "Link" now operates in one geographic zone as of 2022. The Bus also offers "Call-A-Bus" (curb-to-curb service) and "Call-A-Cab" (discounts cab service when public transit is unavailable) for seniors and persons with disabilities through a small network of scheduled routes and participating cab companies. The services are overseen by the Department of Public Works and Transportation.

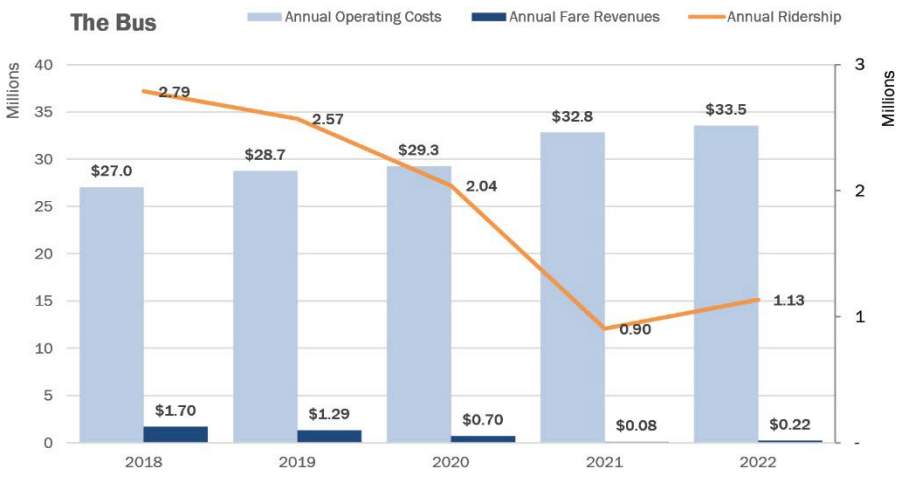
Recent Accomplishments

Conducted community outreach throughout 2023 as part of Transit Forward, an assessment of TheBus' existing service, performance, and infrastructure. This effort is a part of the broader Transit Transformation Initiative that also includes a new vision plan, fleet electrification, and more.

Formally launched the Transit Transformation Initative in October 2023, focused on reinvisioning local bus service in Prince George's County, improving its performance, and increasing its sustainability.

Celebrated the significantly increased on-time performance (OTP) of Call-A-Bus, with a 97.3 percent OTP in November 2023 versus 80 percent in October 2022.

Provider Data



Source: National Transit Database FY18-22

System Snapshot

Service	MB, DR
Fleet	168
Stops	1,729
Routes	24
Depots	1

TheBus bus stopped curbside. (Prince George's County DPW&T/TheBus)

MDOT MTA - Commuter Bus

https://www.mta.maryland.gov/schedule?type=commuter-bus

MARYLAND DEPARTMENT OF TRANSPORTATION
MARYLAND TRANSIT ADMINISTRATION

System Snapshot

Service: CB

Fleet: 92^

Stops: 390*

Routes: 28*

Depots: N/A

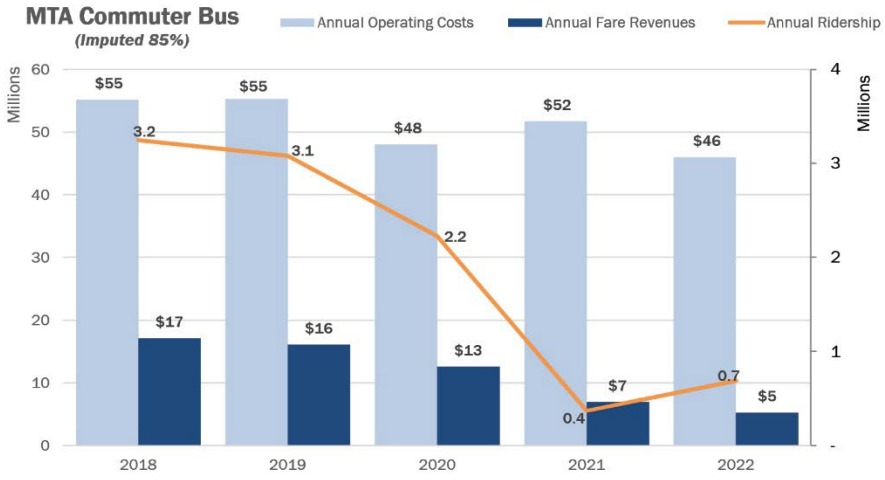
^ Vehicles Operated in Maximum Service (VOMS)

* in TPB region

Overview

MDOT MTA Commuter Bus Service is a vital link that connects thousands of Maryland's suburban residents with jobs in Baltimore and Washington D.C. MDOT MTA Commuter Bus service is supplied by private contractors with oversight from MDOT MTA and operates weekdays during morning and evening rush hours and with select mid-day trips.

Provider Data



Source: National Transit Database FY18-22

MTA commuter bus turning on a commercial street (MDOT MTA)

MDOT MTA - MARC Commuter Rail

https://www.mta.maryland.gov/schedule?type=marc-train

Overview

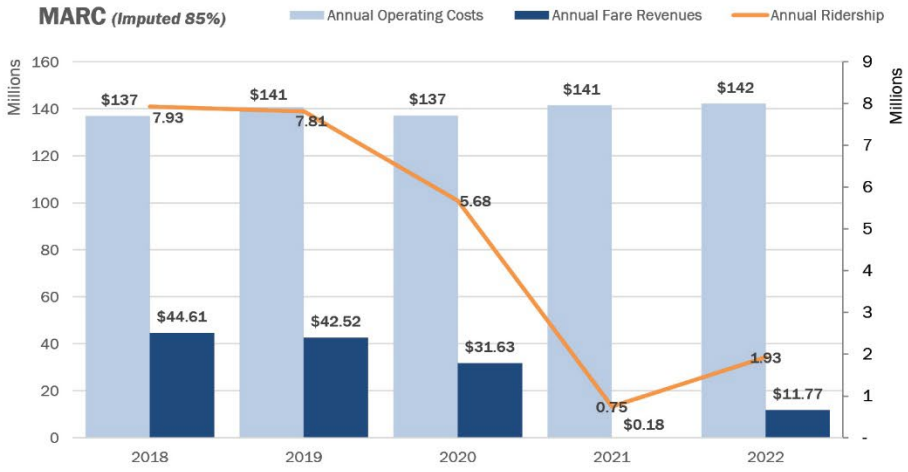
The MARC rail system, serves Baltimore, Washington, D.C., and surrounding areas, as well as Martinsburg, WV. MARC Train operates across three routes including the Brunswick Line, Camden Line, and Penn Line. All routes originate or terminate at Washington Union Station.

Recent Accomplishments

Received an FY22 Consolidated Rail Infrastructure and Safety improvement Program (CRISI) award from the Federal Railroad Administration (FRA) for up to $8.8m for development of the Penn-Camden Connector project. The project will result in a rail link between the Penn and Camden lines that is expected to improve interoperability and achieve savings in maintenance and storage activities.

Completed the MARC Brunswick Line Commuter Rail Expansion Study and began development of the MARC Growth and Transformation Plan, which is meant to update the 2019 Cornerstone long-range plan.

Provider Data



Source: National Transit Database FY18-22

System Snapshot

Service	CR
Fleet	117* 52**
Stops	24^
Routes	3
Railyards	7†

* railcars

** locomotives

^ in TPB region

† incl. D.C. Wedge yard

MARC train at the Riverside Heavy Maintenance Facility. (Pierre Gaunaurd/TPB)

Agency Profiles

VIRGINIA

Alexandria Transit Company - DASH

https://www.dashbus.com/

Overview

The Alexandria Transit Company's DASH system provides safe, reliable, and convenient bus service within the City of Alexandria. DASH's eleven routes connect with regional transit services including Metrobus, Metrorail, Virginia Railway Express, and other local bus systems. DASH serves all of the Alexandria Metrorail Stations, as well as the Pentagon Metrorail station during morning and evening peak periods. DASH's name symbolizes a commitment to the citizens of Alexandria: Driving Alexandria Safely Home.

Recent Accomplishments

Realigned lines 33, 34 & 36A/B as part of the opening of the new Potomac Yard Metrorail station opening to provide better connectivity to the new stop from Old Town Alexandria, Del Ray, Arlandria, Parkfairfax and Shirlington.

Set a new ridership record with 4.5 million boardings in FY 2023, the highest annual total in the agency's nearly 40 years of service.

Continued working with the City of Alexandria to improve bus stop accessibility and add more amenities like shelters, benches and real-time information displays, including improvements at a dozen different bus stops to achieve ADA compliance.

Provider Data

Source: National Transit Database FY18-22

System Snapshot

Service	MB
Fleet	101
Stops	714
Routes	12
Depots	1

Zero-emission DASH buses in Alexandria, VA. (DASH)

Arlington Transit - ART

https://www.arlingtontransit.com

System Snapshot

Service	MB, DR
Fleet	78
Stops	1,004
Routes	16
Depots	3

Overview

Arlington Transit (ART) operates within Arlington County, Virginia, supplementing Metrobus with cross-county routes and neighborhood connections to Metrorail and VRE. ART improves the quality of life in the region by moving and connecting people while reducing traffic congestion and pollution. All ART buses operate on clean-burning natural gas (CNG) and are fully ADA accessible.

Recent Accomplishments

Introduced a new Arlington Transit Data Dashboard in April 2023 that visualized six metrics about ART's service perfromance, including systemwide, route-level, and STAR ridership, service efficiency, on-time performance, and miles between road calls.

Initiated construction of a new operations and maintenance facility in Arlington's Green Valley neighborhood that will help consolidate agency assets and facilitate fleet electrification.

Celebrated its 25th anniversary with a proclamation by the Arlington County Board meant to kick off a year of commemorative activities.

Provider Data

Source: National Transit Database FY18-22

ART bus at the East Falls Church Metrorail bus loop. (Pierre Gaunaurd/TPB)

City of Fairfax City-University Energysaver - CUE

https://www.fairfaxva.gov/government/public-works/transportation-division/cue-bus-system

Overview

The City of Fairfax City-University Energysaver (CUE) bus system provides regularly scheduled, low-cost transportation services to George Mason University, shopping centers, and other locations within the City of Fairfax, as well as to the Vienna/ Fairfax-GMU Metrorail Station. All CUE buses are fully accessible to persons with disabilities.

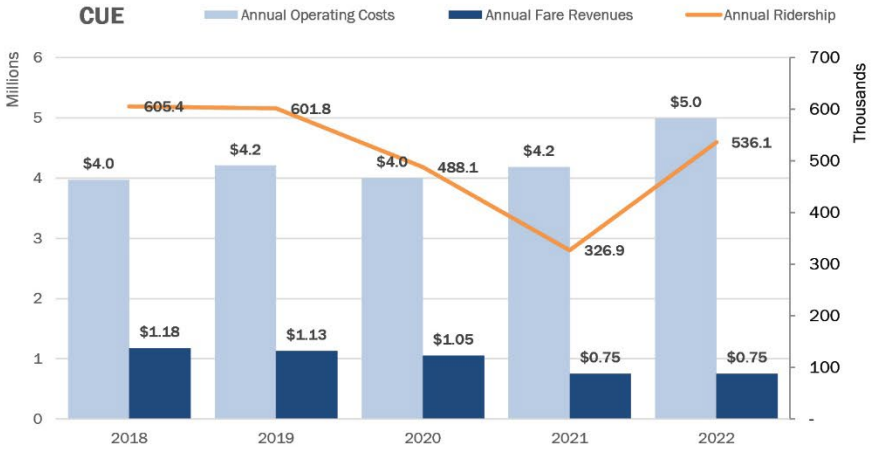
Recent Accomplishments

Began implementation of its transit service rebranding, rededicating the acronym CUE to mean "City University Everyone" from "City-University Energysaver. Other features of the initiative included a new logo, bus stop flags, color scheme, and more. The rebranding was done to help with marketing and service modernization.

System Snapshot

Service	MB
Fleet	12
Stops	200
Routes	4
Depots	1

Provider Data



Source: National Transit Database FY18-22

Fairfax CUE bus moving down Nutley Street near Vienna, VA. (Pierre Gaunaurd/TPB)

Fairfax Connector

https://www.fairfaxcounty.gov/connector/

System Snapshot

Service	MB
Fleet	356
Stops	3,081
Routes	94
Depots	3

Overview

Fairfax Connector is the largest local bus system in Northern Virginia, transporting over 26,000 passengers on average each weekday across Fairfax County and into Washington, DC. Fairfax Connector aims to provide world class transportation service and promote greater mobility while improving the safety of its community and enhancing the quality of life for riders.

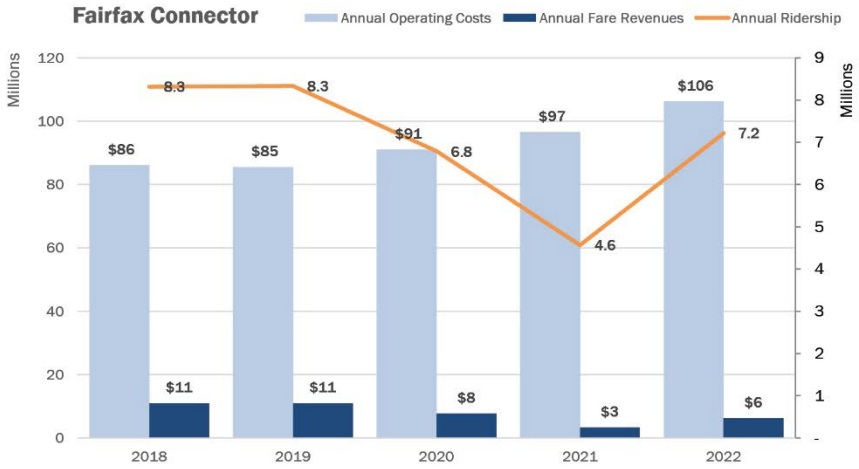
Recent Accomplishments

Introduced a new policy allowing occupied strollers on board buses.

Amended fare policy to allow all children aged 12 and under to ride for free with a paying adult, as of May 2023.

Had their FY2023 - FY2033 Transit Strategic Plan (TSP) approved by the county board in December 2023.

Provider Data



Source: National Transit Database FY18-22

Fairfax Connector bus driving alongside the Dulles Toll Road. (Fairfax County DOT/Connector)

Loudoun County Transit

https://www.loudoun.gov/4121/Transit-Commuter-Services

Overview

Loudoun County offers four distinct transit services: Local Fixed Routes, Paratransit, Metro Connection, and Commuter Bus. The Local Fixed Routes provide all day transit service from Purcellville through Leesburg and eastern Loudoun County. Paratransit services provide ADA-accessible curb-to-curb bus service for eligible riders within ¾ of a mile of local fixed routes. Metro Connection provides rush hour bus service between Park and Ride Lots and Metrorail. The commuter bus service operates during the AM and PM peak periods providing transportation from Park and Ride lots to Rosslyn, Crystal City, the Pentagon, and DC.

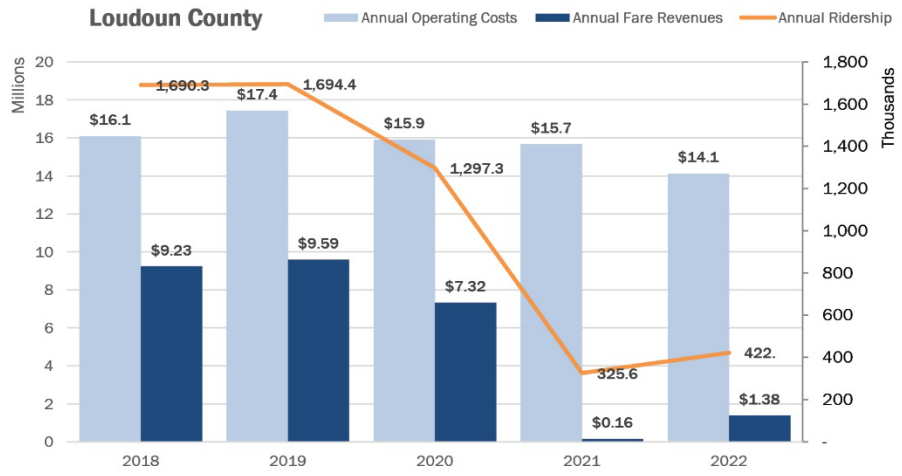
Recent Accomplishments

Launched 21 new transit routes in connection with the Metrorail's Silver Line expansion into Loudoun County the previous Fall.

Restructured county operations and moved the Transit and Commuter Services Division into the Department of General Services from the Department of Transportation and Capital Infrastructure.

Awarded an FTA Low or No Emission Vehicle Grant for $13.9 million to purchase compressed natural gas (CNG)-fueled buses, construct a CNG fueling station, and upgrade its maintenance facility.

Provider Data



Source: National Transit Database FY18-22

Loudoun County Transit bus parked at the depot. (Pierre Gaunaurd/TPB)

System Snapshot

Service	MB, CB, DR
Fleet	115
Stops	470
Routes	47
Depots	1

Potomac Rappahannock Transportation Commission - Omniride

https://omniride.com/

Overview

OmniRide is PRTC's commuter and local bus service. OmniRide offers safe, reliable, and flexible weekday service throughout Prince William County and along the I-95 and I-66 corridors to destinations including the Mark Center, Pentagon, Crystal City, Rosslyn/Ballston, Tysons Corner, and downtown Washington, DC. In addition to morning and evening commuter service, midday service is available on most routes.

Recent Accomplishments

Implemented new DRPT funded commuter routes to operate along newly extended I-95 express lanes.

Launched new commuter service between Balls Ford Commuter Lot in Manassas with the Reston/Dulles Corridor.

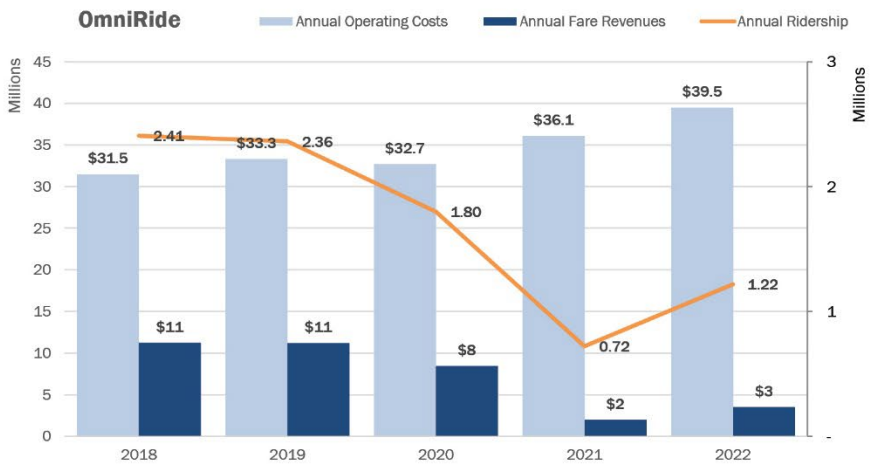
Completed public hearings and outreach for major eastern local bus restructure in eastern Prince William County to be implemented in spring 2024.

Fully restructured western local bus service as well as commuter bus routes to coincide with new commuter lots opened with I-66 express lane completion.

System Snapshot

Service	MB, DR, CB
Fleet	158
Stops	625
Routes	26
Depots	2

Provider Data



Source: National Transit Database FY18-22

OmniRide Express commuter bus. (OmniRide)

Virginia Railway Express - VRE

https://www.vre.org/

Overview

The Virginia Railway Express (VRE) is a joint project of the Northern Virginia Transportation Commission and the Potomac Rappahannock Transportation Commission to provide safe, cost effective, accessible, reliable, convenient, and comfortable commuter-oriented passenger rail service. VRE provides commuter rail service from Fredericksburg, Spotsylvania County, and the Northern Virginia suburbs to Alexandria, Crystal City and downtown Washington, DC, along the I-66 and I-95 corridors.

Recent Accomplishments

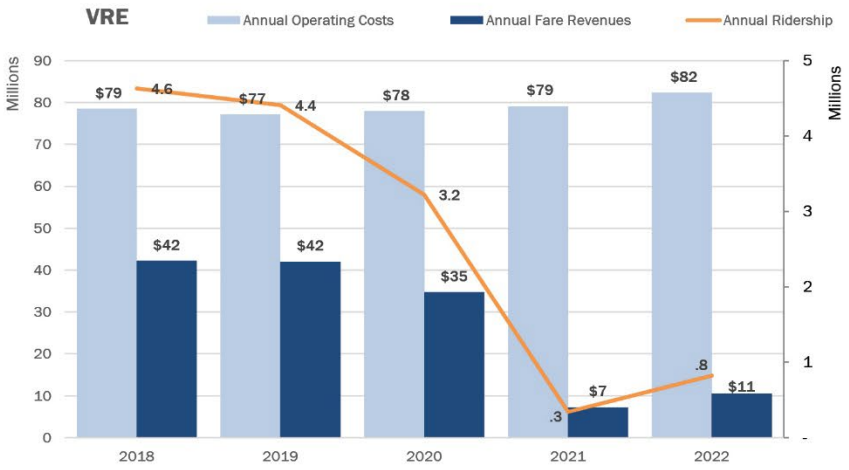
Began construction on the Fredericksburg Station Rehabilitation project

Significant progress made on the Washington Union Station Track 22 rehabilitation project, a project led by Amtrak and partially funded by VRE, and construction of an expanded three-track Quantico station.

Broke ground on the VRE Potomac Shores station and parking garage by Biddle Real Estate Ventures which is funding and constructing the station complex, and the Manassas Park parking garage construction project.

Substantial completion and grand opening of the VRE Lifecycle Overhaul and Upgrade Facility (LOU) at the Crossroads Maintenance and Storage Facility.

Provider Data



Source: National Transit Database FY18-22

System Snapshot

Service	CR
Fleet	100* 20**
Stops	15^
Routes	2
Railyards	2

* railcars

** locomotives

^ in TPB region

VRE train moving through Northern Virginia outside of Washington, DC. (VRE)

Agency Profiles

WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY (WMATA)

WMATA - Metrobus

https://www.wmata.com/service/bus/

Overview

Metrobus is the sixth busiest bus agency in the United States, with an active fleet of almost 1,600 buses. In December 2023, Metrobus provided an average of 329,000 trips each weekday in the District of Columbia, Maryland, and Virginia. Average weekend ridership was over 360,000.

Recent Accomplishments

Adopted its Strategic Transformation Plan, titled "Your Metro, the Way Forward," in February 2023. The plan focuses on goals and objectives revolving around service performance, workforce development, partnerships and sustainability.

Released its Zero Emission Bus (ZEB) Fleet Transition Plan in March 2023 and received 12 battery-electric buses raising its total ZEB fleet to 15.

Began a "courtesy stop" program in June 2023 to allow passengers, upon request and at the discretion of the driver, to get off the bus between designated route stops. This option is available during service between 9pm and 5am.

Extended bus service across 14 routes in the District of Columbia to 24 hours a day, seven days a week beginning December 2023.

Provider Data

Source: National Transit Database FY18-22

System Snapshot

Service	MB
Fleet	1,571
Stops	9,374
Routes	245
Depots	9*

* active

Metrobus moving through Washington, DC. (Pierre Gaunaurd/TRB)

WMATA - Metrorail

https://www.wmata.com/service/rail/

System Snapshot

Service	HR
Fleet	1,278
Stops	98
Routes	6
Railyards	10

Overview

Metrorail provides safe, clean, reliable transit service for approximately four million people throughout the Washington, DC area. The system is one of the busiest in the United States, serving ninety-eight stations across Virginia, Maryland, and the District of Columbia. By December 2023, an average of 331,000 people rode the Metrorail service on weekdays. The Metrorail urban rail system is the third largest urban rail system in the country, serving an approximately 1,500 square mile area and including 130 miles of network.

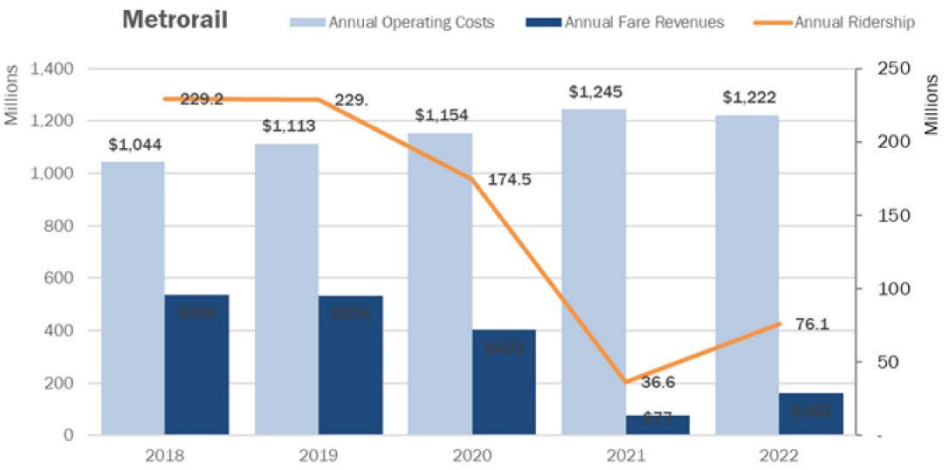
Recent Accomplishments

Opened Metrorail's 98th station, Potomac Yard-VT, as an in-fill station in Alexandria, VA along the Blue/Yellow Lines.

Celebrated the opening of two new regional headquarters in New Carrollton, MD and in Alexandria, VA. The MD building serves as the new home for Metro's call center and Metro Transit Police, among other arms of the organization. The VA building houses the new Integrated Command and Communications Center (MICC) which is the transit provider's centralized control center for bus and rail operations and more.

Began installing taller faregates with more coverage across the Metrorail network to help reduce fare evasion.

Provider Data



Source: National Transit Database FY18-22

Metrorail trains moving through the Metro Center station in Washington, DC. (Pierre Gaunaurd/TPB)

PART 3 – OTHER PUBLIC TRANSIT SERVICES – OVERVIEW

This section provides a brief overview of other transit services in the region not included in the previous section. These include a selection of paratransit and commuter transit agencies that operate services within or immediately around the National Capital Region.

A Fastran paratransit bus moving down US Route 29 in Fairfax, VA. (Pierre Gaunaurd/TPB)

ANNE ARUNDEL COUNTY TRANSIT (AACT)

Anne Arundel County Office of Transportation (AA OOT) offers transit via fixed route, microtransit, and paratransit service across the county and within the city of Annapolis (independent of Annapolis Transit). Through its contractor First Transit, AACT operates nine fixed bus routes.[5] AA OOT also supports one fixed route in the county operated by RTA of Central Maryland. AACT's upcoming Transit Development Plan foresees future service expansion crossing into Prince George's County, MD.

DC DEPARTMENT OF FOR-HIRE VEHICLES

The DC Department of For-Hire Vehicles is responsible for regulation of the vehicle-for-hire sector within the District. It also operates the DC Neighborhood Connect microtransit service, which offers an on-demand, curb-to-curb, shared-ride public transportation option to customers moving within three available zones. These zones transect five of the city's wards (1, 4, 5, 6, and 8). Customers use the service's app to book a trip, but there is also a call-in option. DC Neighborhood Connect began as "DC Microtransit" in 2019, but pivoted its service during the pandemic, focusing instead on offering a safe and affordable travel option to healthcare workers and providing necessary goods under the public health emergency.

Returning to its original public transportation purpose, DC Neighborhood Connect was fare-free in 2022 and expanded its service area, but reinstated fares ($3 dollars/per trip) beginning July 2023.[6] However, although certain performance metrics improved after the return of fares, ridership went down more than 50 percent shortly after. In May 2023 there were 10,597 trips taken on DC Neighborhood Connector versus 4,687 in August 2023.[7]

DOT

DOT is the City of Alexandria's paratransit service for residents and visitors who cannot use fixed-route bus or rail services due to their disability. DOT provides curb to curb (with door to door by request) service throughout the City of Alexandria as well as the City of Falls Church, Arlington, and Fairfax Counties, the City of Fairfax, and Washington, DC.[8]

EASTERN PANHANDLE TRANSIT AUTHORITY (EPTA)

EPTA is a public transportation agency based out of Martinsburg, WV, running fixed-route, demand response, and paratransit service. It serves various cities and areas within the eastern panhandle of West Virginia, including Martinsburg, Charles Town, and Harpers Ferry. EPTA's fleet operates along twelve fixed routes daily.[9] It also has two special routes that serve MARC riders with stops in Frederick County, MD and operates bus service for Shepherd University.[10] EPTA has plans to begin commuter service between Martinsburg, WV, and the Ashburn, VA, Silver Line Metrorail stop in Loudoun County, with the possibility of adding Leesburg, VA, as a stop.[11]

FASTRAN

Fastran is a specialized transportation service for residents of Fairfax County and the Cities of Fairfax and Falls Church that offers lift-equipped, door-to-door service for people whose disability or special need prevents them from using public transportation to get to county-sponsored programs and services.

All Fastran riders must be certified by a sponsoring Human Services agency, such as:

- Critical Medical Care: Transportation for Fairfax County residents who must undergo life sustaining treatments including dialysis, radiology, chemotherapy, brain injury therapy, physical therapy, and water therapy. Transportation service under this program is not guaranteed but is provided on a space available basis.

- Adult Day Health Care - Transportation to and from adult day health care centers.

- Community Services Board - Transportation to and from support services and worksites related to intellectual disability, mental health, and the Recovery Women's Center.

- Senior Centers - Transportation to and from Fairfax County Senior Centers. Service is arranged through centers only.

- Senior Residences - Transportation for twice-a-month grocery shopping trips and a trip to the mall every other month for residents of eighteen senior residence developments. Trips scheduled by sites; or,

- Therapeutic Recreation Services - Transportation to and from outings and structured recreational activities for individuals with intellectual or physical disabilities.

PRINCE GEORGE'S COUNTY CALL-A-BUS

Call-A-Bus is the paratransit service provided by Prince George's County, providing demand response, curb-to-curb bus service throughout the county available to all residents who are not served by, or cannot use, existing bus or rail services. However, priority is given to older adults and persons with disabilities. Persons with disabilities must provide their own escort, if needed. Service animals are allowed for riders with visual impairments. Reservations can be made up to seven days in advance. In addition to the County's Call-a-Bus service, seventeen local municipalities also provide their own Call-a-Bus service.

REGIONAL TRANSPORTATION AGENCY OF CENTRAL MARYLAND (RTA)

The RTA of Central Maryland is an organization made up of multiple jurisdictions to establish a more effective and efficient public transportation system across Central Maryland. The RTA's operational area primarily lies outside of the TPB area but includes Anne Arundel County, Howard County, Northern Prince George's County, and the City of Laurel. The RTA has combined the management and administrative functions of all jurisdictions to reduce operating expenses and provide a better customer service experience for riders. The Central Maryland Transportation & Mobility Commission (CMTMC) provides oversight of the organization and is made up of two representatives from each jurisdiction.

STAR

Specialized Transit for Arlington Residents (STAR) is the paratransit component of Arlington Transit (ART) and provides shared ride paratransit service for Arlington County residents who have difficulties using public fixed route transit service either due to age or disability.

VIRGINIA REGIONAL TRANSIT (VRT)

Virginia Regional Transit operates, manages, and plans fixed-route, demand-response, and commuter transportation services across fifteen different jurisdictions primarily outside the Metropolitan Washington Region, but includes: Loudoun, Fauquier, Culpeper, Orange, Clarke, Warrenton, Augusta, and Charlottesville. In Loudoun County, VRT operates the Purcellville Connector fixed-route bus between Purcellville, VA and Leesburg, VA. It also offers a curb to curb On Demand/Paratransit service across much of Loudoun County, including rural areas.

WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY (WMATA) METROACCESS

MetroAccess is a shared ride, door-to-door transportation service for people with disabilities who are unable to use fixed-route public transit. Service is provided to locations that are located within ¾ mile of a Metrobus or Metrorail line, in accordance with federal requirements, in the following jurisdictions: Fairfax County, Arlington County, Prince George's, and Montgomery counties; the District of Columbia; and the cities of Fairfax, Falls Church, and Alexandria.

The Abilities-Ride program offers MetroAccess customers a more flexible option for travel within Maryland. Metro has partnered with local taxicab and transportation network companies to provide on-demand discounted taxi services.

PART 4 - REGIONAL PUBLIC TRANSPORTATION ORGANIZATIONS

This section details state- and regional-level organizations in Maryland and Virginia that conduct planning for public transportation in the National Capital Region, including an overview of and recent accomplishments for each organization.

A Fairfax Connector zero emission bus is parked at the Vienna/GMU Metrorail station, Fairfax, VA. The service participated in development of NVTC's Northern Virginia Zero Emission Bus Strategic Plan. (Pierre Gaunaurd/TPB)

MARYLAND DEPARTMENT OF TRANSPORTATION AND TRANSIT ADMINISTRATION (MTA)

Overview

The Maryland Transit Administration (MTA) is a division of the Maryland Department of Transportation (MDOT) and one of the largest multimodal transit systems in the United States. MTA operates local buses (CityLink and LocalLink) and both heavy (SubwayLink) and light rail (RailLink) in the Baltimore area. MTA's commuter bus and commuter rail (MARC) services operate across the state, including in the NCR. MTA also operates a comprehensive Paratransit system (MobilityLink)and Taxi Access system for the Baltimore area, and directs funding and statewide assistance to Locally Operated Transit Systems (LOTS) in each of Maryland's twenty-three counties, Baltimore City, Annapolis, and Ocean City.

More information on the 2023 activities related to MTA's commuter bus and rail services within the NCR is available in Part VI of this report.

Recent Accomplishments

PURPLE LINE UPDATE

The Purple Line is a 16-mile double track light rail line that will operate between Bethesda in Montgomery County and New Carrollton in Prince George's County. The Bethesda to Silver Spring segment will include a parallel hiker/biker trail. The line will include direct connections to Metrorail in four locations, all three MARC Train lines, and Amtrak. The project includes track, stations, railcars, and two operations and maintenance facilities. The project is being delivered as a public-private partnership for the design, construction, financing, operation, and maintenance of the facility. Project funding allocation increased by $449 million to fund the full-scale construction of the project and the addition of FY availability payment. The Board approved an additional amendment to the completion date in the P3 Agreement in July 2023. MTA is wrapping up certain limited construction activities and construction by the new design-build contractor is at full scale. The service is expected to launch in Spring 2027.

NORTHERN VIRGINIA TRANSPORTATION AUTHORITY (NVTA)

Overview

The Virginia General Assembly created the Northern Virginia Transportation Authority (NVTA) in 2002 with a mandate to prepare a long-range transportation plan for Northern Virginia and fund transportation capital improvement projects using the sustainable revenue stream (primarily, sales tax) established in 2013 (HB 2313). 70 percent of the revenues are directly programmed by NVTA, and the remaining 30 percent are distributed to NVTA's nine-member jurisdictions which allocate these revenues to transportation projects of their choosing, including public transportation projects, in accordance with HB 2313. NVTA's efforts include:

- Updating TransAction, the long-range multi-modal transportation plan for Northern Virginia, a fiscally and geographically unconstrained plan that currently includes 424 regional projects with an estimated capital cost of more than $75 billion. TransAction is updated on a five-year cycle and was last adopted in December 2022.

- Programming its Regional (70 percent) revenues through updates to NVTA's Six Year Program (SYP), is updated on a two-year cycle. To this date, NVTA has programmed $3.1 billion in regional funds for multimodal projects across the region. The next SYP update is anticipated to be adopted in July 2024.

- Disbursing its Local Fund revenues (30 percent) to member localities. Up to this point, more than $1 billion in Local Funds has been allocated to multimodal projects of which more than $350 million is for transit projects (capital and operating) and close to $100 million in bike-ped and technology projects.

- So far, investing more than $4.1 billion in the region continued NVTA's commitment to BRT solutions (Richmond Highway, Metroway, Duke Street Transitway, West End Transitway, Envision Route 7), rail and transit solutions (VRE Crystal City and other stations, power upgrades on Orange and Blue Metrorail lines, new rolling stock), transportation technology (e.g. Transit Signal Priority), and active transportation solutions such as bike/pedestrian facilities.

- An analysis of lane miles added by these investments shows that they will result in adding about 18 miles of dedicated transit right of way for bus rapid transit projects and 184 miles of active transportation infrastructure in Northern Virginia.

Recent Accomplishments

PRELIMINARY DEPLOYMENT PLAN FOR A REGIONAL BUS RAPID TRANSIT SYSTEM IN NORTHERN VIRGINIA (PDP-BRT)

In October 2023, NVTA kicked off the preparation of the PDP-BRT, which will further refine the vision for a regional BRT system for Northern Virginia that was initially developed by NVTA as part of its latest update to the TransAction Plan adopted in December 2022. The two-year process will include data-driven analyses on land use thresholds, ridership, potential alignments, bus priority measures (infrastructure and technology-based), coordinated and integrated operations across multiple lines and transit agencies, mobility hubs, technology, funding, and governance. This will be supported through exclusive public engagement (surveys, focus groups, comment period). To coordinate with the larger Metro DC region, a BRT Planning Working Group has been set up by NVTA that includes members from TPB, WMATA, Montgomery County, Prince George's County and DDOT in addition to NoVA jurisdictions and agencies, where various aspects of the study will be discussed. The PDP-BRT work is anticipated to be completed by Fall 2025.

CMAQ/RSTP

Each year, NVTA makes recommendations to the Commonwealth Transportation Board (CTB) for allocation of federal Congestion Mitigation and Air Quality (CMAQ) and Regional Surface Transportation Program (RSTP) revenues in Northern Virginia. CMAQ and RSTP are part of the overall mix of transportation funding available to Northern Virginia. The CMAQ Program funds transportation projects or programs that will contribute to attainment or maintenance of the National Ambient Air Quality Standards (NAAQS) for ozone, carbon monoxide, and particulate matter. The RSTP funds provide flexible funding that may be used for projects to improve and preserve conditions and performance on federal-aid highways, public bridges and tunnels, bicycle and pedestrian infrastructure and transit capital projects. In 2023, NVTA recommended and CTB approved more than $90 million CMAQ and RSTP funds for projects such as Commuter Connections, Metropolitan

Area Transportation Operations Coordination (MATOC), Metrobus and PRTC bus replacements, Metrorail access improvements, BRT projects, signal optimization, sidewalk, trail, etc. throughout the region.

TECHNOLOGY INITIATIVES

NVTA updated its Transportation Technology Strategic Plan (TTSP) and added a new strategy on enhanced mobility through innovations and emerging technologies in transit. NVTA continues to collaborate with the Commonwealth of Virginia as a co-sponsor of the Regional Multimodal Mobility Program (RM3P) which uses information and communications technologies to address Northern Virginia's mobility needs. Of the five elements, Data-Exchange Platform and Artificial Intelligence-Based Decision Support System are already in the deployment stage. In March, NVTA hosted the 8th Annual Northen Virginia Transportation Roundtable. Two dynamic panel discussions discussed transportation technology topics related to NVTA's core values of Equity, Safety, and Sustainability and the audience was able to engage with panelists as well as interact through live polling. NVTA launched a Lunch and Learn series in 2023 that brings in local and national experts to present on topics highly relevant to the region and held five sessions in 2023 including topics such as microtransit deployments, intelligent transportation systems (ITS), bike-pedestrian data, etc. More information on technology initiatives can be found at: https://thenovaauthority.org/transportation-technology/

NORTHERN VIRGINIA TRANSPORTATION COMMISSION (NVTC)

Overview

NVTC advances a robust and reliable public transit network to support communities in Northern Virginia. As the voice of transit in Northern Virginia, NVTC brings the region together to plan, coordinate, and secure funding for transit systems that are financially sustainable and high performing. The agency serves as a regional forum for discussion and analysis of transit issues that are critically important to Northern Virginia's economy and quality of life.

NVTC's efforts include:

- Serving as a regional hub for coordination of transit services
- Funding and providing oversight for Metro and appointing board members
- Providing expertise on transit systems, ridership, and advanced fare collection
- Jointly owning Virginia Railway Express
- Providing leadership on legislative and policy issues
- Managing state and regional funding for six bus systems
- Administering the Commuter Choice program
- Providing Northern Virginia focused transit research and technical expertise

Recent Accomplishments

2023 ANNUAL REPORT ON THE PERFORMANCE AND CONDITION OF WMATA (REPORT)

This year's report made near-term and mid- to long-term recommendations for Metro

- Near-term goals include: a) seek administrative or legislative opportunities to permit WMATA to re-baseline its FY 2025 operating subsidy bill, b) advocate for additional state

aid in FY 2025 to match local funding for WMATA, and c) seek commitment from federal, state, regional, and local funding partners to develop long-term dedicated funding to meet WMATA's capital and operating needs
- Mid- to long-term goals include managing labor cost escalation, improving farebox recovery, seeking amendments to the federal Wolf Act, and examining Virginia's and Maryland's legislatively mandated operating assistance growth cap.

2023 REGIONAL MARKETING CAMPAIGN: NOVARIDES

NVTC led its fourth regional marketing campaign promoting the use of public transit in Northern Virginia between June and September following the reopening of the Yellow Line Bridge/Tunnel over the Potomac River, as well as the opening of the Potomac Yard-VT Station.

NVTC, PRTC, AND VRE LEGISLATIVE FORUM

On December 1, NVTC partnered with PRTC and VRE to hold its annual legislative forum to discuss the importance of regional coordination for transit service and how transit agencies serving Northern Virginia have adapted to post-pandemic travel patterns.

Speakers included Kathy Hollinger, CEO of Greater Washington Partnership, Jen DeBruhl, Director of DRPT, and a panel with Metro GM/CEO Randy Clarke, VRE CEO Rich Dalton, PRTC Executive Director Bob Schneider, and NVTC Executive Director Kate Mattice.

COMMUTER CHOICE

Commuter Choice is NVTC's competitive grant program that reinvests toll revenues into projects that provide alternatives to driving alone.

Commuter Choice-funded projects provided 6,000 passenger trips in the I-66 Inside the Beltway and I-395/95 corridors each weekday, the most in any year in the program's history. NVTC also allocated over $48 million to new projects and received a record level of public input during our project selection process.

The Commute Choice I-395/95 program awarded $48 million to 13 projects in FY 2023. This is the largest collective award to date.

VALUE OF NORTHERN VIRGINIA TRANSIT TO THE COMMONWEALTH (REPORT)

NVTC completed its study on the value of transit to the commonwealth in 2023. The Northern Virginia transit network generates $1.5 billion annually in personal income and sales tax revenue for Virginia, approximately 5 percent of the Commonwealth's general fund. Every dollar Virginia invests in transit in Northern Virginia generates an additional $1.60 in statewide revenue (160 percent return on investment)

Northern Virginians using transit removes congestion from I-95 and I-66, helping to improve the reliability of vehicle travel for people and freight traveling across Virginia and the East Coast.

NORTHERN VIRGINIA ZERO-EMISSION BUS (ZEB) STRATEGIC PLAN (REPORT)

Staff worked with agency partners to identify challenges and opportunities to the ZEB transition in Northern Virginia. Staff plan to begin work toward implementing the strategies and short- and long-term actions

There are six major strategies in the plan:

1) serve as a regional ZEB forum
2) advocate for consistent and supportive ZEB standards and policies
3) provide regional ZEB funding coordination
4) support development of shared BEB charging infrastructure
5) evaluate opportunities for private partnerships related to ZEBs
6) support ZEB workforce training and education

NORTHERN VIRGINIA REGIONAL BUS ANALYSIS

NVTC began a study this year to provide regional context to Northern Virginia's transit services. Analysis includes identifying transit service gaps, opportunities for new bus routes and sharing facilities, and provide an overview of existing and anticipated financial needs. This study will serve as a strategic planning resource for the Commission and jurisdictional partners.

NORTHERN VIRGINIA STRATEGIC POLICY RESEARCH ROADMAP

NVTC kicked off a study to develop a strategic vision to guide NVTC regional transit policy research over the next several years. The roadmap will also develop a research idea pipeline to assist NVTC staff with identifying and developing regional transit policy research ideas and produce reference materials to help support future work. This includes research partnerships, new or alternative funding sources and additional opportunities for disseminating work.

ENVISION ROUTE 7 BUS RAPID TRANSIT STUDY

Staff completed the latest phase of study for Envision Route 7, focusing on the segment planned to run through Falls Church, evaluating and determining the mobility benefits and impacts resulting from the proposed Bus Rapid Transit (BRT) from Tysons to Seven Corners, part of the larger planned BRT extending to Alexandria. The study will be used by the City of Falls Church to decide what different elements of a BRT will work best through their residential and downtown areas.

ADVANCING BUS PRIORITY STUDY (REPORT)

NVTC staff studied the scheduled bus speeds of six Northern Virginia bus operators to understand how congestion is affecting bus speeds. Findings were then used to estimate the cost of congestion to the region to be $19 million/year. The final report also demonstrated different ways bus priority treatments can be prioritized to help speed up buses in the region.

BUS STOP AMENITIES STUDY

The study evaluated how and why bus stop amenities are distributed in Northern Virginia, demonstrating that bus stop amenity distribution was related to factors like adjacent land use, the location of bus stops in cities or adjacent to local roads and demographics. The study found the presence of bus stop amenities (like seats and shelter) was related to adjacent land use, demographics, right-of-way ownership, and the amount of bus service and ridership. If a bus stop was shared by multiple transit agencies, it was also far more likely to have a seat or shelter. Finally, while bus stop amenities were slow to implement, almost 10 percent of bus stops gained designated seating over the past decade. The study also recommended updating and adding amenities to bus stops and simplifying the approval and installation of upgrades.

VIRGINIA DEPARTMENT OF RAIL AND PUBLIC TRANSPORTATION (DRPT)

Overview

The mission of DRPT is to facilitate and improve the mobility of the citizens of Virginia and to promote the efficient transport of goods and people in a safe, reliable, and cost-effective manner. DRPT is a state agency that reports to the Secretary of Transportation. Its focus is on the movement of people and goods throughout the Commonwealth, the primary areas of activity are rail, public transportation, and commuter services. DRPT works with local, regional, state, and federal governments, as well as private entities to provide support for projects and programs by:

- Assessing feasibility and environmental impacts of new and expanding services,
- Conducting statewide rail and public transportation studies,
- Planning and programming new services and capital improvement projects, and
- Providing leadership, advocacy, technical assistance, and funding.

WASHINGTON SUBURBAN TRANSPORTATION COMMISSION (WSTC)

Overview

Created in 1965, the Commission administers the Washington Suburban Transit District and has powers to plan, develop, and oversee, on a bi-county basis, a transportation system, including mass transit facilities, for Montgomery County and Prince George's County, Maryland. It coordinates mass transit programs with the two county governments, the Washington Metropolitan Area Transit Authority, and the Maryland Department of Transportation.

Within Montgomery and Prince George's counties, the Commission acts as the financial conduit for funding of mass transportation projects. It also is authorized to levy a property tax in each county to support mass transit services, and associated debt service and administrative costs.

The Commission consists of seven members appointed to three-year terms. Two are chosen by the Montgomery County Executive, and two by the Prince George's County Executive. With Senate advice and consent, the Governor appoints one member from Montgomery County and one from Prince George's County. One member serves ex officio. Annually, the position of chair alternates between Montgomery and Prince George's counties.

PART 5 –PUBLIC TRANSPORTATION STUDIES AND INITIATIVES – IN-DEPTH

This section features some of the major accomplishments and challenges faced by transit agencies in the region over the past year, including major studies completed or in progress. Some of the content may add detail to what was described briefly in an agency's profile in Part 3 of this report.

MARC trains at the Riverside Heavy Maintenance Facility (Pierre Gaunaurd/TPB)

MAJOR STUDIES COMPLETED AND LIST OF STUDIES IN PROGRESS

CITY OF ALEXANDRIA/DASH

DASH TRANSIT DEVELOPMENT PLAN 2024 UPDATE AND UPCOMING TRANSIT STRATEGIC PLAN

DASH staff prepared the FY 2024 ATC Transit Development Plan (TDP), which outlined service changes for FY 2024 and beyond. This document was approved by the ATC Board of Directors in May 2023, but will be replaced by the FY 2025 Alexandria Transit Strategic Plan (ATSP) for FY 2025 and future years.

DUKE STREET IN MOTION

City of Alexandria staff advanced the Duke Street in Motion project through the design stages with community input and City Council approval. This plan outlines the future design for the Duke Street corridor, including future dedicated bus lanes and safety improvements for bicyclists and pedestrians.

DRPT FUNDING RECEIVED FOR ADMINISTRATIVE NEEDS, SERVICE AND CUSTOMER EXPERIENCE ENHANCEMENTS

DASH was awarded DRPT funding for several demonstration grants in 2023, including pilot projects for Automated Wheelchair Securement Systems and an Electric Bus Charge Management System. DASH also received DRPT grant funding to continue its intern program.

DASH was also awarded NVTC funding from the I-395 Commuter Choice program for a continuation of enhanced service on Lines 35 and 36A/B, as well as the purchase of two additional 60-foot 100 percent electric buses that will be used to provide additional capacity on Line 35.

ZERO EMISSION VEHICLE (ZEV) PLANNING

DASH completed its Zero Emission Fleet Implementation Plan, which outlines the plan for transition the DASH fleet to 100 percent electric buses by 2037. It was also awarded $24 million in FTA Low/No Emission program funding in 2023 for the purchase of replacement electric buses and supporting infrastructure. This was the first federal discretionary grant that has been awarded to DASH in agency history.

FREDERICK COUNTY/TRANSIT

2022 TRANSIT DEVELOPMENT PLAN IMPLEMENTATION

Frederick Transit continues to move forward on a bus network redesign informed by the completion of the FY2022 TDP document.

MARYLAND TRANSIT ADMINISTRATION

MARC GROWTH AND TRANSFORMATION PLAN (IN PROGRESS)

The MARC Growth and Transformation Plan will update and expand upon the MARC Cornerstone Plan, last published in 2019, which provided strategic priorities for the system and the capital investment needed to achieve those initiatives. This long-range plan synthesizes MTA plans, policies,

and reports with performance data, local and national trends, and stakeholder input. MTA is comprehensively analyzing this information to create targeted recommendations for growth and investment that coordinate with the overall needs of the MARC system.

The MARC Growth and Transformation Plan will identify a vision and strategies for MARC that reflect:

- Current commuter travel patterns (post-COVID)
- MARC's critical infrastructure needs
- MARC's long-term service objectives based on market analysis and public input
- Improvements needed for an equitable and socially just service that meets the needs of the community
- Available federal funding opportunities such as through the Infrastructure Investment and Jobs Act (IIJA)

BRUNSWICK LINE STUDY TECHNICAL REPORT (COMPLETED)

The Brunswick Line Study Technical Report (the Report) provides a history of the corridor, summary of existing rail operations, markets for increased ridership, environmental and railroad constraints, potential future service enhancements, and the feasibility of extending the MARC service into Western Maryland. The Report also explores up to four railroad alignment options to extend the Brunswick Line service into Western Maryland in order to comply with the Transit Safety and Investment Act (SB 199/HB 114).

FY 2022 CRISI AWARD – PENN-CAMDEN CONNECTOR (UP TO $8,800,000)

A Consolidated Rail Infrastructure and Safety Improvements (CRISI) award was received for the proposed Penn-Camden Connector project. This project involves development activities for various rail infrastructure improvements to support a new rail connection between the MARC Penn Line, on Amtrak's Northeast Corridor, and the MARC Camden Line, on CSX Transportation's (CSX) Capital Subdivision. The project will help advance efforts to provide a rail connection between the Penn and Camden Lines, improving operations and reliability for passenger rail and freight train service. Furthermore, the project aligns with the selection criteria by improving ability to meet existing and anticipated demand as it will support MTA's future efforts to relocate the MARC trainset storage facility, which will enable Amtrak to advance its plans to redevelop Baltimore's Penn Station and Union Station in Washington, DC. MTA will provide a 20 percent non-Federal match.

PRTC/OMNIRIDE

OMNIRIDE REVENUE VEHICLE REPLACEMENT

PRTC is continuing to replace aging fleet with new vehicles. 15 new MCI buses were ordered and received in 2023. In addition, four new Gillig transit buses were received to replace aged out 40' transit buses. Additional vehicles are or are in the works of being ordered to continue the replacement of fleet or to supplement expanded commuter operations.

COUNTY COORDINATION ON BUS SHELTER PROGRAM

PRTC/OmniRide continued working with Prince William County on various planning studies, reviewing opportunities for bus shelter replacement at certain bus stops along the Route 1 corridor, increasing funding requests to replace bus shelters at other locations throughout the county and to look at opportunities to add shelters at other locations that meet ridership warrants.

EXPANSION OF ZERO EMISSIONS REVENUE FLEET

OmniRide submitted a Low/No Emission Grant application but was denied for the second year in a row; however, this is not stopping the agency from transitioning its small vehicle fleet from gasoline to battery electric. Four Nissan Leaf vehicles have been ordered with three Ford eTrans vans to be ordered in 2024. These seven vehicles will be operated out of both the Woodbridge and Manassas maintenance facilities.

CHARLES COUNTY/VANGO

ZERO EMISSIONS FLEET TRANSITION FEASIBILITY

Maryland Department of Transportation Maryland Transit Administration conducted a consultant study for all locally operated transit systems to examine the feasibility of deploying zero emission buses. The study concluded that for Charles County, given the current state of technology for light and medium duty buses, a good strategy may be to delay until technology advances to the point it would be practical.

VRE

SYSTEM PLAN 2050 UPDATE

VRE staff completed Phase 1 of the System Plan 2050 Update (Vision and Goals setting and Market Assessment focus areas). Phase II of the Plan was initiated, to include development of 2050 service concepts for refinement, definition and selection of a 2030 (near-term) service alternative, and a robust public and stakeholder outreach process.

SIGNIFICANT OPERATIONAL ACHIEVEMENTS AND CHALLENGES

CITY OF ALEXANDRIA/DASH

BUS ROUTE SERVICE CHANGES

DASH was able to implement service improvements to Lines 33, 34 and 36A/B for improved bus connections to the new Potomac Yard Metro station in May 2023. Line 33 was also improved on Sundays from every 60 minutes to every 30 minutes for better connectivity between Del Ray, Arlandria and the new Potomac Yard Metro.

PASSENGER INFORMATION SCREEN BUS PILOT

DASH has installed new passenger information screens on one of its buses to test the screens and receive customer input. The screens display trip information, upcoming stops, service alerts and other content. If the screen pilot is successful, DASH would seek to install similar screens on all new buses.

NEW PLATFORM FOR TRACKING OF SUPPORT VEHICLES

DASH installed a new system called "Samsara" on its non-revenue fleet for better tracking and monitoring of support vehicles.

ELECTRIC BUS CHARGE MANAGEMENT PILOT

DASH also launched a pilot project for electric bus charge management. The Wide Sense platform has been deployed to obtain better data on electric bus performance, including more analytics on bus charging. This pilot was funded by a Demonstration Project grant from DRPT.

OPERATIONAL CHALLENGES

Increases in labor and maintenance costs have let to additional budget challenges. DASH has overcome recent issues related to operator staffing but still struggles to identify candidates for maintenance positions. It has also seen a decrease in service reliability as measured by on-time performance and missed trips. DASH is continuing to evaluate these trends to determine their cause.

DDOT/DC CIRCULATOR & STREETCAR

DC BUS PRIORITY PROGRAM ROLL-OUT

DDOT continued to build out projects under the Bus Priority Plan, which was completed in December 2022. As of December 2023, DDOT's bus lane total grew to 12.1 lane-miles built or under construction. As part of Mayor Bowser's FY22 budget, the District committed to 51 bus priority projects. Four total of the 51 projects have been completed, two are under construction, and 13 more are in active planning or design. 7 more will kick-off planning in FY24.
See https://buspriority.ddot.dc.gov/ for project information about individual projects. Here are the totals for 2023:

- Bus priority projects completed
  - Minnesota Avenue SE: Pennsylvania Avenue to East Capitol
  - Pennsylvania Avenue SE: 2nd to Barney Circle
  - 8th Street SE: Florida Avenue to East Capitol
- Bus Priority projects under construction

    - MLK Jr. Avenue SE: Good Hope Road to St. Elizabeths East Campus, building upon the existing pilot lanes
    - M Street SE: 10th Street to Half Street, building upon the existing pilot lanes
- Bus Priority projects in planning or design
    - 11th Street NW: Pennsylvania Avenue to Massachusetts Avenue
    - Columbia Road NW: 16th Street to California Street
    - 14th St NW: Newton to Upshur
    - Georgia Ave NW: Kansas to Eastern Avenue
    - Marion Barry / Minnesota Ave SE: MLK to Pennsylvania Ave
    - H Street NE: North Capitol to Benning Rd
    - Nannie Helen Boroughs Ave NE: Minnesota to Eastern Ave
    - 8th Street SE: East Capitol to M Street
    - U Street NW: 18th to 9th Street
    - Minnesota Avenue NE: East Capitol to NHB Avenue
    - 11th Street SE: M Street to Marion Barry Avenue
    - Florida Avenue NW/NE: 9th Street NW to 1st Street NE
    - MLK Jr. Avenue SE: Redwood to Alabama Avenue

An update to the Bus Priority Plan is anticipated to align with any service changes recommended through the WMATA Better Bus Network Redesign.

FREDERICK COUNTY/TRANSIT

RIDERSHIP REBOUNDS

Ridership continues to increase and has surpassed pre-pandemic levels. Routes operated as scheduled except for select Meet-the-MARC Shuttle runs, which were reduced to reflect limited MARC train ridership. Drivers were reassigned to assist with call-out coverage and additional paratransit support.

COUNTY GOVERNMENT PARTNERSHIPS

Working with partner agencies, Transit staff identified outstanding needs within the community, primarily in the County's more rural communities. Transit also provided information for other County Divisions on transit access to upcoming public health related efforts.

BUILDING THE BRAND THROUGH OUTREACH

Transit continued to assess and deploy staff in more effective public outreach during FY23, resulting in better knowledge of Transit services and programs. Resulting from this outreach, new bus stops and amenities were installed, and routes were re-timed for operational improvement.

AWARDS RECEIVED

- **Transportation Association of Maryland**
  Outstanding Leadership – Roman Steichen, Director

- **Association for Commuter Transportation**
  40 Under 40 Award– Roman Steichen, Director

OPERATIONAL CHALLENGES

Hiring drivers continued to be a challenge for Transit Services. Service remained suspended on the 50 and 60 Peak routes due to lack of drivers. In addition, vehicle supply chain issues persisted, resulting in two or more year lead times for vehicle acquisition and delivery.

MARYLAND TRANSIT ADMINISTRATION

MARC RIVERSIDE HEAVY MAINTENANCE FACILITY OPENED

At the start of 2023, MTA celebrated the opening of the new MARC Riverside Heavy Maintenance Facility in Baltimore. The MARC Riverside facility includes four maintenance slots for locomotives undergoing heavy maintenance and repair, which will free up the existing shop building to streamline preventative maintenance and federally required inspections. Improved equipment and maintenance repair times provides operational flexibility for systemwide MARC service – decreasing repair times, increasing fleet availability, and improving on-time performance.

OPERATIONAL CHALLENGES

MARC's operational challenges are associated with the host railroad arrangement that it operates through. All three lines are operated on right-of-way owned by other railroads, such as CSXT and Amtrak and any changes must go through them for approval. Any delays in freight or Amtrak traffic could cause MARC trains to be delayed or canceled. Additionally, MARC has to store some of its trains at Penn Station in Baltimore, which may be impacted by future Amtrak fleet plans.

PRTC/OMNIRIDE

COMMUTER BUS SERVICE ADJUSTMENT

In August 2023, commuter bus service was retracted to meet both lower passenger usage and continued operator retention issues. A big push has continued to attract new operators, but many do not make it through training. Therefore, service was paired back to meet operator availability, as well as continue to meet passenger demand.

MICROTRANSIT SERVICE EXPANSION INTO EASTERN PRINCE WILLIAM COUNTY

In June 2023, new microtransit service was started in the Dumfries/Triangle/Quantico areas. This has been met with great demand and ridership continues to increase monthly. The existing Manassas/Manassas Park zone, which was implemented in December 2022, continues to grow each month and with the introduction of Saturday service, continues to provided added access for residents.

OPERATIONAL CHALLENGES

A one-month work stoppage took place in February/March 2023 and a new operator contract was put in place. This caused major disruptions for both commuter and local bus service.

VRE

RAIL CONGESTION POSES CHALLENGES

While VRE has not made any operational changes this year, on-time performance has suffered due to rail congestion challenges across the system caused by factors beyond VRE's direct control.

PART 6 –INCREASING THE RESILIENCE AND SUSTAINABILITY OF PUBLIC TRANSPORTATION IN THE NATIONAL CAPITAL REGION

This section focuses on the adaptive and mitigating efforts undertaken by transit agencies to address threats facing their operations due to extreme and hazardous natural conditions.

VRE Tracks Washed Out near Springfield, VA Due to Flooding in September 2011. (VRE)

Prince George's County Battery-Electric Bus (Prince George's County DP&W)

INTRODUCTION

Extreme weather and other natural hazards pose serious threats to public transportation customers, transit operations, and existing infrastructure. Customers moving to and from bus stops or train stations during a heat wave may face an increased danger of heat stroke or exhaustion (among other health threats). Flash floods could isolate buses or individuals in isolated situations and cause damage to property. Winter storms or strong winds can cause ice to develop on roads and trees to fall across rail tracks. In response, public transportation agencies in the NCR have invested increasingly larger amounts of time and resources into building their resilience to these threats and into sustainability initiatives that help mitigate future risks.

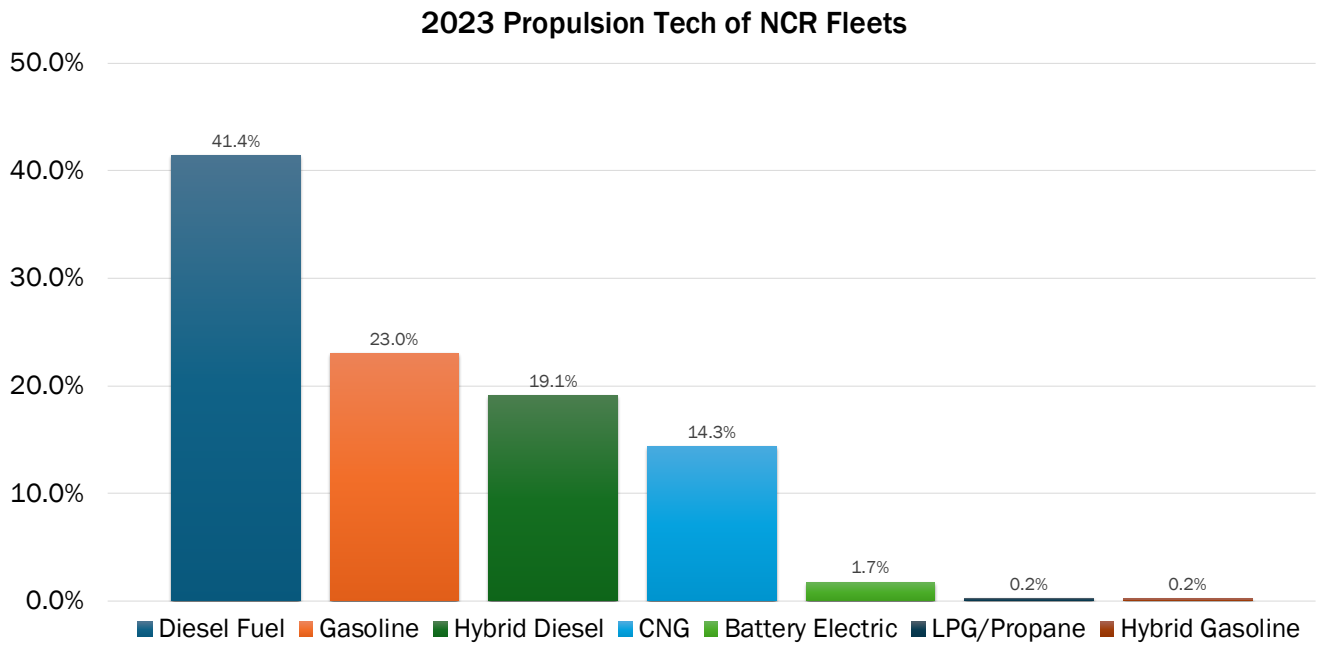
An influx of financial resources from federal and state agencies to address many of these concerns has provided these efforts with a major boost in recent years. However, due to the limitations caused by supply chain issues, administrative bottlenecks, and ongoing financial difficulties, many of the broader visions and programs getting attention today will not fully deliver the promised benefits to communities for years to come. Nevertheless, at the local level, new technologies and strategies are beginning to show results such as reducing air pollution and improving air quality for communities, more effectively addressing stormwater, and using renewable energy to strengthen resilience and improve the quality of life in the region.

This section will feature highlights from the diverse set of projects and programs local jurisdictions have implemented or initiated that impact the resilience and sustainability of the public transportation system. Many of these examples include work done in CY 2023, but as many of these projects are part of long-running or permanent initiatives, this section also features ongoing examples that began before CY 2023.

ZERO-EMISSION BUS TRANSITIONS

As the NCR's modern era of local bus transit began in the early 1970s, the predominant fuel type for transit buses was diesel fuel. Today, many agencies operate their fleets using a combination of fuel types. This helps spread the risk of any potential issues regarding a particular fuel supply or vehicle model; however, it is also the result of an evolving understanding, regulation, and consideration of the impact different fuels have on air pollution. Most transit agencies in the National Capital Region operate a bus fleet that run on some combination of diesel engine ("clean diesel"), diesel-hybrid engines, CNG, alternative fuels (including biodiesel), and battery-electric components. This list continues to grow with the consideration of and nascent investment in hydrogen fuel cell buses, which are more popular in the western United States where there is a more established supportive infrastructure but in the future could be effectively employed in this region as well.

Figure 4: Fuel-Type Share Among Transit Revenue Fleets in the NCR (Appx.), CY 2023



As of CY 2023, almost all of the transit operators in the NCR were at some stage of transitioning their revenue fleets to zero-emission buses (ZEBs). At least four agencies (ART, DASH, OmniRide, and WMATA) have completed either ZEB transition plans or feasibility studies, although five (Frederick Transit, DC Circulator, TheBus, Ride On, and WMATA) incorporated ZEBs into their fleets before these detailed planning products became more common as part of federal grant requirements. Several agencies are actively working on developing their own transition plans with plans to publish in 2024 or later. Currently, the term ZEBs describes both battery-electric (BEB) and fuel cell buses (FCEB), with the only jurisdiction to actively invest in fuel cell technology is Montgomery County, MD.[12]

The recent push to study and procure ZEBs is due to a parallel set of motivators: first, a decades-long trend to conform with regulatory requirements and agency demands to decrease greenhouse gas emissions and improve communities' air quality; and second, an increase in jurisdictions adopting zero greenhouse gas emission goals as part of their local climate action plans or policies. These drivers now guide transit agencies to accelerate the transition of their fleets sooner rather than later.

Local zero-emission target years range across the region from the mid-2030s into the 2040s; however, bus procurement challenges may impact the ability of transit agencies to meet these local goals.[13] BEB bus fleet totals for transit agencies in the NCR as of approximately December 2023 are listed in Table 1.

Table 1: CY 2023 Fixed-Route ZEBs in NCR Transit Bus Fleets

Jurisdiction/Organization	Battery Electric Total
Arlington County, VA/ART	0
Alexandria, VA/DASH	14
Fairfax City, VA/CUE	0
Charles County, MD/VanGO	0
Washington, D.C./DC Circulator	15
Fairfax County, VA/Connector	12
Frederick County, MD/Transit	9
Loudoun County, VA/LCT	0
Montgomery County, MD/Ride On	14
Prince George's County, MD/TheBus	4
PRTC/OmniRide	0
WMATA/Metrobus	3
Total	**71**

AGENCY INVESTMENTS TOWARD ADDRESSING THE IMPACTS OF NATURAL HAZARDS AND CHALLENGES FACED

District of Columbia/DC Circulator

DC Circulator's broader sustainability strategy is outlined in the DC Circulator Electrification Plan, which has the goal of decarbonizing transportation in the District of Columbia. Toward that goal, DC Circulator is drawing on a mix of federal, local, and third-party funds for its transition to a zero-emission bus fleet. DDOT has been granted three awards from FTA's Low or No Emission Transit Vehicle competitive grant program totaling over $17M to fund the purchase of zero-emission vehicles, matched by local funds of over $35M. That match funding includes ~$4.5M from the Volkswagen Clean Air Act settlement (managed by DOEE), which is set aside specifically to fund the replacement of Circulator's 14 oldest diesel buses. In addition, DDOT received just under $6M from the Bus and Bus Facilities competitive grant program—complemented by $4M in local funds—for the renovation and expansion of the Circulator's South Capitol Street facility, which will greatly expand the capacity of DDOT's only facility for BEBs. DDOT is working to leverage these awards with local resources to jumpstart the electrification process, for a greener and more reliable Circulator.

DDOT's zero-emission operations have been hampered by extreme heat, which has contributed to the degradation of Circulator's bus chargers' reliability and effectiveness. The Charger failures exacerbated by summer heat in CY 2023 forced DDOT to commence replacement of the electric bus chargers with higher-powered, more reliable units. This included identifying a procurement process for innovative battery-powered chargers as well as the replacement of several old chargers with newer models from the same manufacturer. Furthermore, extremes of both heat and cold noticeably reduce the range of Circulator's BEBs through the HVAC energy burden they impose. As Circulator's

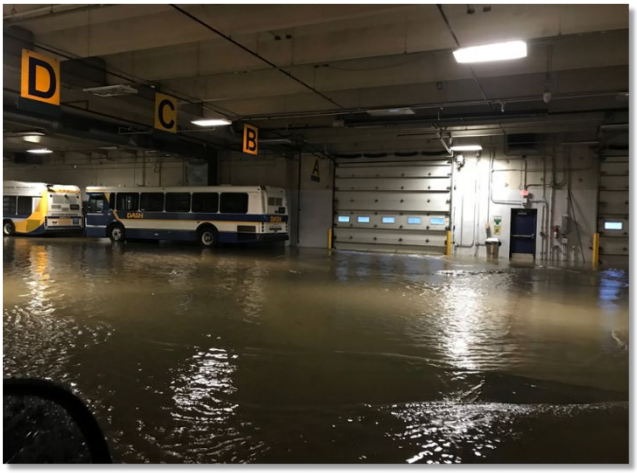
zero-emission transition continues, system planners and operators will devise mitigations for these outdoor temperature extremes.

Frederick County, MD/Transit Services of Frederick County

Frederick Transit continues to evaluate additional methods to improve sustainability and reduce its carbon footprint. Coordination is underway to install additional chargers and procure zero emissions vehicles. Five vehicles in Transit's electric bus fleet are powered by first-generation batteries that are susceptible to temperature extremes, especially during extended periods of sub-freezing ambient temperatures. In the event that these battery packs are exposed to these conditions, they can and will freeze, which would cost about $200,000 per bus to replace. To prevent this, Transit currently "idles" these buses 24/7 with the heat on to keep the batteries warm. During heavy snow events or when ambient temperatures get far below freezing, Transit must move vehicles into empty maintenance bays without the ability to charge, which is challenging because it requires vehicles under maintenance to be moved outdoors, causing the batteries to deplete from not charging. Having a covered, heated enclosure for these buses would eliminate the problem, and the residents of Frederick County would benefit from more reliable service from these vehicles, as they are typically parked during extreme cold conditions due to the challenges associated with keeping the battery packs warm. In FY 2023, Transit applied for a 5339 Bus and Bus Facilities grant to build a bus enclosure with solar panels but was not selected. Lessons learned can inform future efforts.

City of Alexandria/DASH

DASH and the City of Alexandria have continued to invest in 100 percent electric buses and the infrastructure needed to support them. DASH has completed initial designs on a bus facility expansion project that includes charging stations for nearly 40 electric buses. DASH also recently completed its Zero-Emission Fleet Implementation Plan, which outlines steps by which DASH will transition its fleet to 100 percent electric buses by CY 2037. DASH has primarily relied on city funds for facility upgrades noted above, but the fleet electrification program has been funded by FTA (Low/No Emission), DRPT (SMART SCALE) and NVTC (I-395 Commuter Choice). DASH has also received grant funding from DRPT to pilot a new electric bus charge management system that will help it collect better performance data on its electric bus fleet and identify more efficient charging practices.



DASH Bus Garage Floods in Alexandria, VA During Extreme Weather. (DASHBus/Facebook)

Regarding resilience of its operations, DASH has been affected by extreme weather in several ways. The DASH Facility is located in a floodplain subject to frequent flash floods. To this end, DASH has worked with the City of Alexandria to implement several projects that will improve flood resilience and ensure that extreme weather events are less likely to impact DASH service.

Also, the energy consumed by its fleet increases when temperatures are extremely hot or cold. Electric buses, in particular, consume higher amounts of energy during periods of

extreme hot or cold. This can affect the buses' ability to fulfill basic service needs and buses will need to return to the depot earlier for recharging.

PRTC/OmniRide

PRTC/OmniRide has invested in transit resilience and sustainability on multiple fronts, including its zero-emission bus feasibility study, planning for demand response vehicle charging infrastructure, and continuing facility upgrades with LED lighting at the Woodbridge Transit Center. Its customer service department also works 100 percent remote, uses a cloud-based phone system, and is able to provide continuous phone support during storms.

In the winter, severe weather leads to disruptions in normal operations. Predicting snowfall depth is difficult, and PRTC either ends up in one of two situations: running service in adverse conditions and having to retreat if a storm is stronger than predicted, or with decreased ridership because customers do not want to go out in the bad weather. If enough advanced notice is provided, PRTC can adjust schedules accordingly and add back in as weather conditions improve. When schools close, the workforce using commuter services tends to telework more than normal, lowering ridership. PRTC budgets each year for the necessary amount of snow treatment, shoveling, pre-treat, cleanup, etc. The budgeting has remained about the same each year.

During the summer, PRTC is vulnerable to the impacts of heavy thunderstorms. While it typically does not lead to cancellation of service, it does impact on time performance. Accidents or heavy traffic along the highway network will create issues with buses that have to deadhead from far distances in eastern and western Prince William County.

PRTC works closely with the Prince William County Emergency Operations Center (EOC) and routinely meet to go over various scenarios, tabletops, and other regional collaboration meetings with proper DOT's and other agencies. PRTC uses state, local and Federal sources of funding.

Charles County, MD/VanGO

Charles County is taking a slow approach toward transitioning its fleet to zero emissions given that development of light and medium duty battery-electric buses is not happening as quickly as full-sized and articulated buses. It is planning a comprehensive study in FY-2025 to explore how a zero emissions fleet could be deployed and will begin to develop an implementation plan when that is completed.

Maryland Transit Administration/MARC

Weather-related factors continue to impact the operations on all three commuter rail lines, causing delays and train cancellations. Some of the key impacts have been associated with flooding, snow, and extreme heat conditions. These impacts are more severe on Camden and Brunswick lines. For example, in the last quarter of 2023, of all the factors impacting train delays and cancelations, 24 percent were caused by weather reasons on the Brunswick Line, 26 percent on the Camden Line, and 3.2 percent on the Penn Line.

Virginia Railway Express/VRE

While VRE did not complete a risk/vulnerability assessment in FY 2023, it submitted several heat and inland flooding resilience study project concepts to TPB's Transportation Resilience Improvement Plan (TRIP) call for projects. VRE plans to conduct this work in FY 2024. VRE also coordinated with the Virginia Passenger Rail Authority (VPRA) on an additional group of resiliency project submittals to the TRIP that focus specifically on the rail and track bed infrastructure that VRE does not own or control, but relies on to operate service, primarily on the Fredericksburg Line corridor.

VRE did not make any revenue or non-revenue vehicle investments or procurements in low/zero emission vehicles in FY 2023. It has not taken advantage of sustainability or resilience-related grant programs in the past but does plan to apply for PROTECT Planning Grant funding in the next fiscal year to study the effects and proposed mitigation strategies for adverse weather events such as excessive heat and inland flooding. These proposed studies are included in TPB's TRIP project list.

VRE sees the most significant disruptions to service due to high-heat days (when host railroads impose slow orders during PM service, significantly delaying trains) and straight-line wind events that knock down trees across the railbed and block trains. Both types of adverse weather events can cause VRE to cancel or significantly curtail service. The number and severity of these instances have increased in recent years.

USING RENEWABLE AND MORE EFFICIENT ENERGY AT AGENCY FACILITIES

Brookville Smart Energy Bus Depot Relys On Microgrid for Long-term Resilience

Brookville Smart Energy Depot Bus Parking Under Solar Canopy
(AlphaStruxure and Montgomery County, MD/USDOT - FHWA)

In its Climate Action Plan, Montgomery County, MD set a goal of zero greenhouse gas emissions by 2035. As part of reaching that goal, it has committed to transitioning its transit fleet to non-emitting energy types, including battery electric and hydrogen fuel. This strategy requires renovation and development of bus garages that facilitate the charging of electric buses via plug-in chargers and pantographs and fueling of hydrogen buses. Montgomery County decided to go further and create a more resilient infrastructure to support these upgrades, specifically with respect to battery electric buses, at the Brookville Bus Depot via a microgrid that uses various energy types. The microgrid is made up of "2 MW of solar photovoltaic panels, 4 MW of Battery Energy Storage System (BESS), natural gas generators and an electric bus charging system (chargers, dispensers, and charge management)."[14] The "Smart Energy Depot" is not only a step toward a future with cleaner air, it is also a cost-effective solution for charging the county's Ride On transit fleet using solar energy in-house through a public-private EaaS (Energy as a Service) partnership.

Community Solar Carports Installed at Select Metrorail Station Parking Facilities

WMATA has plans to install 11 acres of solar panels and carports at four Metrorail stations along the Green and Orange lines, specifically: Anacostia, Southern Avenue, Cheverly and Naylor Avenue.[15] As described, "the solar carports [will] collectively generate around 10 megawatts of electrical capacity for the region. This is equivalent to generating power used by at least 1,100 homes annually."[16] These solar carports not only put into action the agency's commitment to sustainability but also serve as a revenue source for WMATA. The power generated will be added to the broader electrical grid and sold to users. The transit agency receives lease payments from the carports' owner for the use of Metro land.[17] The carports themselves also incorporate modern infrastructure for station parking lots that make it safer for users, including LED lighting, emergency phones, security cameras, weather-shielding canopies, and more. As of December 2023, the solar carports at the Anacostia and Southern Avenue stations were completed and active.

Solar Carports at the Naylor Road Metrorail Station's Parking Lot (Pierre Gaunaurd/TPB)

WORKING TOGETHER AS A REGION TO ADDRESS A COMMON THREAT

TPB has committed additional resources in recent years to examining the impacts of natural hazards and extreme weather on the National Capital Region, for example in its Resiliency Study and Whitepaper for the Visualize 2045 long-range transportation plan in Fall 2021 and subsequent webinars in 2022.[18] As part of this increased focus, and as a result of these foundational analysis, the TPB formalized its transportation resilience program in 2022 with the hiring of its first resilience planner and initiation of the region's first Transportation Resilience Improvement Plan (TRIP).

The TRIP consists of a vulnerability assessment of the NCR's transportation infrastructure to select natural hazards as well as a list of projects submitted by member jurisdictions and agencies that address identified risks and vulnerabilities in the transportation network. Unlike with the TPB's federally-required Transportation Improvement Plan (TIP), there is no obligation for a project's successful funding that it be included in a state's or MPO's TRIP; however, by submitting its transportation resilience related project for inclusion in a TRIP and MPO's long-range plan (MTP), the submitting party qualifies to reduce its local share of costs by seven (TRIP) and three percent (MTP), if it were awarded a federal PROTECT grant.[19] Many transit agencies and their supporting jurisdictions in the NCR have actively participated in the TPB's Transportation Resilience Working Group and provided input in the development of the region's TRIP.

Other regional organizations have also been active in helping local transit agencies and regional partners coordinate and collaborate their resilience and sustainability efforts. Two related to transit within the National Capital Region include the National Capital Bus Leaders Committee's Zero Emission Bus Subcommittee and NVTC's Zero-Emission Bus Working Group. Both have gathered representatives from transit agencies across the region (for NVTC, specifically within Northern Virginia) to learn from one another's fleet transition work and discuss opportunities for collective

action and planning. TPB continued its own convening of member jurisdictions and related agencies working on resilience improvements through an ongoing working group (begun as a means of informing development of the TRIP) and at a Regional Transportation Resilience Forum held in October 2023.

PART 7 - TRANSPORTATION PLANNING BOARD ACTIVITIES

This section details the activities of the Transportation Planning Board, the federally designated metropolitan planning organization (MPO) for the National Capital Region. These include, but are not limited to, ongoing work within the Regional Public Transportation Subcommittee (RPTS), performance-based planning and programming (PBPP) responsibilities, and Visualize 2045 and 2050, the region's current and upcoming long-range transportation plans.

Members of the TPB Regional Public Transportation Subcommittee and VRE staff participate in a site visit to VRE's Broad Run Yard in May 2023. (Pierre Gaunaurd/TPB)

TPB REGIONAL PUBLIC TRANSPORTATION SUBCOMMITTEE (RPTS)

The subcommittee was formed by resolution of the National Capital Region Transportation Planning Board (TPB) on January 17, 2007, as the Regional Bus Subcommittee. Its mission was to provide a permanent process for the coordination of bus planning throughout the Washington region, and for incorporating regional bus plans into the long-range transportation plan. The subcommittee reports to the TPB Technical Committee of jurisdictional staff on issues and interests of the region's public transportation providers.

In response to MAP-21 and the requirement for increased representation of public transportation on metropolitan planning organizations (MPOs), the TPB passed a resolution in September 2014 declaring itself in compliance with MAP-21, but also calling for further dialogue and the reconstitution of the TPB's Regional Bus Subcommittee as the Regional Public Transportation Subcommittee (RPTS) to include all regional providers of public transportation. The mission, goals, and membership of the reconstituted subcommittee were approved by the TPB Technical Committee and an annual "State of Public Transportation" report was to be developed to communicate public transportation provider interests to the TPB.

Membership of the Regional Public Transportation Subcommittee includes representatives from all transit operators in the region as well as the departments of transportation and other regional transportation agencies. Private providers are encouraged to use the forum of the Subcommittee to highlight their strategic transportation needs with the TPB.

The Subcommittee coordinates with and engages the public transportation services in the region. Topics discussed at RPTS Meetings in 2023 include:

TPB Activities and Products:

- TPB High-Capacity Transit Needs Webmap Development
- PBPP Transit Asset Management Targets
- Transit Project Air Quality Conformity Inputs
- Regional Electric Bus Infrastructure Overview
- Enhanced Mobility Grant Solicitation
- Regional Transit On-Board Survey Coordination

WMATA Activities and Products:

- Regional Partnerships for Bus Priority Expansion
- Local Workforce Recruitment, Retainment, & Scheduling
- Better Bus Initiative – Visionary Network Unveiling
- Updates on WMATA Joint Development Projects

Other Regional Transit Provider and Local Government Activities:

- DASH: Update on Network Redesign & Free Fare Program
- DDOT Bus Priority Program Update
- VRE Update
- Alexandria's Duke Street in Motion Project
- Arlington Transit's Updated Transit Strategic Plan

- Takoma Park: Bus Stop Improvement Study (Update)
- DC DFHV: Assessment of DC Connect Microtransit
- Cool Green Bus Shelters in Hyattsville
- DDOT Bus Priority Program Update
- Strategic and Service Planning Updates at Fairfax Connector
- Agency updates from Frederick Transit, Loudoun County Transit, OmniRide, and VRE
- Local Workforce Recruitment, Retainment, & Scheduling

Other Regional Plans and Activities:

- MARC's Brunswick Line Study and Operations Update
- Transforming Rail in Virginia and Related Projects
- Greater Washington Partnership Bus Transformation 2023 Progress Report
- National Center for Smart Growth's Equitable TOD Along the Purple Line Corridor Study
- ULI Washington's Technical Assistance Program for TOD
- Eastern Panhandle Transit Authority's Silver Line Connection

National Organization and Transit Provider Activities:

- Transit Workforce Center's Development Programs and Dashboard
- APTA's March 2023 Transit Workforce Shortage Study
- RTD Denver's 2023 Systemwide Fare Study and Equity Analysis
- Evolution of Fare Free Transit in Albuquerque
- SEPTA's Expanding Key Advantage Fare Program
- Amtrak's Terminal Infrastructure Plan

All documents can be found at the RPTS events page via the link below:
https://www.mwcog.org/events/2023/?F_committee=165

PERFORMANCE BASED PLANNING AND PROGRAMMING

Transit Asset Management

Transit asset management (TAM) is federally defined as "a strategic and systematic process of operating, maintaining, and improving public transportation capital assets effectively through the life cycle of such assets."[20] In accordance with federal requirements, providers of public transportation must adopt annual targets for the performance of their transit assets.

Regional TAM targets were developed for adoption by TPB initially in 2017, and subsequently in 2019 and 2022. The setting of TAM targets is one of the requirements of the performance-based planning and programming (PBPP) rulemakings enacted by the federal government in accordance with the MAP-21 and FAST Act surface transportation acts.

Annual TAM targets are adopted by the region's providers of public transportation. MPOs are not required to prepare annual TAM targets and are only obligated to prepare regional targets whenever a Metropolitan Transportation Plan (MTP) or Transportation Improvement Plan (TIP) is updated. There is also no prohibition against maintaining existing regional TAM targets, although the FTA encourages that target setting be done in close coordination with state DOTS and local partners to ensure alignment.

To date, TPB staff, in consultation and coordination with the region's providers, have proposed a set of TAM targets for the region that summarize the reported targets of all agencies in table or matrix format. This summary table of TAM targets is then adopted by the TPB as the set of regional TAM targets. Per FTA guidance, the regional TAM targets are developed as a single regional target for each asset class. Regional targets are developed by calculating the total inventory in each asset class and the associated target based on the targets of each the region's providers of public transportation.

Transit Safety Targets

In an effort to improve transit safety and security performance, select public transportation agencies are required to annually report targets for a series of related safety metrics. Unlike the TAM targets which apply generally to public transportation providers, transit safety targets (and potentially a public transportation safety plan) are only required from agencies that receive Section 5307 funding, per FTA guidance. MPO reporting requirements are similar to that for TAM targets. Regional transit safety targets are only required to be prepared for any MTP update and do not have to be set annually.

Since beginning its transit safety program, TPB has set annual transit safety targets. These targets are based on transit safety and security data collected directly from public transportation providers and from data previously reported by those agencies to the FTA and publicly available on the NTD. Target calculation formulas account for total incident targets in each assigned category, per transit mode, as well as the sum of vehicle revenue miles, using the totals set by each applicable provider.

SPECIAL PROJECTS

COG CAO Transit Funding Report

With the assistance of TPB staff, COG prepared and published an Interim Report by the NCR's Chief Administrative Officers (CAO) Workgroup on WMATA's Cost Structure in December 2023. This workgroup studied WMATA's funding issues, reviewed various opportunities for covering its deficits, and examined the structural concerns that would need to be addressed to reach a more sustainable financial picture. This effort was organized, in part, due to significant revenue decreases as a result of reduced transit ridership during the Covid-19 pandemic, and inflationary cost increases. In addition, federal relief funding was limited and would expire after a few more years requiring that there be a regional plan for keeping transit financially afloat. The Interim Report acknowledges that this was only one step and further collaboration between regional partners would be required in the immediate term to improve WMATA's fiscal health in the long-term.

High-Capacity Transit Local Accessibility Study

In 2023, the TPB began a deeper study of the geographies around existing high-capacity stations (HCT) stations to more clearly determine station accessibility to-and-from various points of interest and local transit connections. By helping TPB and jurisdictional staff and the public better understand the areas around HCT stations, this project supported the progress of multiple TPB priority strategies including expanding bus rapid transit and transitways, moving more people on Metrorail, and improving pedestrian and bike access to transit connections. This analysis used a Network Analysis tool (the R5 routing engine with OpenStreetMap and GTFS data) to more accurately navigate local street grids and available infrastructure and explore practical connectivity to HCTs.

The resulting HCT Study Web Hub is a powerful tool with various sub-analyses and data points that can give land use and transportation planners a holistic view of what the current state and needs of HCT zones are.

Intercity Travel Desk Review

In Spring 2023, TPB staff performed a desk study of the state of intercity travel in the NCR. It began with a review of the previous TPB analysis of intercity travel in 2016 and updated the preexisting inventory of operators in that sector. Using the open-source information for trips served by those operators, an analysis was performed of popular routes, the busiest travel days, the various types of amenities available to customers at stops, and more. This analysis revealed that the most trips (as summed between all operators) are offered along the DC to New York City corridor and that this corridor is served from stops across the metropolitan DC area. Intercity travel stops in the NCR also range significantly from the amenity-laden Union Station in Washington, DC, to curbsides and gas stations. At the end of 2023, a more in-depth follow-up to this project was launched that would also involve intercity travel customer surveys among other expanded methods.

TECHNICAL ASSISTANCE

Transportation-Land Use Connections (TLC)

The Transportation-Land Use Connections (TLC) program offers project-based technical assistance to member jurisdictions via consultants. TLC awards go to projects that promote mixed-use and walkable communities, and further a wider range of transportation options. The program grants selected projects award amounts that vary from up to $80,000 for planning projects and up to $100,000 for preliminary design and engineering work. These grants, paid directly to the consultants, help members complete early project work that can facilitate future grant applications and quicker project delivery.

With regard to transit-related projects, TLC grants were awarded in FY 2024 to Montgomery County for a Ride On Flex Microtransit Post-COVID Study and to Prince George's County for the development of a Bus Stop Safety and Accessibility Prioritization Tool.

More information on TLC projects is available at: https://www.mwcog.org/transportation/planning-areas/land-use-coordination/tlc-program/

Transit Within Reach (TWR) Program

Transit Within Reach is another technical assistance program operated by TPB. It grants consultant assistance for preliminary to 30 percent engineering and design work on projects that help create better bike and pedestrian connections to local transit. Only TPB member jurisdictions may submit project proposals and the projects must have already undergone a planning process toward implementation. The amount of the award per project can vary per year and is paid directly to the consultants. The solicitation period for this program opens every two years through FY 2026. FY 2022 was the first grant cycle of the program. In FY 2024, $250,000 of funding was approved for three projects split across Washington, DC, Maryland, and Virginia. These grants help further development of road diet, shared-use path, and sidewalk safety projects.

More information on TWR projects is available at:
https://www.mwcog.org/transportation/programs/transit-within-reach-program-/

VISUALIZE 2045

Visualize 2045 is the federally mandated, long-range transportation plan ("Plan") for the National Capital Region. The Plan underwent its federally mandated quadrennial update, which was approved in June 2022. The Plan includes additional items like TPB's aspirational initiatives, new programs, and policies like added language in the air quality analysis resolution to increase the region's commitment to addressing climate change within the transportation sector.

The Visualize 2045 update is organized into nine chapters:

1. About the Plan: provides an overview of the regional planning process and how the plan was developed.
2. Where Are We Today?: describes the regional context of geography, demographics, population, jobs, cultural, social, and environmental conditions.
3. Visualizing Our Future Together: describes the goals and priorities TPB uses to guide planning in the region.
4. What Factors Affect Our Future?: examines factors that impact communities and the transportation network.
5. How Do We Engage the Public?: summarizes the "Voices of the Region" public engagement used for the 2022 update
6. Strategies for a Brighter Future: describes planning activities and strategies TPB is using to improve the transportation network for all users.
7. Funding the Transportation System: provides an overview of transportation funding and financial planning in the region.
8. Planning for Performance: describes the TPB performance planning activities and congestion management process that aim to reduce congestion and pollution.
9. What Happens Next?: visualizes the future challenges the region faces to achieve the goals outlined in the plan and what actions are necessary to achieve the best future for the region.

VISUALIZE 2050

In June 2021, the TPB passed a resolution requiring an updated Plan to be submitted for approval in 2024. This updated Plan was set into motion ahead of the federally required quadrennial schedule (which would have meant a deadline of 2026) for two primary reasons. First, the aforementioned TPB Resolution R19-2021 specifically called for the plan to be updated sooner than 2026, with a target date of 2024.[21] Second, to maintain the required 20-year horizon past year 2025, the TPB would need to update the Plan to include a year 2050 planning horizon.[22]

Work on this updated Plan (known as Visualize 2050), began in late 2022. Throughout 2023, TPB staff outlined the schedule for development of the new metropolitan transportation plan (MTP), organized internal resources for content creation, and coordinated with local jurisdictions to collect project inputs as part of the plan's zero-based budgeting strategy (ZBB).

As part of that ZBB approach, jurisdictions and agencies were asked to resubmit all relevant projects for consideration in the new MTP and Air Quality Conformity Analysis (AQC), as well as any new

projects, but exempting any "projects currently under construction or currently funded with federal, state, regional, local or private funds."[23] This helped give planning staff and the TPB a clearer understanding of not only the current projects under consideration across the region but also how these projects align with the TPB policy framework, priorities, and goals. Preliminary project inputs, including those deemed to be significant for regional air quality, were collected in 2023.

As of December 2023, Visualize 2050, the AQC, and the FY2026-2029 TIP were scheduled for adoption by the TPB in June 2025. Although originally planned for approval at the end of 2024, TPB staff recommended more time be allotted to account for the complexity of some of the biggest projects in the plan.

APPENDIX

The report's appendix is divided into sections reflecting extra information significant to the content of the main report. This includes the report's research methodology, supplementary data, and references and credits.

A.1 METHODOLOGY

Data Sources

Data for the State of Public Transportation report was gathered using mixed methods, including: questionnaires sent to RPTS member jurisdictions and transit agencies, follow-up correspondences via e-mail, research of primary and secondary sources such as transit agency websites, equipment manufacturer websites, federal NTD Agency Profiles and other databases, news media, press releases, transit agency videos and agency-related videos on YouTube, transit agency social media (including X (formerly Twitter) posts and Facebook pages), publicly available transit development plans, fleet management plans, transit strategic plans, comprehensive plans, progress reports, board presentations, meeting minutes, and more.

National Transit Database (NTD)

Congress established the NTD to be the Nation's primary source for information and statistics for U.S. transit systems. Federal law requires that recipients or beneficiaries of grants from the FTA under the Urbanized Area Formula Program (§5307) or Other than Urbanized Area (Rural) Formula Program (§5311) submit data to the NTD.

Where information appears from the NTD Agency Profiles, the data is from FY 2022, not FY 2023. The annual profile updates are released by the Federal Transit Administration every fall after the year for which the data is applicable. This timeline means that the NTD data that is applicable to the CY of this report will typically not be available until after the corresponding edition of this report is published. Therefore, although this State of Public Transportation report is largely concerned with transit industry activities from CY 2023, the data available from the NTD for relevant agencies, at the time the report was first started, was from FY 2022 and that is what appears in the report where cited unless otherwise stated.

Data Decisions

Where the data obtained for a particular metric (e.g., bus stop total, fleet count) varied between different sources, the total provided directly by the transit agency (if available) was the one chosen for this report. Otherwise, the most recently provided metric available in a transit agency produced document (including by an agency contractor) is used. Finally, if neither of those are available, the most recent metric totals available using secondary sources (e.g., news articles, reports produced by third parties) were used. For the purposes of this report, "recently" means the data that is most up to date as of December 2023, or closest to that date (whether before or after it). For bus fleet totals, all buses actively in service and available for service were included in the total count. This included buses that were expected to arrive for service within 2023 and could be verified as received. This distinction is particularly relevant for new electric buses.

A.2 AGENCY REVENUE DATA (FROM NTD FY 2022)

Figure 5: NCR Transit Agencies' Revenue Sources, By Agency - 2022 NTD

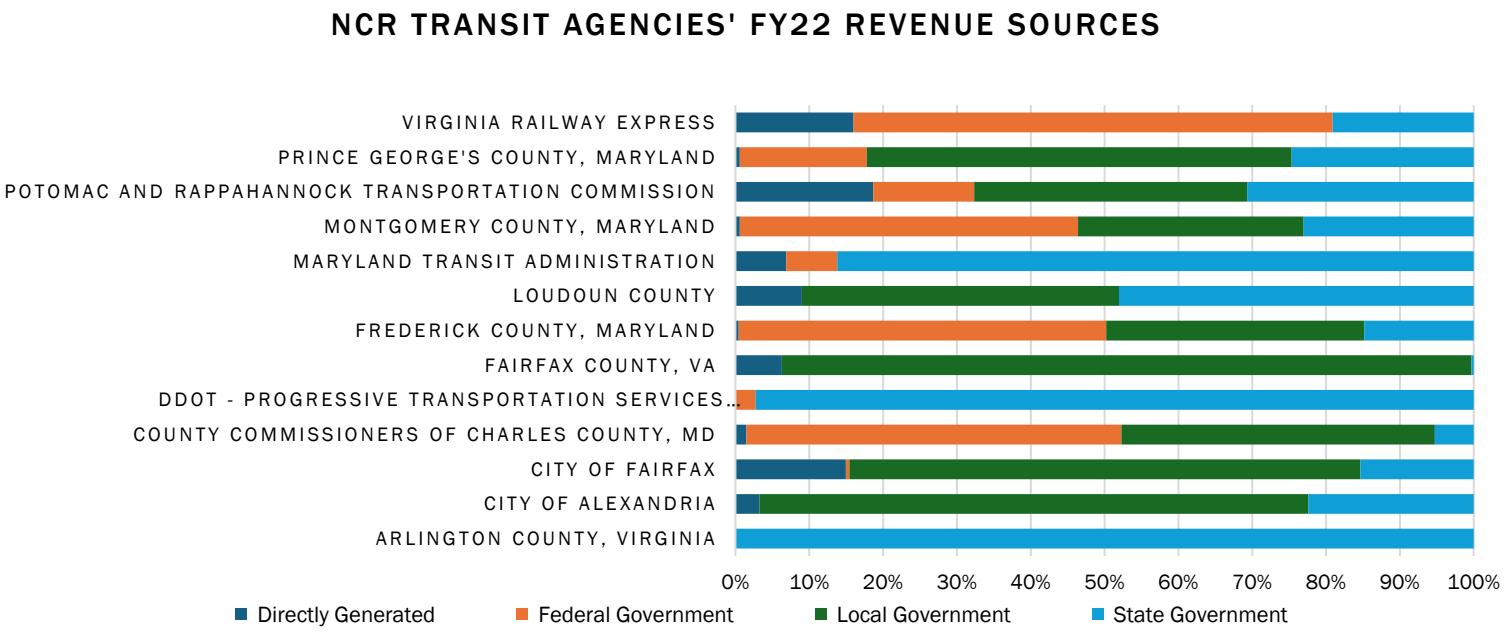
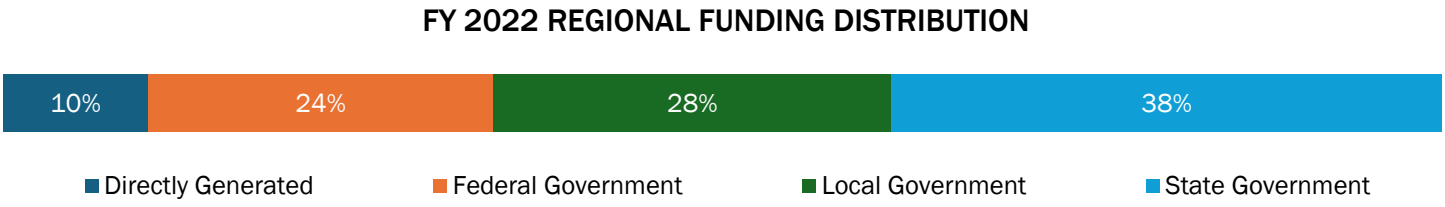


Figure 6: NCR Transit Agencies' Aggregate Revenue Source Distribution, By Revenue Source, 2022 NTD



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