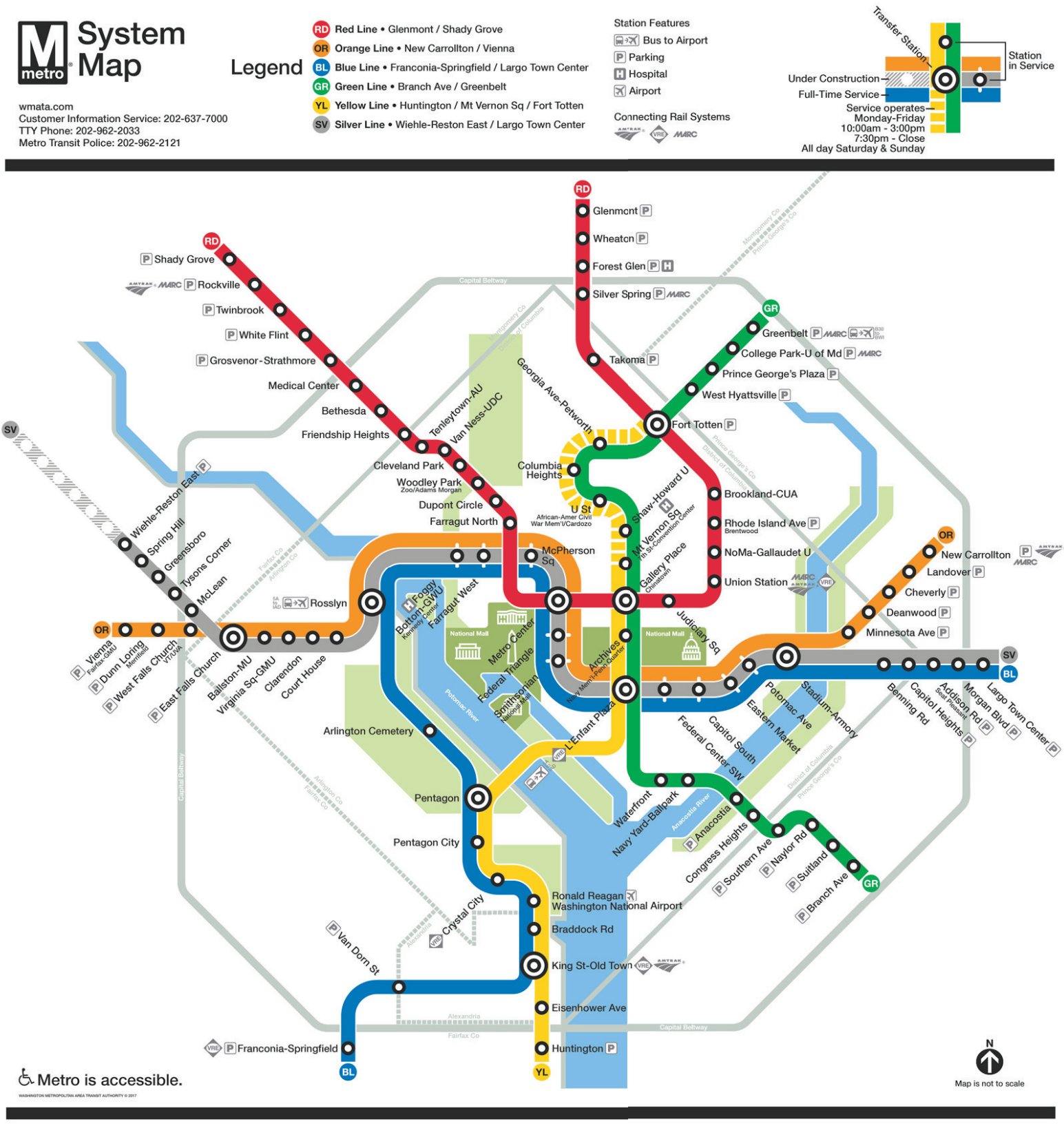
REBUILDING, REFORMING & IMPROVING REGIONAL TRANSIT

FY2019 APPROVED BUDGET

EFFECTIVE JULY 1, 2018



WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY



On the cover

Metro's new state-of-the-art Cinder Bed Road facility in Lorton, VA is scheduled to open in 2018. Nine bus lines and 80 buses will operate from the facility.

Fiscal Year 2019 Approved Budget

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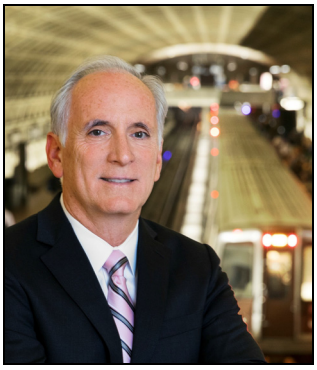
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Rebuilding, Reforming, and Improving Regional Transit



Despite the challenges of delivering safer, more reliable service after decades of chronic underinvestment, Metro remains a powerful economic engine that drives the region's economy. Nearly 30 percent of the region's property tax base and more than half of the jobs are located within a half mile of either a Metrorail station or a Metrobus stop. Metro is the region's 10th largest employer and provides 300 million customer trips per year.

In recognition of Metro's importance as a transportation and economic asset, regional funding partners came together this year to create the first dedicated capital revenue program in the Agency's history. New legislation in the State of Maryland, the Commonwealth of Virginia and the District of Columbia will provide $500 million annually for a Capital Trust Fund. This fund will help Metro launch a vital 10-year, $15.5 billion capital investment program.

Metro's FY2019 approved budget funds a safer, more reliable, and fiscally-responsible transit service for the National Capital Region. Importantly, the $3.2 billion budget does not raise fares or reduce service. The budget provides funding to improve the customer experience, including a Rush Hour Promise guarantee – the only one of its kind in the industry – which automatically credits rail customers for trips that are delayed more than 15 minutes.

Our Board, employees and other stakeholders are working together to make a significant difference in reliability and performance. Nearing the end of FY2018, we are seeing the results:

- 9 out of 10 rail trips now arrive on time
- Bus on-time performance is at 79 percent
- Railcar performance the highest in eight years, with customer offloads down 40 percent
- Escalator performance is at 94 percent availability
- Customer experience has improved with free Wi-Fi, cellular service, and brighter and cleaner stations

The FY2019 budget includes $1.3 billion of capital investment for the fiscal year, and $8.5 billion over six years, to continue progress toward Metro's critical capital improvement objectives. These include:

- Complete delivery of new 7000-series railcars to replace older, less reliable trains;
- Procurement of new buses and paratransit vehicles
- Additional rehabilitation of track infrastructure and stations, traction power improvements, new radio communications and wireless systems improvements

In April 2017, I announced a plan to Keep Metro Safe, Reliable and Affordable. The plan calls for 10 actions to restore Metro to a state of good repair with long-term financial sustainability. This budget reduces costs through management actions and competitive contracting, which limits the growth of jurisdictional operating subsidy for Metro to three percent, or $29 million in FY2019 – substantially less than the 16 percent subsidy increase in FY2018.

The budget does not fund wage increases for the workforce – subject to the outcome of the binding arbitration process underway – the extension of all Red Line trains to Shady Grove, Silver Line Phase 2 service or new bus services, which may be funded on a discretionary basis by the jurisdictions.

With capital funding in hand, and with the support of our customers, regional partners and Board of Directors, Metro and its employees now begin the hard work of rebuilding, reforming and improving transit for the region.

Paul J. Wiedefeld

General Manager and Chief Executive Officer

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Board of Directors

The Washington Metropolitan Area Transit Authority is governed by a 16-member Board of Directors composed of eight Principal and eight Alternate members. The District of Columbia, Maryland, Virginia and the Federal Government each appoint two Principal and two Alternate members. Below are the members currently serving on the Board.



Jack Evans, Chair

Appointed to the Board as a Principal Director in January 2015 representing the District of Columbia. Mr. Evans has served on the Council of the District of Columbia (Ward 2) since 1991. Mr. Evans currently serves as Chair of the Board Executive Committee. He also serves on the Finance & Budget Committee.



Jim Corcoran, Second Vice Chair

Appointed to the Board as a Principal Director in February 2015 representing the Commonwealth of Virginia. Since April 2010, Mr. Corcoran has served as President and CEO of the Fairfax County Chamber of Commerce. He currently chairs the Board Capital & Strategic Planning Committee and serves as Second Vice Chair on the Executive Committee.



Steve McMillin

Appointed to the Board as a Principal Director in July 2017 representing the Federal Government. Mr. McMillin is a partner in the economic and public policy consulting firm US Policy Metrics LLC. Previously he was Deputy Director of the Office of Management and Budget. He also served the U.S. Senate for two years as financial economist. Mr. McMillin is Federal Representative on the Board Executive Committee and also serves on the Finance & Budget Committee.



Corbett A. Price

Appointed to the Board as a Principal Director in March 2015 representing the District of Columbia. Mr. Price currently serves as Chairman and CEO of Quantix Health Capital, LLC. Additionally, he chairs the Board Business Oversight Committee.



Michael Goldman

Appointed to the Board as a Principal Director in June 2013 representing the State of Maryland. Mr. Goldman has practiced in the areas of international, antitrust and transportation law. Mr. Goldman chairs the Board Finance & Budget Committee.



Catherine Hudgins

Appointed to the Board as a Principal Director in 2008 representing the State of Virginia. Mrs. Hudgins served as Chair in both 2011 and 2012. She joined the Board in January 2004 as an Alternate Director. She was first elected to the Fairfax County Board of Supervisors in November 1999 and is currently serving her third term. Mrs. Hudgins currently serves on the Board Safety & Service Delivery Committee.



David Horner

Appointed to the Board as a Principal Directors in July 2017 representing the Federal Government. Mr. Horner is a partner with the law firm Hunton & Williams LLP. He also served as Deputy Assistant Secretary for Transportation Policy and Chief Counsel of the Federal Transit Administration. Mr. Horner currently serves on the Board Business Oversight Committee.



Tom Bulger

Appointed to the Board as an Alternate Director in July 2011 representing the District of Columbia. Mr. Bulger is President of Government Relations Inc., and has been a federal advocate and policy consultant. He currently serves on the Board Capital & Strategic Planning Committee.



Malcolm Augustine

Appointed to the Board as an Alternate Director in July 2015 representing Prince George's County, Maryland. Mr. Augustine is a multi-channel marketing, sales, analytics and customer relationship executive in the direct marketing sector with expertise in higher education, non-profit, and healthcare at Intra Mail Network. Mr. Augustine serves on the Board Capital & Strategic Planning Committee.



Christian Dorsey

Appointed to the Board as an Alternate Director in January 2016 representing Arlington County, Virginia. Mr. Dorsey was elected to the Arlington County Board in November of 2015. He also represents Arlington on the board of the Metropolitan Washington Council of Governments and serves as one of three Arlington commissioners of The Northern Virginia Transportation Commission (NVTC). Mr. Dorsey serves as Vice Chair of the Board Finance & Budget Committee.



Robert Lauby

Appointed to the Board as an Alternate Director in June 2016 representing the Federal Government. Mr. Lauby has 37 years of railroad and rail transit experience involving safety, security, accident investigation, project management, project engineering, manufacturing, and vehicle maintenance. He currently serves as Associate Administrator for Railroad Safety and Chief Safety Officer with the Federal Railroad Administration (FRA). Additionally, he serves as Chair of the Board Safety & Service Delivery Committee.



Jeff Marootian

Appointed to the Board as an Alternate Director in September 2017 representing the District of Columbia. Mr. Marootian is the Interim Director at the District Department of Transportation (DDOT). He joins DDOT from the US Department of Transportation, where he served under the Transportation Secretary from 2013 to 2017. Mr. Marootian currently serves on the Board Finance & Budget Committee.



Kathy Porter

Appointed to the Board as an Alternate Director in January 2011 representing Montgomery County, Maryland. Ms. Porter was Mayor of the City of Takoma Park, Maryland, from 1997 to 2007. Currently, Ms. Porter serves on the Board Business Oversight Committee.



Paul C. Smedberg

Appointed to the Board as an Alternate Director in January 2016 representing the Commonwealth of Virginia. Mr. Smedberg was first elected to the Alexandria City Council in 2003 and was re-elected for a fifth term in November of 2015. He is currently the Director of Advocacy & Government Affairs at the American Academy of Physical Medicine & Rehabilitation. Mr. Smedberg serves as Vice Chair of the Board Business Oversight Committee.



Anthony E. Costa

Appointed to the Board as an Alternate Director in July 2014 representing the Federal Government. Mr. Costa is currently Senior Advisor to the Administrator of the General Services Administration (GSA) and is leading GSA's efforts to help direct federal real estate activities to encourage the provision of environments where communities and employees live and work. Mr. Costa serves as Vice Chair of the Board Capital & Strategic Planning Committee.

GOVERNMENT FINANCE OFFICERS ASSOCIATION

Distinguished Budget Presentation Award

PRESENTED TO

Washington Metropolitan Area Transit Authority

District of Columbia

For the Fiscal Year Beginning

July 1, 2016

Executive Director

Chapter 1 - Introduction



History in Brief

The Washington Metropolitan Area Transit Authority (WMATA), commonly referred to as Metro, was created in 1967 through an interstate compact among the District of Columbia, Maryland and Virginia. Construction of the Metrorail system began in 1969, and the first phase of Metrorail operation began in 1976.

Metro added a second transit service to its network in 1973 when, under direction from the United States Congress, it acquired four Washington-area bus systems and merged them to create Metrobus.

In 1994, as mandated by the Americans with Disabilities Act, Metro began providing MetroAccess paratransit service for people with disabilities who are unable to use the fixed route transit service.

Metro completed the originally planned 103-mile Metrorail system in early 2001. In 2004, Metro expanded the rail system, opening the Blue Line extension to Largo Town Center, as well as the NoMa- Gallaudet U station on the Red Line. These expansions increased the Metrorail system to 86 stations and 106 miles.

In March 2009, Metropolitan Washington Airports Authority (MWAA) started construction on the Silver Line, a 23-mile rail extension in Fairfax and Loudoun Counties in Virginia. Supported by a Full-Funding Grant Agreement from the Federal Transit Administration, toll revenues, and other revenues from funding partners, phase 1 opened on July 26, 2014 with 11.6 miles and five new stations extending service to Tysons Corner and Reston. Phase 2, an additional 11.4 miles with six new stations, will provide service to Dulles International Airport and Loudoun County. Construction on Phase 2 is expected to be complete in FY2020, with revenue service projected to begin during the fourth quarter.

The Silver Line is Metro's largest rail expansion project since the opening of the National Airport to Stadium-Armory segment in 1977.

Key Metro Facts

- Metro's service area size is approximately 1,500 square miles with a population of approximately four million people.
- Metro's transit zone consists of the District of Columbia, the Maryland counties of Prince George's and Montgomery, and the Northern Virginia counties of Arlington, Fairfax and Loudoun and the cities of Alexandria, Fairfax and Falls Church.
- Average weekday passenger trips on Metrorail, Metrobus, and MetroAccess total approximately 1.0 million.
- More than half of Metrorail stations serve federal facilities, and over a quarter of Metrorail trips on an average weekday are taken by federal employees.

Metro has one of the most active joint development programs in the nation and has spurred over $235 billion in economic activity at and around its stations.

Metrorail

The Metrorail system is a rapid transit system that consists roughly of 118 route miles, 91 passenger stations and a fleet of over 1,200 railcars. Starting in FY2018, service is operated 5:00 am to 11:30 pm Monday through Thursday, 5:00 am to 1:00 am on Fridays, 7:00 am to 1:00 am on Saturdays, and 8:00 am to 11:00 pm on Sundays. The system is comprised of three main types of structures: underground, surface and elevated. The underground sections consist of 50.5 route miles and 47 stations, the surface sections comprise 58 miles and 38 stations, and the elevated sections consist of 9.2 route miles and 6 stations. While there are three types of structures, they operate as one unified system providing seamless service to passengers. All Metrorail stations and railcars are accessible to disabled passengers and compliant with the Americans with Disabilities Act (ADA).



Metrorail service is operated on six lines: Blue between Franconia-Springfield and Largo Town Center; Green between Branch Avenue and Greenbelt; Orange between New Carrollton and Vienna; Red between Glenmont and Shady Grove; Yellow between Huntington and Fort Totten; and Silver between Wiehle-Reston East and Largo Town Center.

Metrorail is projected to provide 173 million passenger trips in FY2019.

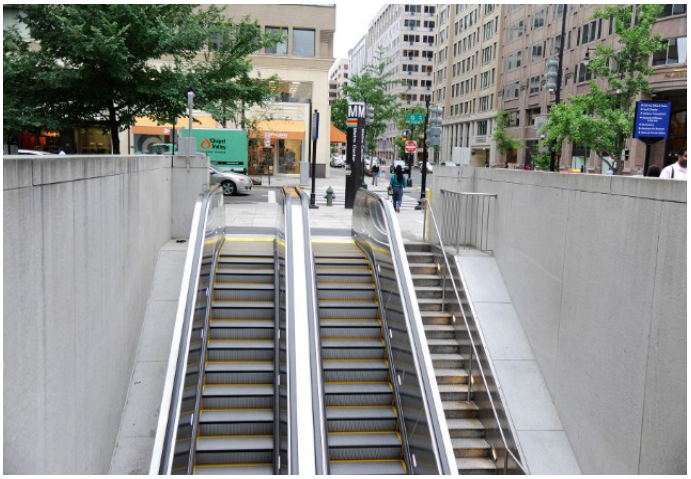
The first Metrorail line opened was the Red Line consisting of 4.6 miles from Farragut North to Rhode Island Avenue. By July 1977, the Blue and Orange Lines were added with service between National Airport and the Stadium-Armory. This added 11.8 miles and 17 new stations to Metro's rail operation. With continued development, in 1983 the Yellow Line was added with service from Gallery Place-Chinatown to the Pentagon, adding 3.3 miles and one station. In 1991, the Green Line was added providing service from Gallery Place to U St/ African-American Civil War Memorial/Cardozo. In 2001, the Green Line was extended to Branch Avenue, and in 2004, the Blue Line was extended to Largo Town Center and the NoMa-Gallaudet Station on the Red Line opened to passengers. The table below provides a list of all openings.

The system is equipped with communication systems that facilitate the flow of information to and from passengers. The Metrorail operations control center is equipped with two-way radios for communication with all train operators in service, as well as hotlines to the police and fire departments in all of the jurisdictions served by Metro. Public address systems on all trains and platforms facilitate communications from Metrorail train operators and station managers. All stations are also equipped with digital signs that show next train arrival times and system status. Passenger-to-train operator intercoms are located inside all rail cars, one at each end, and there are passenger-to-station manager intercoms on all station platforms, landings, and in all elevators. The ongoing radio infrastructure renewal and cellular communications project will upgrade Metro's radio system for Metro workers and first responders and provide cellular capability throughout the tunnels and in stations for customers.

Sequence of MetroRail Openings

Line	Segment	Stations	Miles	Date
Red	Farragut North to Rhode island Ave	5	4.6	03/29/1976
Red	Gallery Pl-Chinatown	1	0	12/15/1976
Red	To DuPont Circle	1	1.1	01/17/1977
Blue/Orange	National Airport to Stadium-Armory	17	11.8	07/01/1977
Red	To Silver Spring	4	5.7	02/06/1978
Orange	To New Carrollton	5	7.4	11/20/1978
Orange	To Ballston- MU	4	3	12/01/1979
Blue	To Addison Road	3	3.6	11/22/1980
Red	To Van Ness- UDC	3	2.1	12/05/1981
Yellow	Gallery PL - Chinatown to Pentagon	1	3.3	04/30/1983
Blue	To Huntington	4	4.2	12/17/1983
Red	To Grosvenor	5	6.8	08/25/1984
Red	To Shady Grove	4	7	12/15/1984
Orange	To Vienna/Fairfax-GMU	4	9.1	06/07/1986
Red	To Wheaton	2	3.2	09/22/1990
Green	To U St/African-Amer Civil War Memorial/Cardozo	3	1.7	05/11/1991
Blue	To Van Dorn Street	1	3.9	06/15/1991
Green	To Anacostia	3	2.9	12/28/1991
Green	To Greenbelt	4	7	12/11/1993
Blue	To Franconia-Springfield	1	3.3	06/29/1997
Red	To Glenmont	1	1.4	07/25/1998
Green	Columbia Heights to Fort Totten	2	2.9	09/18/1999
Green	To Branch Ave	5	6.5	01/13/2001
Red	NoMa-Gallaudet U	1	0	11/20/2004
Blue	To Largo Town Center	2	3.2	12/18/2004
Silver	To Wiehle-Reston East	5	11.6	07/26/2014

Metrorail's design requires high reliance on vertical mobility through the utilization of elevators and escalators. Most customers access Metrorail via escalators to the train platform, while elevators provide accessibility for persons with disabilities, seniors, customers with strollers, travelers carrying luggage and other riders.



Metro is the single largest vertical transportation operator in North America.

Metro operates more than 900 vertical transportation assets (618 escalators and 317 elevators) and carries approximately two million passengers each weekday. The Wheaton Station on the Red Line has the longest escalator (230 feet) in the Western Hemisphere. The Forest Glen Station, also on the Red Line, is the deepest station in the system (196 feet or 21 stories below street level) with high speed elevators that take less than 20 seconds to travel from the street to the platform.

Metrobus

Metrobus provides safe, reliable and effective service across the National Capital Region. Metrobus operates 164 lines with 255 routes covering over 2,365 street miles of service throughout the region. Service is provided on a combination of local, limited-stop (MetroExtra) and express routes connecting the region to Metrorail; employment, medical and activity centers; schools, colleges and universities; airports; military installations; and commuter rail. Metro utilizes 11,017 bus stops supported by 2,554 shelters owned by 15 separate agencies.

The fleet is comprised of 1,583 buses to meet peak weekday service requirements of 1,249 buses with varying sizes and capacities, and to support maintenance of the fleet. All buses are accessible to people with disabilities, and bike racks are available for use on all buses. Service is provided from nine operating divisions located through out the service area in the District of Columbia, Maryland and Virginia.

Metrobus is projected to provide 111 million trips in FY2019.

The BusETA service provides customers information on Metrobus arrival times at a particular bus stop. It uses satellite technology to find specific locations of a bus and sends the estimated arrival time of the bus to customers via mobile devices. The entire bus fleet is equipped with two-way radio links to the operations control center, emergency radio silent alarms, passenger counters, and automatic vehicle locators. In addition, security cameras are installed on all Metro buses. Metrobus is working to install operator safety shields on all legacy Metro fleet; safety shields are included in new buses.

MetroAccess

MetroAccess ensures the ongoing accessibility of Metrobus and Metrorail for customers with disabilities, and in accordance with the Americans with Disabilities Act (ADA), provides MetroAccess paratransit service for those who are unable to use bus and rail. MetroAccess, a shared-ride, door-to- door service, is offered for the same days, hours, and locations as fixed-route transit, utilizing a fleet of 750 vehicles in FY2019. Service contractors operate the van service and manage the operations control center and quality assurance functions. MetroAccess provides over two million trips each year.



Demand for paratransit service is increasing, as the population of people with disabilities is growing in the region and nationwide. For this reason, it is critical for Metro to accommodate as many customers as possible. Metro provides travel training to assist customers with disabilities in navigating the bus and rail system, while encouraging customers to take full advantage of the many accessibility and safety features. MetroAccess partners with Metrobus and Metrorail to provide group orientations and workshops to educate organizations on how to provide travel training to their clients.

Additionally, Metro has partnered with the jurisdictions to improve the accessibility of bus stops in the region, further enhancing customers' ability to make use of the fixed-route system. Because of these initiatives and Metro's free ride benefit, MetroAccess customers take over 2.4 million fixed-route trips each year.

To keep MetroAccess sustainable for future years, Metro has embarked on a campaign to facilitate the establishment of lower-cost alternatives to MetroAccess. Metro is helping to facilitate the following programs:

- Coordinated Alternatives to Paratransit Services (CAPS), established in 2013, provides transportation service for clients of two human services agencies (HSA) in Maryland between the HSAs main facilities and clients' homes. Service provided under the CAPS project costs Metro 32 percent less per trip than a comparable trip on MetroAccess.
- TransportDC, a taxi alternative to MetroAccess for District of Columbia residents was set up in 2014. Under TransportDC, a jurisdiction-run service, the District is paying 44 percent less per trip than they would have paid Metro for providing the same trips on MetroAccess. As a result, Metro reduced the District's MetroAccess subsidy by 100,000 trips or nearly $5.0 million in FY2017.
- Abilities-Ride, which started in the first quarter of FY2018, is a public-private partnership between Metro and two vendors to provide generally available on-demand and reserve trip service to MetroAccess customers for trips beginning and ending in Maryland. The program is designed to be an alternative for a portion of Maryland-to-Maryland MetroAccess trips. Trips provided by the program are expected to cost Metro 66 percent less than comparable MetroAccess trips.

Oversight

WMATA oversight is provided by a variety of internal and external offices, committees, and administrations. These oversight entities include, but are not limited to, the Federal Transit Administration (FTA), the WMATA Office of Inspector General (OIG), the Department of Internal Compliance (INCP), and various advisory entities. Each entity's oversight roles and responsibilities are described below.

Federal Transit Administration

The FTA is the agency of the United States Department of Transportation that provides financial and technical assistance to local public transit systems. The FTA also oversees safety measures and helps develop next-generation technology research.

The Federal Government, through FTA, provides financial assistance to develop new transit systems and improve, maintain, and operate existing systems. FTA provides and monitors grants to state and local transit providers. These grantees are responsible for managing their programs in accordance with federal requirements, and FTA is responsible for ensuring that grantees follow federal mandates along with statutory and administrative requirements.

On October 9, 2015, FTA assumed the safety oversight responsibilities of the Tri-State Oversight Committee, which was originally created by state-level agencies to jointly oversee rail safety and security at WMATA.

In 2017, the District of Columbia, Maryland and Virginia passed legislation to create the Metro Safety Commission (MSC), which will serve as Metro's State Safety Oversight Agency (SSOA). The creation of an SSOA was required in the Moving Ahead for Progress in the 21st Century Act (MAP-21). Congressional consent of the legislation passed by the three funding jurisdictions has been passed by Congress and signed by the President. The three jurisdictions are in the process of naming Board members and working with the FTA on standing up the MSC. Once the MSC is certified, the FTA will relinquish direct safety oversight of WMATA.

WMATA Office of the Inspector General

The Office of Inspector General, authorized by the WMATA Board of Directors in April 2006, supervises and conducts independent audits, investigations, and reviews of Metro programs and operations to promote efficiency and financial integrity as well as to prevent and detect fraud, waste, and abuse in such programs and operations.

Department of Internal Compliance

The Department of Internal Compliance (INCP) is a proactive business partner that assures Metro carries out its mission with integrity and in accordance with rules, regulations and policies. INCP reports directly to the General Manager/CEO and consists of two compliance offices, QICO and MARC.

Quality Assurance, Internal Compliance and Oversight (QICO) provides independent reviews of Metro's operational and engineering processes and assets; promotes and coordinates the implementation of compliance with internal and external regulatory requirements; furthers quality improvement initiatives and action plans that are data driven and results-centric with

the objective of safeguarding the mission and success of the agency while enhancing the customer experience.

Management Audits, Risk and Compliance Office (MARC) provides independent, objective assessments and reviews of Metro's system of internal controls and underlying business processes with a primary focus on financial management and internal business operations. Reviews and assessments are designed to add value and improve Metro's operations by bringing a systematic and disciplined approach to evaluating and improving the management of related risks, internal controls and governance processes.

Advisors

WMATA has three primary advisory groups: the Riders' Advisory Council, the Accessibility Advisory Committee, and the Joint Coordinating Committee. These advisory entities focus on specific issues as described below:

Riders' Advisory Council

In September 2005, the WMATA Board established the Riders' Advisory Council (RAC). The Council provides Metro customers a forum to provide input on bus, rail and paratransit services. The 21-member council includes six representatives from the District of Columbia, Maryland and Virginia, two at-large members, and the chair of WMATA's Accessibility Advisory Committee.

Accessibility Advisory Committee

WMATA's Accessibility Advisory Committee (AAC) was created to address the needs of senior citizens and customers with disabilities. Its efforts have resulted in numerous service upgrades including gap reducers, which make it easier for customers who use wheelchairs to board Metrorail trains.

Joint Coordinating Committee

The Joint Coordinating Committee (JCC) consists of staff members from the jurisdictions supporting WMATA. The JCC was established by the Board of Directors to facilitate the exchange of information between jurisdictions and Metro staff. Meeting agendas are developed by Metro staff and the JCC chairman and include items referred by the Board or Metro staff, as well as items requested by JCC members.

Regional Transit Planning

The Washington Metropolitan Area encompasses over 4,000 square miles in the District of Columbia, suburban Maryland and Northern Virginia; the region is home to almost six million people and over three million jobs.

> *In FY2019, region-wide ridership on Metrorail, Metrobus and MetroAccess is projected to be 287 million trips.*

As the primary transit provider in the region, Metro is integral to the regional transportation planning process. The WMATA Compact gives the Authority the power to adopt a Mass Transit Plan as part of the region's continuous, comprehensive transportation planning process. Metro's regional planning function encompasses the preparation of transit system plans in partnership with other regional transit providers, conducting system-planning analysis and transportation studies, communication of transit needs to regional planning bodies, and participation in planning processes at the regional and sub-regional levels. Metro has a particular responsibility to ensure that the region's transit provider's needs, both capital and operating, are reflected during the establishment of the Mass Transit Plan and that the region achieves a balanced system of transportation.

Metro coordinates with its regional partners to determine transit-based priorities and projects. The WMATA Board of Directors, composed of members from the Compact jurisdictions and Federal Government, helps determine those priorities and provides policy direction. The JCC brings together jurisdictional staff to coordinate on various budget and operational issues in conjunction with Board Committee meetings. Internal planning and programming are designed to work within this institutional framework.

The National Capital Region Transportation Planning Board (TPB) is the federally designated Metropolitan Planning Organization (MPO) to coordinate transportation planning and funding for the Washington region. The TPB serves as a forum for the region to develop transportation plans, policies and actions, and to set regional transportation priorities through the Constrained Long Range Plan (CLRP) and the six-year Transportation Improvement Plan (TIP). The TPB also provides technical resources for planning and policy making. WMATA is one of the implementing agencies in the TPB planning process and is a voting member of the TPB. WMATA is also an active member of the TPB Technical Committee and several subcommittees such as Travel Forecasting, Bicycle and Pedestrian, Regional Bus, Regional Transportation Demand Management Marketing, and Human Services Subcommittee.

The Northern Virginia Transportation Commission (NVTC) administers transit finance and operations in Northern Virginia and coordinates transit service across jurisdictional boundaries. The Northern Virginia

Transportation Authority (NVTA) is responsible for developing a Northern Virginia Regional Transportation Plan which provides long range planning and inter-agency coordination in Northern Virginia. WMATA works with both NVTC and NVTA on important transit funding and corridor development initiatives to enhance public transit service and ensure integration of transit in highway investments and the Department of Transportation (DOT). WMATA also works with the District of Columbia, Maryland, and Virginia on important local plans and project development initiatives to enhance public transit service and ensure integration of transit with roadway investments.

Demographics

Based on the 2010 Census, the population of the Compact jurisdictions currently served by Metro is 3.9 million people across four counties (Montgomery and Prince George's in Maryland, Fairfax and Arlington in Virginia), three cities (Alexandria, Falls Church, and Fairfax in Virginia), and one federal district, which is the ninth largest metropolitan area of the country.

Based on the 2014 American Community Survey (ACS), the demographic profile of the Washington Metropolitan area is as follows:

- 41.1 percent of the population is non-Hispanic white
- 29.3 percent is black or African American
- 15.5 percent is Hispanic or Latino
- 10.9 percent is Asian
- 3.2 percent is Mixed-Other

Economy

Metro's ridership and overall financial outlook are directly influenced by the population, economic conditions, and employment growth in the District of Columbia and the surrounding jurisdictions in Maryland and Virginia.

Job Growth in Metropolitan Washington: According to a May 2016 study by the Metropolitan Washington Council of Governments (COGS) *Trends in Workforce Demand*, while metropolitan Washington has a skilled and educated workforce, there have been concerns in the last few years about the region's economic performance. As other regional economies began to recover from the Great Recession, job growth in metropolitan Washington began to slow. Between the elimination of federal jobs with the enactment of the Budget Control Act of 2011 and loss of federal contracts in the first year of the sequester in 2013, an estimated thirty-six thousand jobs were lost. Employment growth in metropolitan Washington lagged behind the nation from 2012 through 2015.

The 2015 estimates from the Bureau of Labor Statistics' Current Employment Statistics program indicate that while employment increased at the greatest rate (1.9 percent) in a decade in metropolitan Washington, performance is still lagging behind the nation.

Changing Federal Presence: The Federal Government is the largest employer in the region; since 2000, between 11 and 13 percent of employment in metropolitan Washington has been federal. But the structure of the regional economy is changing. COG's regional econometric model projects that the portion of federal employment will decline from twelve percent of employment in 2015 to eight percent in 2045. The Center for Regional Analysis at George Mason University projects that while federal salaries and procurement comprised almost 40 percent of the region's economy in 2010, it is forecast to decline to just under 30 percent by 2020.

Where is Metropolitan Washington's Economy headed: The economic factors of slow job growth and the future outlook of federal government spending impact Metro's forecast for Metrorail and Metrobus ridership. Significant effort is currently underway to diversify metropolitan Washington's economy. Due to slow growth in federal jobs, the Roadmap for the Washington Region's Economic Future identified industrial clusters beyond the Federal Government with the potential to drive metropolitan Washington's economic growth over the next decade. Two of these drivers are professional and business services, which have dominated the region's economy for a long time.

Executive Summary

The approved FY2019 budget totals nearly $3.2 billion and remains grounded in Metro's three priorities: Safety, Service Reliability, and Financial Responsibility. These priorities guided the development of the budget, with safety as the top priority. The budget also does not cut service or increase fares.

Metro faces structural challenges associated with past underinvestment in the maintenance, rehabilitation and replacement of the system's infrastructure and an unsustainable operating model. Additionally, a number of factors continue to impact ridership. Although Metro expects ridership will rebound as new and returning customers experience reliability improvements, the FY2019 budget reflects declining ridership and revenue assumptions based on the ridership realities of FY2018. Reliability challenges, on-going track maintenance programs, recent fare increases and service reductions, low gas prices, and competition from other transportation options have impacted passenger ridership.

Establishing a sound FY2019 operating budget in the face of these structural challenges, compounded by ridership declines, requires management actions to improve efficiency and control costs to limit operating budget expense growth, despite cost growth for legacy commitments, mandates and inflation. With that, the plan to Keep Metro Safe, Reliable and Affordable adheres to a three percent jurisdictional subsidy increase cap.

The budget also reflects increased capital funding requests from local jurisdictions for the FY2019-2024 Capital Improvement Program (CIP). Metro's rate of capital investment continues to improve, with over $1.1 billion invested through the FY2017 CIP, and over $1.2 billion forecasted to be invested in FY2018. The FY2019-2024 CIP Financial Plan assumes continued federal formula grant funding at current levels over the six-year period (while PRIIA funding ends after FY2020), plus over $6 billion of jurisdictional investment in order to achieve the $8.5 billion investment plan.

Budget Highlights

Operating Budget

The approved operating budget for FY2019 is $1.8 billion. The budget is funded with $828.3 million of projected operating revenues, primarily from passenger fares, parking fees, and advertising revenues, and $1.0 billion of jurisdictional contributions. The budget assumes no fare increases, no service reductions, $38.5 million of management actions to reduce expenses and increase business revenues, and a $29.0 million increase in jurisdictional subsidy.

Metro's primary FY2019 budget challenge is declining passenger revenue as ridership continues to decrease. Rail and bus ridership and revenue through the first half of FY2018 were below budget. As this trend is expected to continue, ridership in FY2019 for rail and bus is projected to be four percent below the FY2018 budget, and FY2019 rail and bus revenues are projected to be $25 million below FY2018 budget.

While Metro estimates that some of the riders who reduced their trips on Metro due to SafeTrack are returning, the overall trends are still challenging, and it will take time to rebuild customer trust and confidence in Metro. Rail ridership in FY2019 is expected to equal FY2018 year-end ridership forecast.

Metrobus is not experiencing the same stabilization. Consistent with regional and national trends, bus ridership in FY2018 was below both prior year's actual performance and the FY2018 budget. Further, Metrobus FY2018 revenue was lower than budget. Therefore, the revenue projection for FY2019 has been lowered based on the FY2018 year-end forecast. Improving the customer experience – particularly on-time performance – is critical to reversing current trends.

To stay within the three percent subsidy growth cap, the budget funds legacy commitments, mandates, and inflationary costs. Additional management actions include $25.5 million in base cost reductions, $5.0 million in overtime cost controls, and an $8.0 million increase in non-transit revenues.

The budget reduces costs and facilitates more efficient operations by expanding advertising, increasing parking revenue opportunities, outsourcing where effective, and implementing controls on absenteeism, workers' compensation costs and overtime. While the budget includes certain contractually required step increases for labor, given Metro's financial and structural challenges, it assumes no general wage increase in FY2019. This presents a financial risk for Metro and the jurisdictions given potential labor negotiation outcomes.

Over 70 percent of the Metro operating budget supports personnel costs. To improve management efficiency, in FY2017 Metro eliminated 700 positions, reducing non-essential positions including management and administrative staff throughout the Authority. The FY2018 budget also reduced an additional 100 operations positions associated with right-sizing bus and rail services. Taken together, the reduction of 800 positions represented a six percent reduction in total budgeted headcount. The approved FY2019 budget supports a headcount of 12,260 positions, reflecting an increase of 25 positions for capital projects and 3 position within the Office of Inspector General.

Personnel costs are projected to decline slightly in FY2019, primarily through overtime savings and management actions. Total non-personnel costs will

increase by 1 percent, driven primarily by an $11 million increase in paratransit expense for contract cost escalation, as well as $4 million increase in materials and supplies for railcar parts and safety and reliability improvements.

Capital Budget

The $1.3 billion FY2019 capital budget and $8.5 billion FY2019-2024 CIP focus Metro's capital investment on the safety, state of good repair, and reliability of Metrorail, Metrobus, and MetroAccess assets. The six-year CIP investment priorities include the acquisition of new 7000 series railcars, establishment of radio and wireless communications infrastructure, replacement of buses and paratransit vehicles, rehabilitation and maintenance of railcars and buses to improve and maintain service reliability and continued investment in rail, rail stations and bus system infrastructure to improve safety and address state of good repair backlogs.

The FY2019-2024 CIP assumes that federal formula funding will continue, that PRIIA grant funding ends in FY2020, and that jurisdictional investment increases significantly to address more of the system's safety, state of good repair, and reliability needs. Of the total $8.5 billion in funding required over the six years $6.3 billion will come in the form of state and local contributions, including local match for grants and system performance funding.

Metro's CIP is grouped into six major investment categories: Railcars, Rail Systems, Track & Structures, Stations & Passenger Facilities, Bus & Paratransit, and Business Support. These investment categories are further subdivided into 17 program areas. Within these CIP categories and programs are four types of capital investments: Safety, State of Good Repair & Minor Projects; Major Active Capital Projects; Development & Evaluation Initiatives; and Future Major Projects**.**

Safety & State of Good Repair programs represent a significant portion of Metro's capital investment for maintenance, rehabilitation, and replacement of Metro's existing infrastructure and vehicle assets and components. These safety and state of good repair investments are advanced through annual, recurring programs. The programs are informed by safety and compliance recommendations and requirements, and they typically rely on the age or the condition of the specific assets to determine work plan prioritization. Examples include, but are not limited to: railcar component maintenance and rehabilitation; bus and paratransit vehicle repair, rehabilitation, and replacement; rail, cross-tie, and track fastener replacement; track circuit replacement; power cable replacement; and elevator and escalator repair, rehabilitation, and replacement.

Major Active Capital Projects are large, multi-year construction and acquisition projects, such as construction of a new maintenance facility or the acquisition of railcars. Several major capital projects are currently underway, including the 7000 series railcar acquisition; construction of the Andrews Federal Center Bus Maintenance facility; the Radio and Wireless Infrastructure project; and the construction of Silver Line Phase 2 to Dulles Airport and Loudoun County, which is funded and managed by the Metropolitan Washington Airports Authority (MWAA).

Development and Evaluation (D&E) Initiatives provide funding for evaluation, planning, and development for potential capital projects. The D&E process helps mitigate risks, establishes efficiencies, and improves budget development and effectiveness.

WMATA's Development and Evaluation (D&E) programs provide financial resources for activities that support the Authority's capital investment needs but still require evaluation to determine the optimal plan for execution as Major Active Capital Projects or Safety & State of Good Repair programs.

This process provides the resources necessary to advance a concept or initiative from needs identification through concept development before the initiative is ready for the inclusion in WMATA's Capital Improvement Program. D&E proposals are evaluated using project management best practices and must-pass decision points for advancement to the next stage of development.

The D&E process also helps to ensure that projects have clearly defined scopes, schedules, and cost estimates with appropriate consideration for risks and alternative solutions. Project funding is allocated when initiatives are sufficiently developed to advance to the next stage. When initiatives are fully developed and evaluated, they are committed as Major Projects which require this full funding for construction and/or acquisition.

The pre-capital activities that are under Development and Evaluation respond to identified needs in the Capital Needs Inventory's (CNI). Initiatives that are not already in the CNI can also be submitted into the program by a member of the Capital Program Executive Oversight Committee on a rolling basis.

In both cases, D&E applications are evaluated against their priority, criticality, and impact, as related to safety, achieving a State of Good Repair, and/or regulatory compliance.

Each October, the Office of Planning assembles the submissions and presents them to the capital program Executive Oversight Committee (EOC) for consideration. The EOC then determines which proposals are to be included in the subsequent Fiscal Year capital budget and

prepares an aggregate D&E amount to include in the budget proposal. The EOC makes modifications to this proposal through the budget approval process before finalizing the Fiscal Year D&E program alongside the final budget approval each year.

For the FY2019-FY2024 capital program cycle, Metro has included D&E funding for a wide range of initiatives that are planned to bolster the system beyond its current capital improvement projects. Full cost estimates for these prospective projects will only be identified when the needs are fully developed into Major Projects.

The General Manager/CEO has established a formal D&E Program to address key capital investment needs. These needs will include (but not be limited to): Tunnel Ventilation System and Water Mitigation improvements, 2000/3000 Series Railcar Replacement, Core Station Capacity and Passenger Circulation Improvements, Bladensburg/Northern Bus Garage Rebuild or Replacement, and the consolidation of Metro Office Facilities.

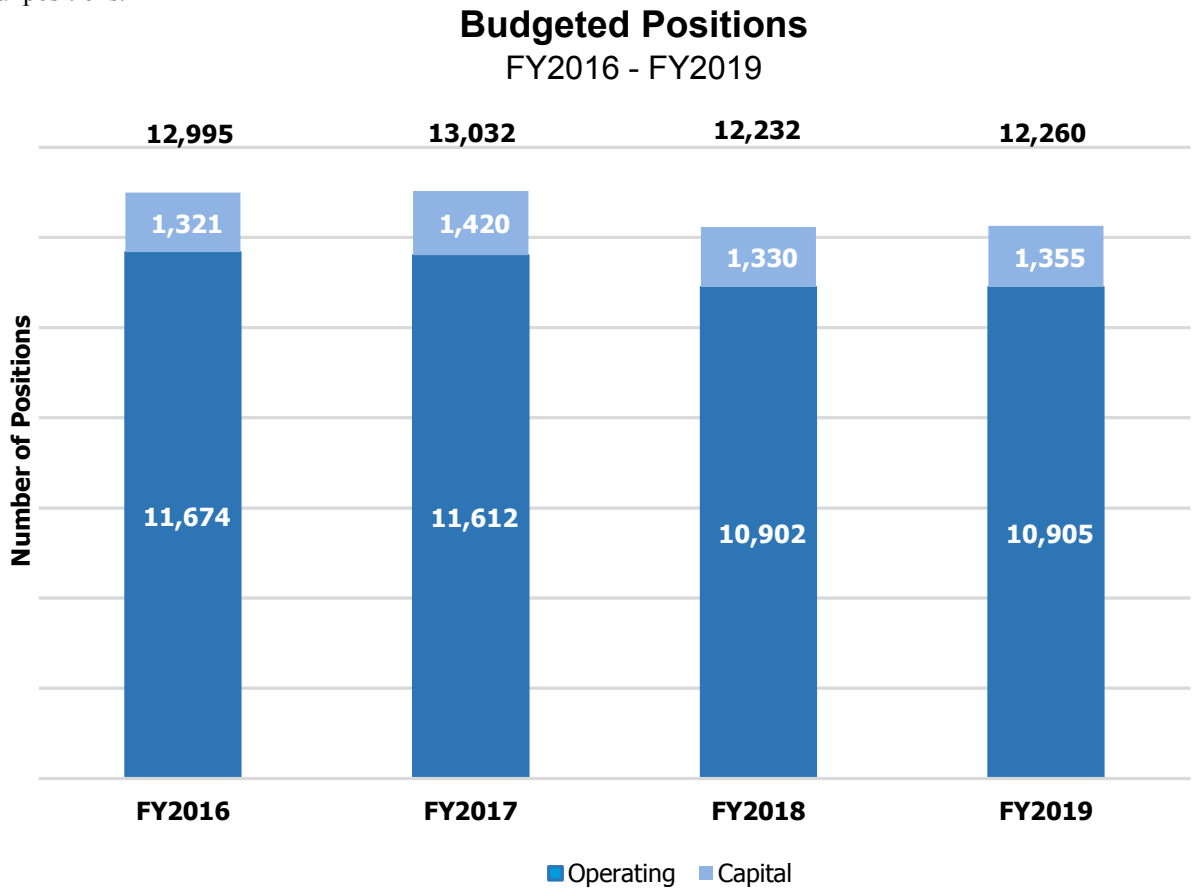
It is expected that additional candidates for the D&E process will be identified, and subject to the availability of funding and regional and system capacity to advance major capital projects.

Successful applicants are notified of their status by the following May and are expected to be prepared to commence work on or about July 1 of the new fiscal year. The EOC maintains a dashboard of funded D&E elements and monitors progress such that D&E initiatives may roll into the Capital Improvement Program upon scoping document completion.

Future Major Projects is the classification for provisional funding allocated for the initiation of projects expected to progress beyond the Development & Evaluation phase and into initial design, engineering, and construction.

Initiatives that fall into this category include those that have either been planned and scheduled for a future date, or those that are deemed to be essential and will require a minimum investment once the detailed plans have been established through the Development & Evaluation process.

Budgeted Positions: The number of budgeted positions for FY2019 is 12,260, consisting of 10,905 operating positions and 1,355 capital positions.



Summary of Funds by Source

(Dollars in Thousands)	FY2018 Approved	FY2019 Approved	Variance to FY2018 $ Chg.	Variance to FY2018 % Chg.
Operating Budget				
Passenger Fares & Parking	$755.4	$736.2	($19.2)	-2.5%
State and Local Funds	$979.5	$1,008.9	$29.4	3.0%
Business Revenues	$47.6	$51.3	$3.7	7.8%
Reimbursable Funds	$30.8	$31.6	$0.8	2.6%
Other Sources	$11.3	$9.2	($2.2)	-19.0%
Subtotal	**$1,824.5**	**$1,837.2**	**$12.7**	**0.7%**
Contributions for Debt Service	$21.2	$55.9	$34.7	163.7%
Subtotal incl. Debt Services	**$1,845.7**	**$1,893.1**	**$47.4**	**2.6%**
Capital Budget				
Federal Formula/Other Grants	$311.9	$310.8	($1.1)	-0.3%
Federal Dedicated Funds (PRIIA)	$148.5	$148.5	$0.0	0.0%
State and Local Funds / Metro 2025 Investment	$374.4	$787.0	$412.6	110.2%
Reimbursable Funds	$118.2	$32.8	($85.4)	-72.3%
Other Sources	$6.0	$0.0	($6.0)	-100.0%
Planned Long-Term Financing	$291.0	$0.0	($291.0)	-100.0%
Subtotal	**$1,250.0**	**$1,279.1**	**$29.1**	**2.3%**
Grand Total	**$3,095.7**	**$3,172.2**	**$76.5**	**2.5%**

Metro is required to have a balanced budget, i.e. projected funding equals planned expense. To the extent that prior year funding remains available and is planned to be used in the current fiscal year, it is included therein. Annual operating and capital budget expires at the conclusion of each fiscal year. Therefore, there is no beginning balance of the operating and capital budgets.

Summary of Expenditures by Program

(Dollars in Thousands)	FY2018 Approved	FY2019 Approved	Variance to FY2018 $ Chg.	Variance to FY2018 % Chg.
Operating Budget				
Metrobus	$689.8	$651.7	($38.1)	-5.5%
Metrorail	$983.4	$1,022.9	$39.5	4.0%
MetroAccess	$120.5	$131.1	$10.6	8.8%
Operating Reimbursable Projects	$30.8	$31.6	$0.8	2.5%
Subtotal Operating	**$1,824.5**	**$1,837.2**	**$12.7**	**0.7%**
Debt Service	$21.2	$55.9	$34.7	163.7%
Subtotal Operating incl. Debt Service	**$1,845.7**	**$1,893.1**	**$47.4**	**2.6%**
Capital Budget				
Capital Improvement Program[1]	$1,250.0	$1,279.1	$29.1	2.3%
Subtotal Capital	**$1,250.0**	**$1,279.1**	**$29.1**	**2.3%**
Grand Total	**$3,095.7**	**$3,172.2**	**$76.5**	**2.5%**

1 Includes Reimbursable Capital Projects

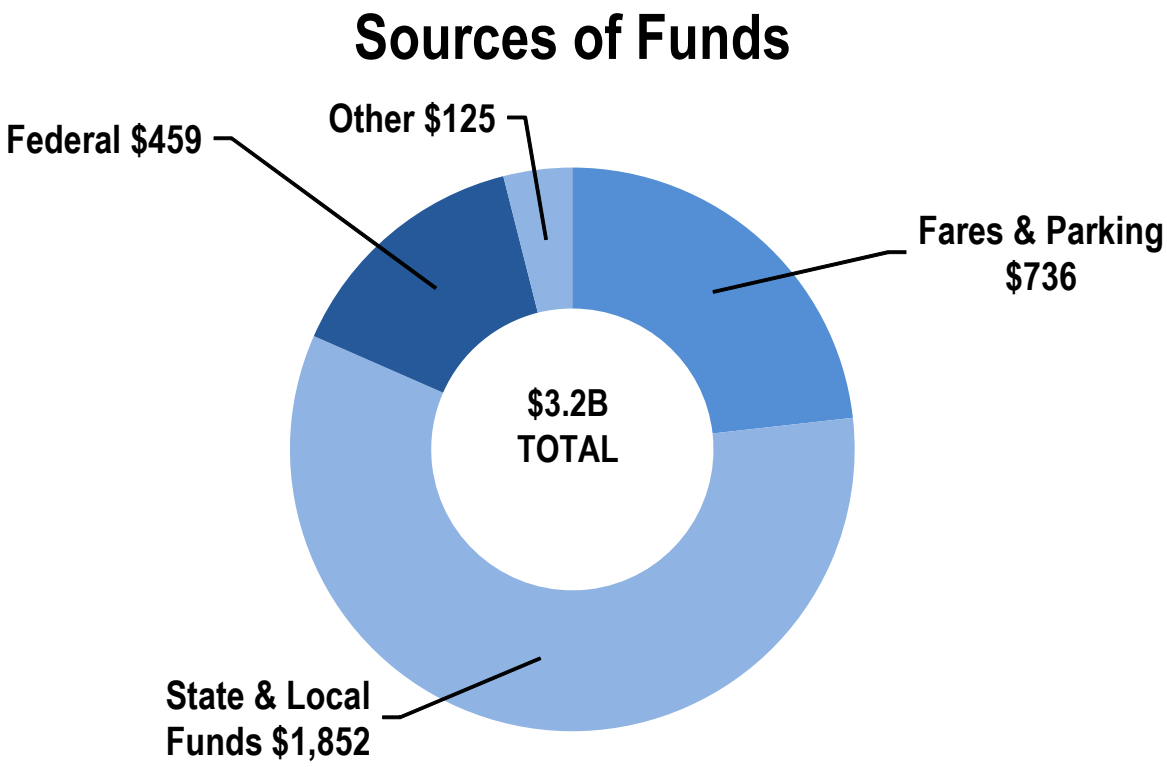
Chapter 2 - Budget Summary



Approved FY2019 Budget

Metro's FY2019 budget totals $3.2 billion, including the operating budget and debt service ($1.9 billion) and the capital budget ($1.3 billion). Funding is comprised of the following sources:

- Metrorail, Metrobus and MetroAccess passenger fares and parking fees of $736.3 million
- State and local funding of $1.85 billion, consisting of:
  - $1,064.8 million for jurisdictional operating subsidy of $1,008.9 million and contributions for debt service of $55.9 million
  - 787.0 million in state/local funding for the capital program, including federal formula and Passenger Rail Investment and Improvement Act (PRIIA) match, system performance funds, and other state and local contributions
- Federal funding of $459.3 million, consisting of $148.5 million in PRIIA funding, $304.9 million in Federal Transit Administration (FTA) formula grants, and $5.9 million in other federal grant sources, including Congestion Mitigation and Air Quality (CMAQ), resiliency, and Department of Homeland Security (DHS) grants
- Other funding of $124.8 million, consists of:
  - Reimbursable projects of $31.6 million for operating and $32.7 million in jurisdictional requested capital projects, including $27.5 million from the Metropolitan Washington Airports Authority (MWAA) for the Silver Line
  - Other revenue, including advertising, joint development, fiber optic revenues, and other sources totaling $60.5 million



Operating Revenue

Metro's total approved operating revenue budget for FY2019 is $828.3 million. Passenger fares and parking fees of $736.3 million make up 89 percent of the total revenue budget. Non-passenger business revenues from advertising, joint development and fiber optic leases are estimated at $51.2 million while other non-transit revenues total $9.2 million, including projected revenues from property and equipment sales. Operating reimbursable projects contribute $31.6 million to the budget, primarily consisting of the DC Circulator program with a budget of $24.0 million.

Operating revenue is $16.7 million lower than FY2018 budget due to overall declining ridership, primarily on Metrobus. Specifically, passenger revenue estimates (including transit fares and parking fees) decrease $19.1 million compared to the prior budget. The revenue decline in passenger fares is partially offset by increased advertising revenue and reimbursable project funds of $2.4 million.

Operating Revenue

(Dollars in Millions)	Actual 2016	Actual 2017	Approved 2018	Approved 2019	Variance to FY2018 $ Chg.	Variance to FY2018 % Chg.
Passenger Fares[1]	$744.0	$678.4	$713.2	$689.0	$(24.2)	-3.%
Parking	$45.0	$41.4	$42.2	$47.2	$5.0	12.%
Advertising	$22.8	$21.9	$24.0	$26.0	$2.0	8.%
Joint Development	$11.1	$9.9	$8.0	$9.8	$1.8	23.%
Fiber Optics	$15.6	$15.8	$15.6	$15.5	$(0.1)	-1.%
Other Nontransit Sources[2]	$32.6	$16.4	$11.3	$9.2	$(2.1)	-18.%
Reimbursables	$28.7	$27.3	$30.8	$31.6	$0.8	3.%
Total Revenue	**$899.9**	**$811.1**	**$845.0**	**$828.3**	**$(16.7)**	**-2.%**

1 Includes DC school subsidy and Anacostia Programs
2 Interest, employee parking, vending machines, Neutral Host, ATMs, antennas, car sharing, other. FY2016 also includes one-time usage of $27 million of Transit Infrastructure Investment Fund (TIIF) revenue to support Metrorail operating expenses.

Ridership and Passenger Revenue

The FY2019 budget used the FY2018 year-end ridership forecast as a baseline, adjusted for external factors that affect passenger trip-making and trends. The projected ridership on Metrorail for FY2018 is 173.4 million trips, a decline of 5.1 million or 2.8 percent compared to budget. Metrobus projected ridership for FY2018 was 110.9 million, a decline of 6.1 million or 5.2 percent. These projections reflect continued ridership decline in the first half of FY2018. In FY2019, ridership is expected to be flat compared to FY2018. MetroAccess ridership is expected to increase slightly from FY2018 actual, despite support of programs with Maryland and the District of Columbia to shift certain trips to less expensive alternate providers. Over the past three fiscal years, the changing transit environment has made forecasting customer behavior challenging. Analysis has shown one of the significant factors in ridership is the walk-ability of a customer's employment or residence to a transit facility - Metrorail station or bus stop. This is a significant reason for Metro's on-going efforts to promote joint development projects centered near rail stations, which will increase passenger trips. Another variable for both rail and bus ridership is the price of gasoline. The greatest influence on ridership from FY2016 through FY2018, though, has been service reliability and frequency. Forecasting models have shown factors such as, the frequency of rail stops at a station and the average speed of a bus impact customer's choice in transportation. As Metro continues to improve safety and reliability, Metro expects the pace of ridership decline to slow as passengers return and new customers start riding.

Ridership by Service

(Trips in Thousands)[1]	Actual 2016	Actual 2017	Budget 2018	Budget 2019	Variance to FY2018 # Chg.	Variance to FY2018 % Chg.
Metrorail	191,348	176,972	178,505	173,433	(5,072)	-2.8%
Metrobus	127,432	121,732	116,968	110,917	(6,051)	-5.2%
MetroAccess	2,281	2,367	2,400	2,413	13	0.5%
Total	**321,061**	**301,071**	**297,873**	**286,763**	**(11,110)**	**-3.7%**

1 Metrorail ridership is based on linked trips; Metrobus ridership is based on unlinked trips; MetroAccess ridership is based on total passengers trips. Unlinked trips are total boardings, while linked trips are total number of complete trips from origin to destination, including transfers.

Metrorail

Metrorail passenger fare revenue (including fares related to the DC student subsidy program) is budgeted at $542.0 million for FY2019, a decrease of $0.8 million or 0.1 percent from FY2018 budget. Through FY2018, ridership on Metrorail was expected to be slightly lower than FY2017. The FY2019 budget reflects a projected leveling out of this ridership trend. The projection also reflects the net revenue growth associated with the base fare increase implemented in FY2018.

Metro's focus is on improving safety and service reliability – with a goal of increasing customer satisfaction and encouraging customers to ride Metrorail.



The decline in ridership in FY2017 was largely driven by SafeTrack, which temporarily shutdown sections of the system to address safety and reliability issues associated with track and structures. This negatively influenced ridership as the sequential "surges" of intense maintenance and rehabilitation work lengthened and disrupted travel across the region. In FY2018, while customer concerns over service reliability and rail frequency continued, the ridership declines steadily slowed. This may be in response to improved rail on-time performance, which measures how evenly spaced the trains are, leading to more consistent travel times and decreased customer crowding. In FY2019, ridership is projected to stabilize compared to the prior fiscal year due to steady growth in weekday ridership during peak periods as reliability continues to improve.

However, even as Metro improves service delivery and passengers see Metrorail as a consistently reliable travel option, other external factors may continue to impact future growth. These include:

- Employment and population located within the walk-shed (defined as the walkable area around a station). Changes in these two factors directly influence ridership. For example, any contraction of the Federal Government workforce will impact Metro's ridership performance as hiring of direct employees and contractors slow. The region is working to entice non-government industries, though, and if established within walking access to public transit will lead to future ridership growth.
- The price of automobile gasoline influences customer transportation choices. Ridership modeling indicates that gas prices above $3.00 per gallon will drive increased public transit ridership. The national average price for regular gasoline the first quarter of FY2018 was near $2.50 per gallon. While this is higher than the prior year price due to increased demand, gas prices are not expected to increase dramatically in the near term.
- Customers have an increasing number of alternative modes of transportation to choose, including ride-hailing services, car-sharing and bike-share. While the ridership impacts have not been quantified, analysis has shown a shift during periods of reduced service.
- There are a number of other variables that adversely impact rail ridership. A significant one is the availability of parking near a rail station. Other market-based factors include telecommuting and alternative work schedules, which have increased in recent years for private sector employers and federal departments and agencies (ridership on Fridays in particular shows the impact of these policies).

In addition to passenger fare revenue, Metro receives fare revenue from the District of Columbia for subsidized student fares on rail and bus. Under the "Kids Ride Free" program, students can take unlimited trips on Metrorail and Metrobus (within the District of Columbia), with the District of Columbia compensating Metro for the trips. Over the past year, student ridership on Metrorail has increased as a result of improved compliance by students to use issued DC One cards to enter through fare gates. In partnership with District Department of Transportation (DDOT) and District of Columbia Public Schools (DCPS), Metro expects to continue this program for the 2018/2019 school year.



Metrobus

The Metrobus passenger revenue for the FY2019 budget (including revenue from the DC student subsidy program) is $137.1 million, a decrease of $23.6 million or 14.7 percent compared to the FY2018 budget. Since FY2016, Metrobus ridership and revenue performance has declined, with FY2017 ending the year with lower ridership than 2005. While ridership for FY2018 continues to decrease even further, the rate of decline is projected to stabilize in FY2019.



This downward trend has a number of contributing causes:

- Average bus speeds have steadily declined in recent years, impacting the on-time performance and quality of service. Increased traffic congestion, roadwork and other factors are contributing to this trend.
- Metrobus fares increased in FY2018 from $1.75 to $2.00 per trip. Though the fare is well within the range for bus fares at peer transit agencies across the country, the price sensitivity of Metro's bus customers appears to be having a greater negative impact on full fare ridership than previously forecasted. Metro is currently reviewing new fare options that will benefit customers impacted by the fare increase. Select Pass is one example, providing customer's savings on their weekly commute.
- Rail's reliability challenges have impacted bus. Bus-to-rail transfers are down, with losses concentrated at major transfer stations, indicating bus is losing some trips from commuters reacting to the challenges on rail.
- Employment and population located within quarter mile of a bus corridor is a strong variable in bus ridership. Ridership has trended downward at other bus operations across the region, and Metro continues to work with partner jurisdictions to understand and address the causes of these declines.
- Similar to rail, automobile gasoline prices, ride sharing and bikeshare also impact bus ridership. Continued low gas prices – below $3.00 per gallon – will adversely affect customer sentiment about using bus for transportation.

While overall bus ridership is projected to decline, growth in demand for Metrobus has been strong in certain corridors such as the Rhode Island Avenue limited-stop line and 16th Street MetroExtra service in the District of Columbia, where Metro has added capacity and improved travel time. Corridor service investments in FY2018 on 14th Street NW, along Alabama Ave SE, H Street NE and Minnesota Avenue SE/NE are addressing long-standing issues of crowding, reliability and congestion and should result in increased ridership, revenue and customer satisfaction. In addition, the new National Harbor service has proven successful as nearly 6,000 passengers ride on an average week. Finally, the "Kids Ride Free" program for District of Columbia students continues to be popular with nearly 30,000 student riders on an average weekday.

Metro will continue to work with the jurisdictions to improve routes that best serve their communities. One current project is the "State of Good Operations" presented to the Board in November 2017, which outlined modifications to a number of regional and non-regional routes. If approved, route changes will commence in FY2019.

The Authority will also initiate a study to overhaul or redesign the bus network, which consists of service routes that have remained virtually unchanged for decades (similar to efforts underway in Houston, Seattle, and Philadelphia). The study will examine travel patterns, customer demand, technology opportunities, first/last mile private carriers, and how to more cost effectively deliver regional versus local bus service to riders.

MetroAccess

MetroAccess projected ridership in FY2019 is 2.4 million which is comparable to the FY2018 budget. The underlying growth is offset by a shifting of trips to alternative partnership programs in Maryland and the

District of Columbia. MetroAccess passenger revenue for FY2019 is $9.9 million.



As the population continues to age, and disability rates continue to rise, the utilization of MetroAccess is expected to grow.

Over 63 percent of MetroAccess trips are provided in Montgomery and Prince George's counties in Maryland, 14 percent of trips in the combined Virginia jurisdictions, and the remaining 23 percent in the District of Columbia. Trip volumes are relatively low in Virginia due to the presence of alternate service providers, and growth has been slowed recently in the District of Columbia, as a result of the TransportDC program, which shifts eligible MetroAccess trips onto taxicabs. The Abilities-Ride program, initiated in the fall of FY2018 in Maryland, is projected to shift additional trips onto alternative providers by providing passengers the option to choose an alternate on-demand mode of transportation with greater flexibility than MetroAccess.

Parking

Total parking revenue for the FY2019 budget is projected at $47.2 million, an increase of $5.1 million compared to the FY2018 budget.

Parking utilization is closely correlated to Metrorail ridership trends. Similar to rail, SafeTrack greatly impacted parking utilization in FY2017. While utilization in FY2018 slightly improved, customer revenue was estimated to be marginally below budget at year-end. In FY2019, projected decreases to parking revenue are offset by revenue increases resulting from parking enhancements under review.

In FY2018, the WMATA Board approved six potential parking revenue enhancement proposals for Metro to expand non-rider parking fees, conduct three pilots and hold a Compact Public Hearing on expanded special event parking locations. Taken together, the proposals, if the pilot outcomes meet expectations and the Board approves, will generate an estimated $6 million in additional revenue over the fiscal year. This additional revenue is included in the $47.2 million parking budget for FY2019. The following are the six proposals:

- Expand operating weekday hours by lowering the fare gates (commence collection of fees) at 7:30 am, Monday through Thursday, and extend the parking hours of operating to 2:00 am on Friday; pilot conducted February through July 2018.
- Implement Saturday hours of operation. The pilot will be used to determine the optimum operating hours and the type of parkers using the facilities on the weekends.
- Adjust the daily parking rate downward at low-utilization Metro stations to increase use of its Park & Rides and analyze parking demand when rates are lowered, with a goal of net return on revenue.
- Implement a non-Metro user parking fee station-by-station. Non-metro user fees do not impact Metro transit parkers and riders, but will optimize revenue return on parking facilities.
- Expand the non-Metro user parking fee program for special events following a compact public hearing and Board approval. Special events will apply to festivals, concerts and other similar activities. While such events are few and unique, it is a valid source for additional revenues.
- Ability to enter into additional parking space licenses with non-transit users, as well as permit commercial uses of Metro parking facilities for a fee.

New Fare Products

To better serve customers and encourage ridership, Metro offers customers products that simplify daily fare calculations and reward high volume users.

- *SelectPass:* The SelectPass was approved by the Board in FY2017, and has received positive customer feedback as usage has grown.
  - The monthly pass gives customers unlimited access to the Metrorail system for one low price, paid as a monthly subscription, allowing customers to use the Metro transit network in ways built around today's lifestyles and travel patterns.
  - Subscribers are able to select a price point based on their normal Metrorail commute trip, making this pass customizable for each individual's travel needs – any trip with a fare equal to or less than the normal commute trip is covered, and any occasional longer trip requires payment of the fare difference from the stored value on the SmarTrip® card.

- In FY2018, available price points were expanded in $0.25 increments to meet all fare ranges between $2.00 and $6.00.
- With Metro SelectPass, customers pay for 18 days of commuting travel and get the rest of the month free. The pass begins and ends on the first of every calendar month, and has an option to conveniently auto-renew, allowing subscribers to "set it and forget it".

In addition to SelectPass, customers have other pass options, including the 1-day pass with unlimited Rail and Bus travel for tourists and other visitors, as well as a 7-day short trip pass or 7-day fast pass options. Metrobus has a 7-day regional bus pass – discounted so customers pay for just four and half days of commute travel and get the rest of the days free. Metro is currently examining additional new fare pass products to promote more frequent ridership and increase customer satisfaction.

- *University* Pass: Metro is working in cooperation with universities in the region to offer the University Pass (or U-Pass) to students. University students represent an untapped partnership, with 20 colleges in the region who can drive additional ridership and revenue for Metro.
  - The University Pass offers unlimited riding privileges at substantially discounted rates to full-time students. The University Pass program requires 100 percent student participation of a college, and each student receives a semester or annual pass that offers unlimited rides on Metrobus and Metrorail.
  - Metro has U- Pass agreements with 12 schools, with the largest partner being American University. Additional schools are showing interest in the program, but the potential revenue is not included in the FY2019 operating budget. The incremental ridership and revenue from the U-Pass program is dependent on the size of the campuses that choose to participate, which varies given their location and the transportation options available to students.

Non-Passenger Revenue

Advertising

Total advertising revenue in FY2019 is budgeted at $26.0 million, an increase of $2.0 million over the FY2018 budget. Metro is actively working to enhance advertising opportunities. This includes expanding the inventory of digital advertising to include aboveground stations in addition to the current underground stations. These actions, combined with organic growth following the SafeTrack program, are projected to yield additional revenue.



Joint Development

The FY2019 Joint Development revenues allocated to the operating budget are $9.75 million, an increase of $1.75 million from the FY2018 approved budget. These revenues grow moderately over time as leases are negotiated. The value of such leases increase during periods of economic growth and in actively developed areas walkable to Metrorail stations.

Fiber Optics

The Metro Fiber Optic Program, initiated in September 1986, has allowed for the installation, operation, and maintenance of a fiber optic-based telecommunication network that utilizes excess capacity within the Metro right-of-way. Metro receives a number of fiber optics lines for its own use as part of the compensation package. For FY2019, fiber optic revenue budget is $15.5 million.

Other Revenue

Other revenue in the FY2019 budget includes proceeds from agreements with telecommunication service providers, vending machines, ATM revenue, employee parking, and property surplus and disposal. These combined miscellaneous revenue sources are expected to contribute $9.2 million to FY2019 non-transit revenues, a decrease of $2.0 million from the FY2018 budget due to an anticipated decline in property disposal sales.

Operating Budget Revenues

(Dollars in Thousands)	Actual FY2016	Actual FY2017	Approved FY2018	Approved FY2019	Variance
MetroBus					
Passenger	$141,053	$129,035	$146,075	$125,241	($20,834)
Other Passenger	8,991	8,221	14,584	11,825	(2,759)
Parking	0	0	0	0	0
Advertising	15,273	14,696	16,080	8,160	(7,920)
Joint Development	0	0	0	0	0
Fiber Optics	0	0	0	0	0
Other	748	10,727	5,639	6,149	510
Subtotal	**$166,066**	**$162,679**	**$182,378**	**$151,375**	**($31,003)**
MetroRail					
Passenger	$574,351	$521,846	$538,169	$534,180	($3,989)
Other Passenger	10,425	9,630	4,631	7,860	3,229
Parking	45,039	41,404	42,164	47,238	5,074
Advertising	7,519	7,230	7,920	17,840	9,920
Joint Development	11,139	9,897	8,000	9,750	1,750
Fiber Optics	15,583	15,703	15,600	15,468	(132)
Other	31,897	5,706	5,639	3,093	(2,546)
Subtotal	**$695,953**	**$611,416**	**$622,123**	**$635,429**	**$13,305**
MetroAccess					
Passenger	$9,156	$9,660	$9,732	$9,940	$208
Other Passenger	0	0	0	0	0
Parking	0	0	0	0	0
Advertising	0	0	0	0	0
Joint Development	0	0	0	0	0
Fiber Optics	0	0	0	0	0
Other	0	1	0	0	0
Subtotal	**$9,156**	**$9,661**	**$9,732**	**$9,940**	**$208**
Reimbursables	**28,740**	**27,348**	**30,767**	**31,568**	**802**
Grand Total	**$899,916**	**$811,105**	**$845,000**	**$828,311**	**($16,688)**
Total Revenue					
Passenger	$724,560	$660,542	$693,976	$669,361	($24,615)
Other Passenger	19,417	17,851	19,215	19,685	470
Parking	45,039	41,404	42,164	47,238	5,074
Advertising	22,792	21,926	24,000	26,000	2,000
Joint Development	11,139	9,897	8,000	9,750	1,750
Fiber Optics	15,583	15,703	15,600	15,468	(132)
Other	32,645	16,434	11,278	9,241	(2,037)
Reimbursables	28,740	27,348	30,767	31,568	(802)
Grand Total	**$899,916**	**$811,105**	**$845,000**	**$828,311**	**($16,688)**

FY2019 Approved Operating Subsidy and Debt Service Contributions

The FY2019 approved jurisdictional operating and debt service funding is $1,064.8 million – $64.1 million more than the FY2018 budget. This includes:

- FY2019 net operating subsidy for Metrobus, Metrorail, and MetroAccess of $1,008.9 million, an increase of 3.0 percent over FY2018. This is the result of ridership declines primarily in Metrobus and expense growth related to legacy commitments, mandates and cost inflation.
- Jurisdictional contributions for debt service payments of $55.9 million, an increase of $34.7 million over FY2018 as a result of the issuance of the Series 2017B bonds. Additional information about Debt Service is included in Appendix - F of this publication.

Jurisdictional Billed Operating Subsidy

(Dollars in Millions)	Approved 2016	Approved 2017	Approved 2018	Approved 2019	$Variance	% Change
Net Subsidy	$845.3	$845.3	$979.5	$1,008.9	$29.4	3.0%
Debt Service	21.2	21.2	21.2	55.9	34.7	163.7%
Total Subsidy	**$866.5**	**$866.5**	**$1,000.7**	**$1,064.8**	**$64.1**	**6.4%**

FY 2019 Approved Budget

Summary of State and Local Operating Requirements

	Total	District of Columbia	Montgomery County	Prince George's County	City of Alexandria	Arlington County	City of Fairfax	Fairfax County	City of Falls Church
Metrobus Operating Subsidy									
Regional Bus Subsidy	$427,246,773	$178,347,247	$63,545,593	$72,921,501	$20,469,316	$32,690,746	$757,922	$56,846,934	$1,667,514
Non-Regional Bus Subsidy	$73,044,310	$32,349,686	$8,339,228	$22,175,546	$2,860,512	$1,483,205	—	$5,836,133	—
Subtotal	**$500,291,083**	**$210,696,932**	**$71,884,821**	**$95,097,047**	**$23,329,828**	**$34,173,951**	**$757,922**	**$62,683,068**	**$1,667,514**
Percent of Total	100.0%	42.1%	14.4%	19.0%	4.7%	6.8%	0.2%	12.5%	0.3%
Metrorail Operating Subsidy									
Base Allocation	$379,496,565	$130,532,975	$69,168,538	$62,275,766	$18,313,788	$36,787,465	$1,191,180	$60,249,929	$976,924
Max Fare Subsidy	$7,976,432	$852,701	$3,114,556	$1,435,083	$325,160	$223,441	$64,435	$1,930,610	$30,445
Subtotal	**$387,472,997**	**$131,385,676**	**$72,283,094**	**$63,710,850**	**$18,638,948**	**$37,010,906**	**$1,255,615**	**$62,180,540**	**$1,007,370**
Percent of Total	100.0%	33.9%	18.7%	16.4%	4.8%	9.6%	0.3%	16.0%	0.3%
MetroAccess Operating Subsidy									
MetroAccess Operating Subsidy	$121,167,265	$27,304,607	$24,979,079	$51,806,156	$982,841	$794,373	$299,883	$14,883,801	$116,525
Subtotal	**$121,167,265**	**$27,304,607**	**$24,979,079**	**$51,806,156**	**$982,841**	**$794,373**	**$299,883**	**$14,883,801**	**$116,525**
Percent of Total	100.0%	22.5%	20.6%	42.8%	0.8%	0.7%	0.2%	12.3%	0.1%
Net Operating Subsidy	**$1,008,931,346**	**$369,387,215**	**$169,146,994**	**$210,614,053**	**$42,951,617**	**$71,979,230**	**$2,313,420**	**$139,747,408**	**$2,791,409**
Percent of Total	100.0%	36.6%	16.8%	20.9%	4.3%	7.1%	0.2%	13.9%	0.3%
Debt Service									
Metro Matters Debt Service	$55,875,228	$23,793,682	$11,912,512	$12,497,108	$1,773,356	—	$111,358	$5,608,396	$178,816
Total Debt Service	**$55,875,228**	**$23,793,682**	**$11,912,512**	**$12,497,108**	**$1,773,356**	**$0**	**$111,358**	**$5,608,396**	**$178,816**
Jurisdictional Operating Funding	**$1,064,806,574**	**$393,180,897**	**$181,059,506**	**$223,111,161**	**$44,724,973**	**$71,979,230**	**$2,424,778**	**$145,355,805**	**$2,970,224**

FY2019 Capital Funding

Metro's FY2019-2024 Capital Improvement Program (CIP) financial plan relies on a forecasted investment of $8.5 billion from the Federal Government, state and local government partners and other sources. Within the $8.5 billion six-year plan, Metro is projecting:

- $2.2 billion from federal grant funding
- State and local contributions (for matching of federal grants and for system performance funds) of $6.1 billion
- Other resources, including Metropolitan Washington Airports Authority (MWAA) funding for the Silver Line and new rail cars, jurisdictional projects, and other miscellaneous funding sources, totaling $203 million.

Additional information about capital funding sources is included in Chapter 4 - FY2019 Capital Budget.

FY2019-2024 Proposed Capital Improvement Program

(Dollars in Millions)	FY2019 Plan	FY2020 Plan	FY2021 Plan	FY2022 Plan	FY2023 Plan	FY2024 Plan	6 Year Total
Federal							
Federal Formula Programs	305	321	313	313	313	313	1,877
Federal PRIIA	149	149	-	-	-	-	297
Other Federal Grants	6	4	4	4	4	4	26
Subtotal, Federal Grants	**459**	**473**	**317**	**317**	**317**	**317**	**2,200**
Match to Federal Formula	76	80	78	78	78	78	469
System Performance and Debt Strategy	561	552	912	1,069	1,113	1,149	5,355
Subtotal, Match, System Performance and Debt Strategy	**637**	**632**	**990**	**1,147**	**1,191**	**1,227**	**5,824**
State and Local PRIIA	149	149	-	-	-	-	297
Other State and Local	1	1	1	1	1	-	5
Long Term Debt Strategy		-	-	-	-	-	-
Subtotal, State & Local	**787**	**781**	**991**	**1,148**	**1,192**	**1,227**	**6,126**
Jurisdictional Reimbursable Projects	5	5	3	3	3	3	22
Subtotal, State and Local, including Reimbursable Jurisdictional Projects	**792**	**786**	**994**	**1,151**	**1,195**	**1,230**	**6,148**
MWAA	27	41	64	32	14	3	181
Grand Total	**1,279**	**1,300**	**1,375**	**1,500**	**1,525**	**1,550**	**8,530**

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Chapter 3 - Operating Budget

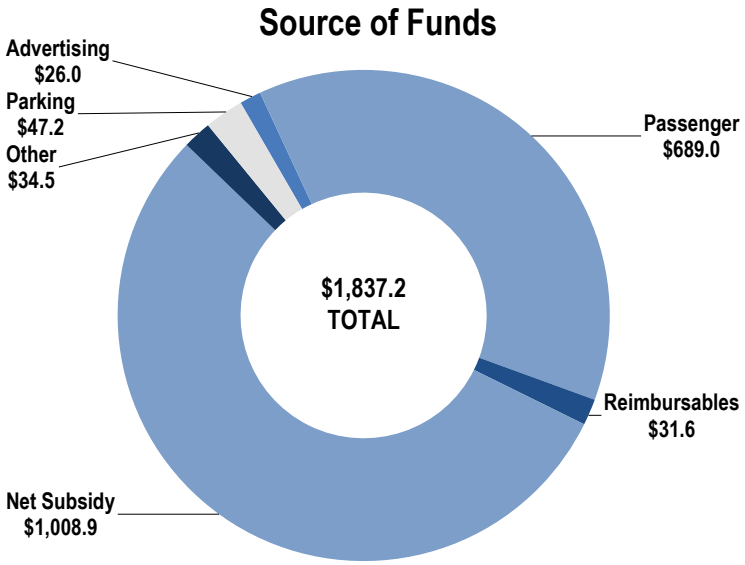


Introduction

The operating budget funds costs associated with Metrobus, Metrorail, MetroAccess and operating reimbursable projects. In total the operating budget is $1.84 billion, a 0.7 percent increase from the FY2018 budget.

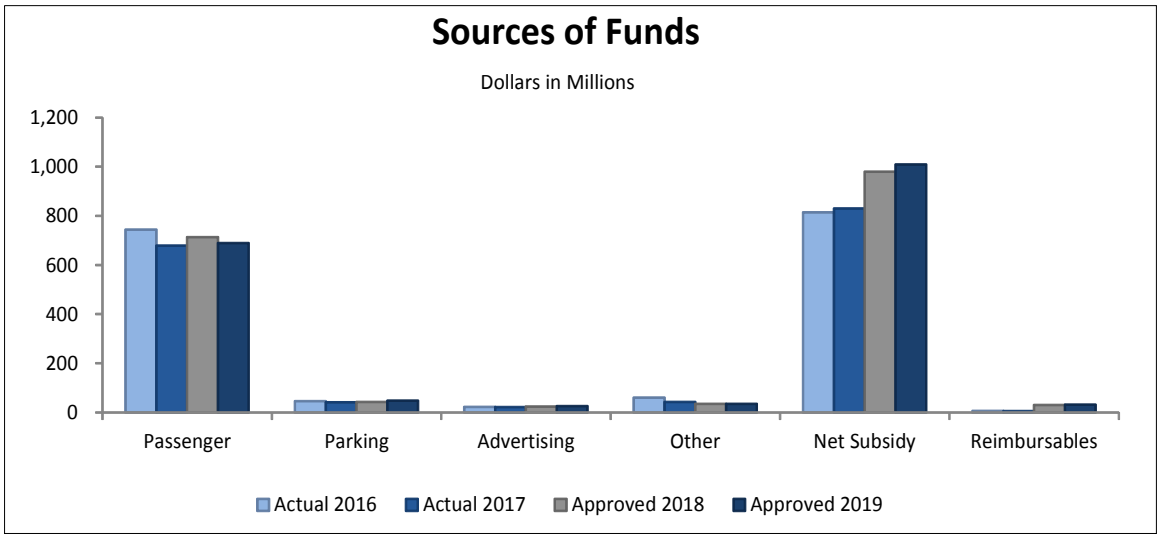
Sources of Funds

- The largest source of funding is the net local subsidy of $1,008.9 million or 54.9 percent of total expenses.
- The second largest source of funding is passenger fare revenue at $689.0 million or 37.5 percent from Metrobus, Metrorail and MetroAccess.
- The remaining $139.3 million comes from parking fees, reimbursable projects, advertising, fiber optic leases and other revenues.



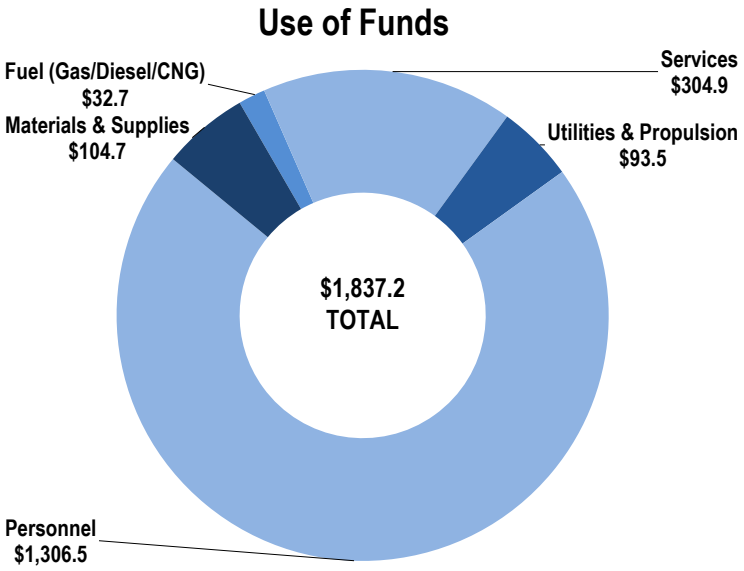
FY2016-FY2019

Net local subsidy increased by $134.2 million from FY2017 to FY2018 and is budgeted to increase by $29.4 million or 3.0 percent from FY2018 to FY2019.



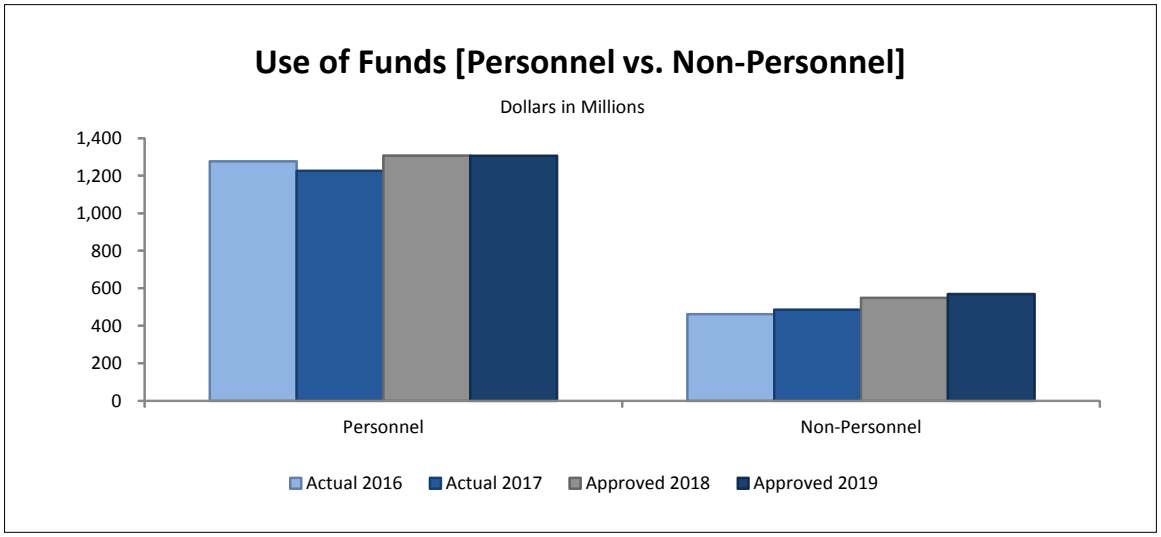
Uses of Funds

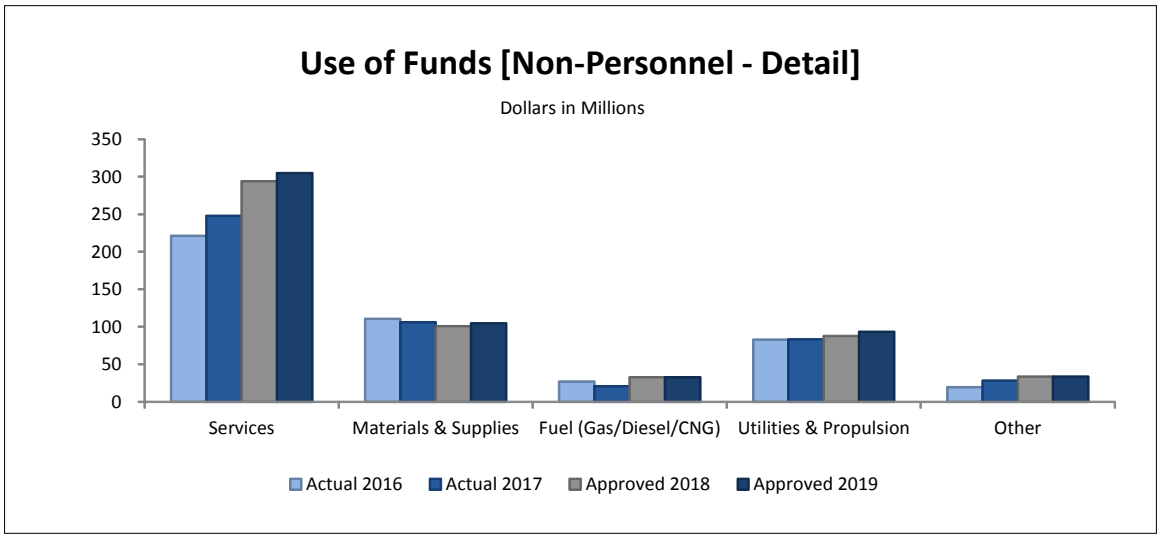
- Personnel expenses are the largest operating budget expense category, at $1.3 billion or 71.1 percent, followed by Services at $304.9 million or 16.6 percent.
- Services budget consists primarily of expenses related to professional and technical, contract maintenance, and temporary labor services. The largest service expense is in support of paratransit, which is projected to be $109.2 million in FY2019.
- Materials and Supplies budget consists primarily of maintenance parts for buses and railcars, track and structure maintenance, elevator and escalator, and general fleet repair for non-revenue vehicles.
- Metro's energy budget (fuel, utilities and propulsion) consists of propulsion usage by the Metrorail system; diesel, CNG and gasoline for Metrobus, MetroAccess and non-revenue vehicles; and utilities (i.e. electricity, water, phone and refuse collection) at Metro facilities.



FY2016-FY2019

- FY2019 operating personnel expenses, inclusive of labor and fringe benefits, are $1.3 billion, approximately flat to FY2018.
- The projected decrease of $7.6 million or 0.9 percent in labor related costs is primarily due to the implementation of controls on absenteeism and overtime expenses, offset by contractually required step increases.
- Fringe benefits are $429.1 million, an increase of $6.2 million or 1.5 percent from FY2018 primarily due to inflation in health care and pension expenses.
- FY2019 services budget is $304.9 million, an increase of $11.0 million, or 3.7 percent over FY2018. This increase is due primarily to increased paratransit costs resulting from contract cost escalations for the service providers.
- FY2019 energy costs are projected to increase by $5.6 million or 4.8 percent in comparison to the FY2018 budget. This increase is primarily due to increased propulsion usage for the new 7000 series railcars.





Operating Budget

Revenue and Expenses

(Dollars in Thousands)	Actual FY2016	Actual FY2017	Approved FY2018	Approved FY2019	Variance
Revenues					
Passenger	$724,560	$660,542	$693,976	$669,361	($24,615)
Other Passenger	19,417	17,851	19,215	19,685	470
Parking	45,039	41,404	42,164	47,238	5,074
Advertising	22,792	21,926	24,000	26,000	2,000
Joint Development	11,139	9,897	8,000	9,750	1,750
Fiber Optics	15,583	15,703	15,600	15,468	(132)
Other	32,645	16,434	11,278	9,241	(2,037)
Reimbursables	28,740	27,348	30,767	31,568	802
Prior-Year Surplus	0	15,181	0	0	0
Total Revenues	**$899,916**	**$826,286**	**$845,000**	**$828,311**	**($16,688)**
Expenses					
Personnel	$1,276,891	$1,226,206	$1,307,859	$1,306,479	($1,380)
Services	221,230	248,009	293,871	304,858	10,987
Materials & Supplies	110,671	106,231	100,860	104,727	3,868
Fuel (Gas/Diesel/CNG)	26,904	20,882	32,849	32,651	(198)
Utilities & Propulsion	82,975	83,308	87,664	93,505	5,841
Casualty & Liability	15,916	24,393	28,560	29,338	779
Leases & Rentals	6,244	7,188	8,329	8,363	34
Miscellaneous	3,877	3,816	5,046	4,431	(614)
Capital Allocation	0	(48,425)	(40,493)	(47,111)	(6,618)
Total Expenses	**$1,744,708**	**$1,671,607**	**$1,824,545**	**$1,837,243**	**$12,698**
Net Subsidy	**$844,775**	**$845,321**	**$979,545**	**$1,008,931**	**$29,386**
Cost Recovery Ratio	51.6%	48.5%	46.3%	45.1%	-1.2%

Operating Expense Budget

Authority Wide

(Dollars in Thousands)	Actual 2016	Actual 2017	Approved 2018	Approved 2019	$ Variance	% Change
Salaries	$276,059	$291,060	$298,797	$307,605	$8,809	3%
Wages	$509,102	$462,266	$504,832	$493,833	($10,998)	-2%
Overtime	$81,138	$83,101	$81,404	$75,985	($5,420)	-7%
Total Salaries and Wages	**$866,298**	**$836,427**	**$885,032**	**$877,423**	**($7,609)**	**-1%**
Fringes	**$410,592**	**$389,778**	**$422,827**	**$429,056**	**$6,229**	**1%**
Fringe Health	(3,441)	209,973	184,308	186,539	2,231	
Fringe Pension	(1)	172,166	140,904	144,073	3,170	
Other Fringe Benefits	391,527	(13,263)	71,886	72,038	153	
Workman Compensation	22,507	20,902	25,730	26,406	676	
Total Personnel Cost	**$1,276,891**	**$1,226,205**	**$1,307,859**	**$1,306,479**	**($1,380)**	**0%**
Services	**$221,230**	**$247,987**	**$293,871**	**$304,858**	**$10,987**	**4%**
Management Fee	209	0	433	365	(68)	
Professional & Technical	30,519	41,739	65,574	70,920	5,346	
Temporary Help	2,852	3,942	2,274	2,835	561	
Contract Maintenance	61,559	67,738	82,388	83,118	730	
Custodial Services	5	58	1,524	61	(1,463)	
Paratransit	98,486	103,765	98,520	109,220	10,700	
Services - Other	27,601	30,745	43,159	38,341	(4,818)	
Materials & Supplies	**$110,671**	**$106,253**	**$100,860**	**$104,727**	**$3,868**	**4%**
Fuels and Lubricants	2,373	2,594	2,682	2,678	(3)	
Tires	6,068	6,517	6,034	6,679	645	
Materials & Supplies - Other	102,230	97,142	92,144	95,370	3,226	
Fuel (Gas/Diesel/CNG)	**$26,904**	**$20,882**	**$32,849**	**$32,651**	**($198)**	**-1%**
Diesel Fuel	18,384	13,222	22,542	23,497	955	
Gasoline	6,901	6,293	7,673	7,093	(580)	
Clean Natural Gas	1,619	1,366	2,634	2,061	(573)	
Utilities & Propulsion	**$82,975**	**$83,308**	**$87,664**	**$93,505**	**$5,841**	**7%**
Electricity	25,383	26,751	28,843	29,078	235	
Propulsion	49,363	47,981	47,937	53,879	5,942	
Utilities - Other	8,229	8,576	10,885	10,548	(337)	
Casualty & Liability	**$15,916**	**$24,393**	**$28,560**	**$29,338**	**$779**	**3%**
Insurance	12,959	14,563	16,000	13,180	(2,820)	
Claims	2,957	9,830	12,560	16,158	3,598	
Leases	**$6,244**	**$7,188**	**$8,329**	**$8,363**	**$34**	**0%**
Property	2,072	2,197	2,255	2,456	201	
Equipment	4,172	4,991	6,074	5,907	(167)	
Miscellaneous	**$3,877**	**($44,609)**	**($35,447)**	**($42,680)**	**($7,233)**	**20%**
Dues and Subscriptions	411	424	594	617	23	
Conferences and Meetings	108	127	209	309	100	
Business Travel/Public Hearings	708	287	513	482	(31)	
Interview & Relocation	617	753	1,109	725	(384)	
Tolls	3	4	3	5	2	
Advertising	1,995	4,008	3,149	3,349	200	
Other	2,648	1,004	1,368	1,121	(248)	
Reimbursements	(2,615)	(2,790)	(1,900)	(2,176)	(276)	
Capital Allocation	0	(48,425)	(40,493)	(47,111)	(6,618)	
Total Non-Personnel Cost	**$467,817**	**$445,401**	**$516,686**	**$530,763**	**$14,078**	**3%**
Total Cost	**$1,744,708**	**$1,671,607**	**$1,824,545**	**$1,837,243**	**$12,698**	**1%**

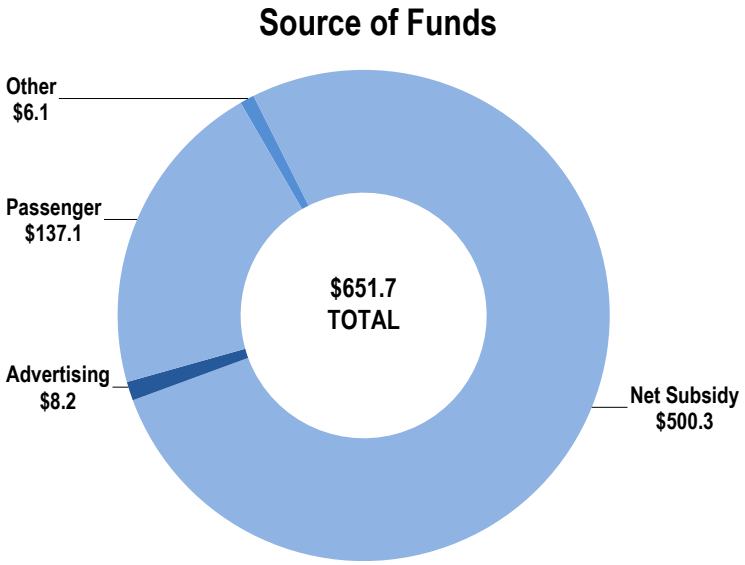
Operating Expense Budget

(Dollars in Thousands)	Approved FY2019	BUS FY2019	RAIL FY2019	ACCESS FY2019	Reimbursables FY2019
Salaries	$307,605	$93,747	$204,012	$5,679	$4,168
Wages	$493,833	$228,010	$265,181	$642	$0
Overtime	$75,985	$31,352	$43,606	$23	$1,003
Total Salaries and Wages	**$877,423**	**$353,108**	**$512,799**	**$6,345**	**$5,171**
Fringes	**$429,056**	**$169,415**	**$254,551**	**$3,167**	**$1,923**
Fringe Health	186,539	73,041	111,299	1,409	790
Fringe Pension	144,073	56,670	85,721	1,060	622
Other Fringe Benefits	72,038	29,317	41,820	504	397
Workman Compensation	26,406	10,387	15,711	194	114
Total Personnel Cost	**$1,306,479**	**$522,524**	**$767,350**	**$9,512**	**$7,093**
Services	**$304,858**	**$51,739**	**$116,248**	**$114,563**	**$22,308**
Management Fee	365	4	360	0	0
Professional & Technical	70,920	17,799	48,710	3,660	750
Temporary Help	2,835	845	1,935	55	0
Contract Maintenance	83,118	22,193	38,908	459	21,558
Custodial Services	61	60	1	0	0
Paratransit	109,220	0	0	109,220	0
Services - Other	38,341	10,838	26,335	1,168	0
Materials & Supplies	**$104,727**	**$41,704**	**$62,331**	**$530**	**$162**
Fuels and Lubricants	2,678	1,673	1,005	0	0
Tires	6,679	6,615	64	0	0
Materials & Supplies - Other	95,370	33,416	61,261	530	162
Fuel (Gas/Diesel/CNG)	**$32,651**	**$23,936**	**$1,435**	**$5,275**	**$2,005**
Diesel Fuel	23,497	21,180	312	0	2,005
Gasoline	7,093	695	1,123	5,275	0
Clean Natural Gas	2,061	2,061	0	0	0
Utilities & Propulsion	**$93,505**	**$14,835**	**$78,120**	**$550**	**$0**
Electricity	29,078	10,845	17,839	393	0
Propulsion	53,879	0	53,879	0	0
Utilities - Other	10,548	3,990	6,402	157	0
Casualty & Liability	**$29,338**	**$8,755**	**$20,061**	**$522**	**$0**
Insurance	13,180	3,933	9,013	235	0
Claims	16,158	4,821	11,049	288	0
Leases	**$8,363**	**$1,591**	**$5,882**	**$890**	**$0**
Property	2,456	201	1,443	812	0
Equipment	5,907	1,390	4,439	78	0
Miscellaneous	**($42,680)**	**($13,418)**	**($28,526)**	**($735)**	**$0**
Dues and Subscriptions	617	137	468	12	0
Conferences and Meetings	309	59	244	6	0
Business Travel/Public Hearings	482	123	340	19	0
Interview & Relocation	725	216	496	13	0
Tolls	5	0	5	0	0
Advertising	3,349	994	2,296	59	0
Other	1,121	375	728	18	0
Reimbursements	(2,176)	(1,264)	(889)	(23)	0
Capital Allocation	(47,111)	(14,058)	(32,215)	(839)	0
Total Non-Personnel Cost	**$530,763**	**$129,141**	**$255,552**	**$121,595**	**$24,475**
Total Cost	**$1,837,243**	**$651,666**	**$1,022,902**	**$131,107**	**$31,568**

Operating Budget by Mode: Metrobus

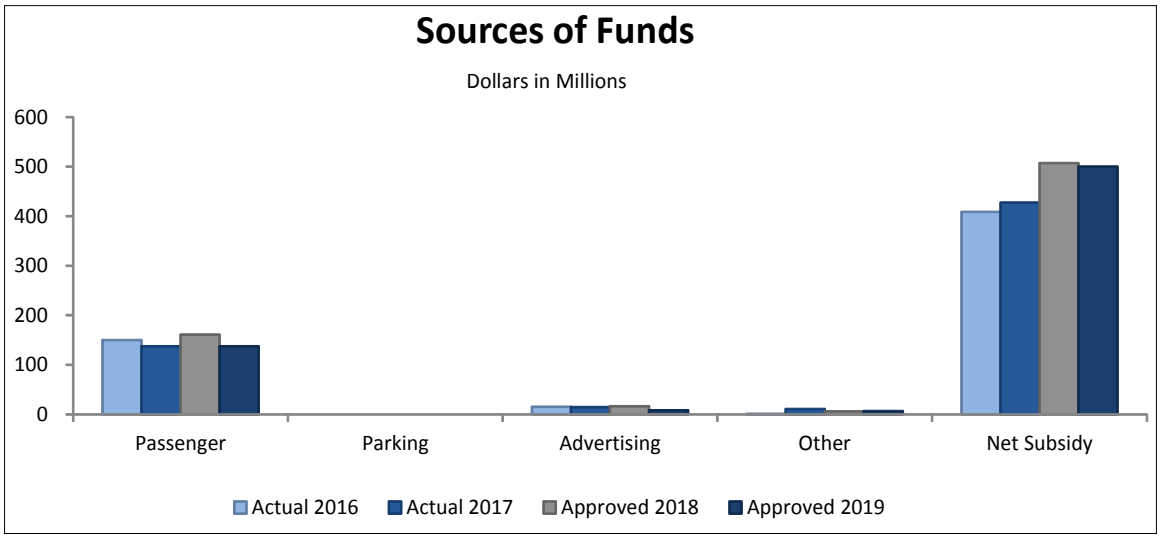
Sources of Funds

- Metrobus sources of funds consist of revenue (primarily passenger fares and advertising) and subsidy from Metro's jurisdictional partners.
- Total Metrobus revenue in FY2019 is projected at $151.4 million. The largest revenue source is passenger revenues estimated at $137.1 million, which includes fares and passes. Passenger revenue is lower than the FY2018 budget due to reduced ridership projections. The FY2019 ridership is projected to be 6.1 million trips less than the FY2018 budgeted levels. This projected decrease reflects the lower ridership performance experienced through the first half of FY2018.
- Metrobus is projected to receive advertising revenue of $8.2 million. This amount is a decrease of $7.9 million from the FY2018 budget due to a reallocation of budget to Metrorail to align with current marketing trends.
- Other revenue, which includes lease revenue, third-party reimbursements, and other miscellaneous sources, will contribute $6.1 million in FY2019.



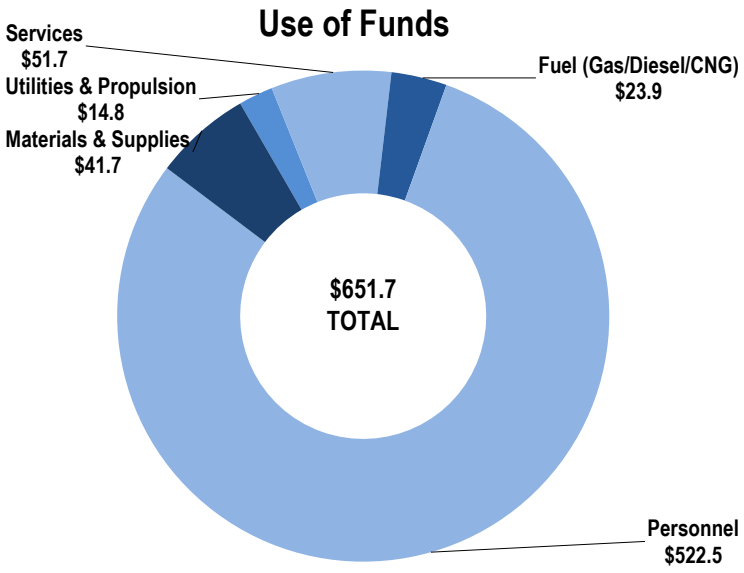
FY2016 - FY2019

Net local subsidy for Metrobus is budgeted to decrease by $7.1 million or 1.4 percent to $500.3 million from FY2018 to FY2019. Metrobus subsidy is 49.6 percent of the total FY2019 Metro net operating subsidy.



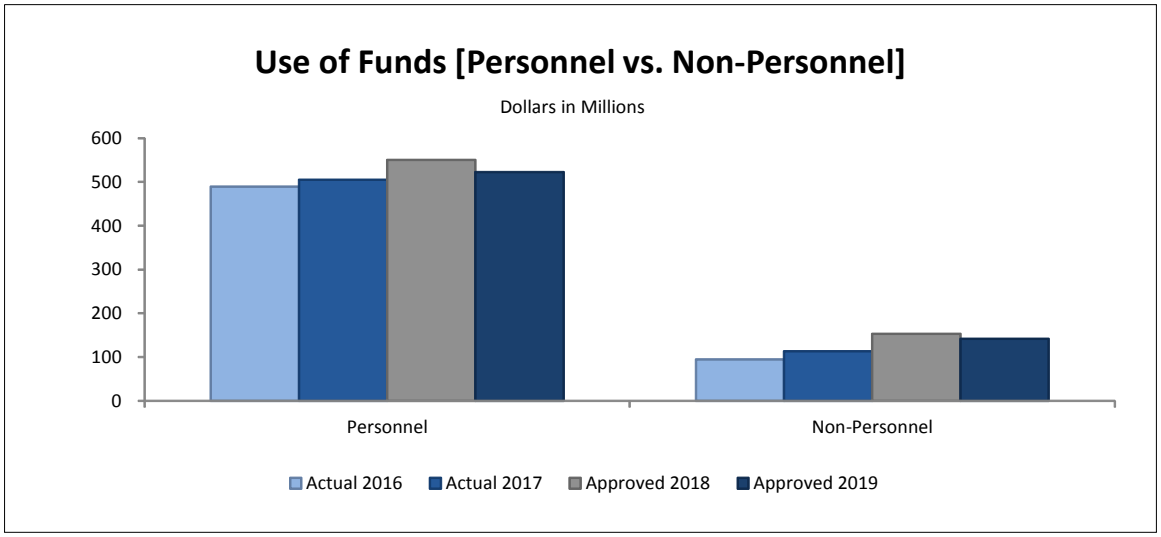
Uses of Funds

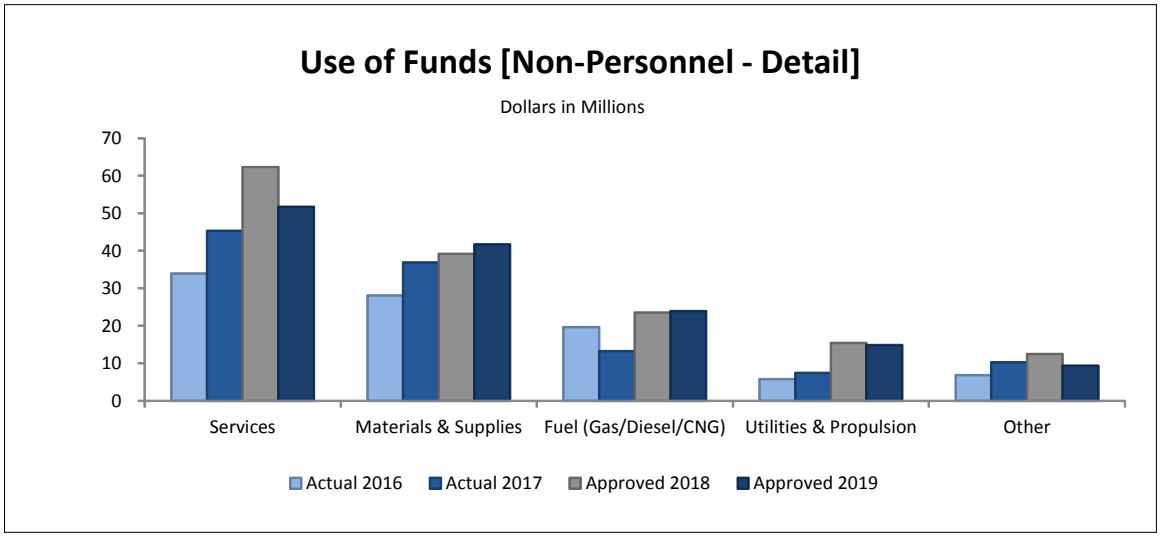
- Personnel expenses are the largest portion of the Metrobus budget. For FY2019, personnel cost is estimated at $522.5 million or 80.2 percent of the Metrobus budget, which represents a decrease of $27.7 million from the FY2018 budget. This decrease is primarily due to the impact of Metrobus absorbing a lower proportion of allocated indirect costs. The FY2019 rate allocation was modified using an FTA compliant model to calculate the modal impact by activity. For example, the updated calculation factors the number of Rail procurement activities handled by the Office of Procurement as compared to the Bus procurement activities.
- Services are budgeted at $51.7 million, which is $10.6 million lower than the FY2018 budget. The decrease reflects the impact of Metrobus absorbing a lower proportion of allocated indirect costs, offset slightly for increases due to right sizing and inflation.
- Materials and Supplies are budgeted at $41.7 million, which is $2.5 million higher than the FY2018 budget primarily due to increased cost for material parts.
- Energy costs, which include diesel, Clean Natural Gas (CNG) and gasoline, are budgeted at $23.9 million. This amount is $0.4 million higher than the FY2018 budget primarily due to fuel inflation costs.
- Other expenses for Metrobus are budgeted at $11.8 million in FY2019. This represents a decrease of $0.2 million compared to the FY2018 budget primarily due to the impact of Metrobus absorbing a lower proportion of allocated indirect costs.



FY2016 - FY2019

- Personnel actual expenses grew by $15.8 million or 3.2 percent from FY2016 to FY2017 and are projected to decrease by $27.7 million or 5.0 percent from FY2018 budget to FY2019. The decrease is primarily due to the impact of Metrobus absorbing a lower proportion of allocated indirect costs and management control of projected overtime.
- Services increased by $11.4 million or 33.5 percent from FY2016 to FY2017 and are projected to decrease by $10.6 million or 17.0 percent from FY2018 to FY2019. The decrease can be attributed to the right-sizing of service related expenses, as well as the impacts of Metrobus absorbing a lower proportion of allocated indirect costs.
- Materials and Supplies increased by $8.8 million or 31.3 percent from FY2016 to FY2017 and are projected to increase by $2.5 million or 6.4 percent from FY2018 to FY2019. The increase is primarily attributed to the higher cost associated with parts for the newer vehicles.
- Energy costs for fuel decreased by $4.8 million or 18.7percent from FY2016 to FY2017 due to lower rates, and are projected to decrease by $0.2 million or -1.4 percent from FY2018 to FY2019 primarily due to favorable fuel prices.
- Other expenses decreased by $2.1 million from FY2018 to FY2019 primarily due to the impact of Metrobus absorbing a lower proportion of allocated indirect costs.





Metrobus

Revenue and Expenses

(Dollars in Thousands)	Actual FY2016	Actual FY2017	Approved FY2018	Approved FY2019	Variance
Revenues					
Passenger	$141,053	$129,035	$146,075	$125,241	($20,834)
Other Passenger	8,991	8,221	14,584	11,825	(2,759)
Parking	0	0	0	0	0
Advertising	15,273	14,696	16,080	8,160	(7,920)
Joint Development	0	0	0	0	0
Fiber Optics	0	0	0	0	0
Other	748	10,825	5,639	6,149	510
Reimbursables	0	0	0	0	0
Total Revenues	**$166,066**	**$162,777**	**$182,378**	**$151,375**	**($31,003)**
Expenses					
Personnel	$489,137	$504,954	$550,251	$522,524	($27,727)
Services	33,970	45,340	62,310	51,739	(10,571)
Materials & Supplies	28,096	36,877	39,192	41,704	2,513
Fuel (Gas/Diesel/CNG)	19,662	13,246	23,555	23,936	380
Utilities & Propulsion	5,757	7,420	15,425	14,835	(590)
Casualty & Liability	6,169	9,447	11,081	8,755	(2,327)
Leases & Rentals	1,502	1,787	2,255	1,591	(664)
Miscellaneous	693	838	1,441	640	(801)
Capital Allocation	0	(19,442)	(15,711)	(14,058)	1,653
Total Expenses	**$584,986**	**$600,466**	**$689,799**	**$651,666**	**($38,133)**
Net Subsidy	**$418,920**	**$437,689**	**$507,421**	**$500,291**	**($7,130)**
Cost Recovery Ratio	28.4%	27.1%	26.4%	23.2%	-3.2%

Operating Expense Budget

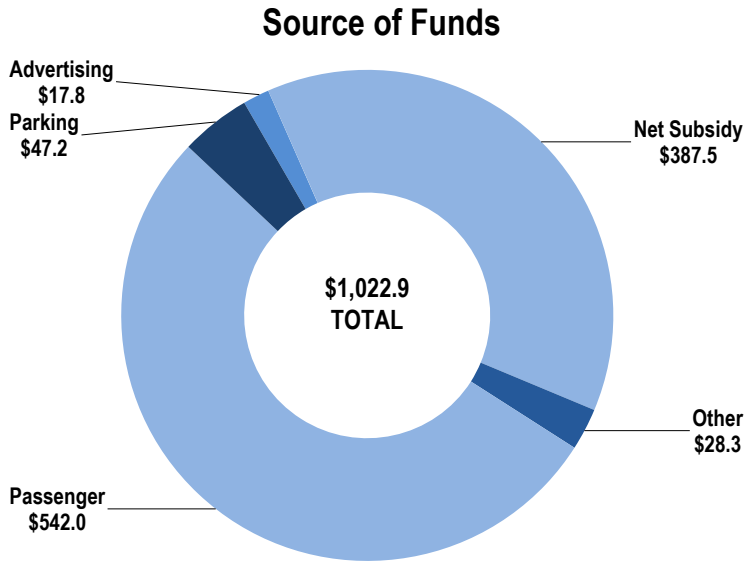
Metrobus

(Dollars in Thousands)	Actual 2016	Actual 2017	Approved 2018	Approved 2019	$ Variance	% Change
Salaries	$74,559	$92,713	$102,432	$93,747	($8,686)	-8%
Wages	$225,109	$212,878	$235,126	$228,010	($7,116)	-3%
Overtime	$31,466	$36,228	$33,527	$31,352	($2,175)	-6%
Total Salaries and Wages	**$331,134**	**$341,819**	**$371,085**	**$353,109**	**($17,976)**	**-5%**
Fringes	**$158,003**	**$163,135**	**$179,166**	**$169,415**	**($9,751)**	**-5%**
Fringe Health	(67)	70,573	78,054	73,041	(5,013)	
Fringe Pension	(1)	58,607	59,674	56,670	(3,004)	
Other Fringe Benefits	149,339	25,955	30,540	29,317	(1,223)	
Workman Compensation	8,732	8,000	10,897	10,387	(510)	
Total Personnel Cost	**$489,137**	**$504,954**	**$550,251**	**$522,524**	**($27,727)**	**-5%**
Services	**$33,970**	**$45,340**	**$62,310**	**$51,739**	**($10,571)**	**-17%**
Management Fee	22	15	0	4	0	
Professional & Technical	9,265	13,201	21,089	17,799	(3,291)	
Temporary Help	500	1,427	882	845	(38)	
Contract Maintenance	19,260	20,455	23,127	22,193	(934)	
Custodial Services	4	57	1,520	60	(1,460)	
Paratransit	56	26	0	0	0	
Services - Other	4,864	10,159	15,691	10,838	(4,853)	
Materials & Supplies	**$28,096**	**$36,877**	**$39,192**	**$41,704**	**$2,513**	**6%**
Fuels and Lubricants	1,609	1,589	2,085	1,673	(412)	
Tires	5,970	6,454	5,761	6,615	854	
Materials & Supplies - Other	20,516	28,834	31,346	33,416	2,070	
Fuel (Gas/Diesel/CNG)	**$19,662**	**$13,246**	**$23,555**	**$23,936**	**$380**	**2%**
Diesel Fuel	17,596	12,502	20,420	21,180	760	
Gasoline	447	(514)	861	695	(167)	
Clean Natural Gas	1,619	1,257	2,274	2,061	(213)	
Utilities & Propulsion	**$5,757**	**$7,420**	**$15,425**	**$14,835**	**($590)**	**-4%**
Electricity	3,532	3,769	11,328	10,845	(483)	
Propulsion	9	(9)	0	0	0	
Utilities - Other	2,216	3,660	4,097	3,990	(107)	
Casualty & Liability	**$6,169**	**$9,447**	**$11,081**	**$8,755**	**($2,327)**	**-21%**
Insurance	5,023	5,646	6,208	3,933	(2,275)	
Claims	1,146	3,801	4,873	4,821	(52)	
Leases	**$1,502**	**$1,787**	**$2,255**	**$1,591**	**($664)**	**-29%**
Property	449	205	238	201	(37)	
Equipment	1,054	1,582	2,017	1,390	(627)	
Miscellaneous	**$693**	**($18,604)**	**($14,270)**	**($13,418)**	**$852**	**-6%**
Dues and Subscriptions	163	170	223	137	(85)	
Conferences and Meetings	39	46	57	59	2	
Business Travel/Public Hearings	74	73	152	123	(29)	
Interview & Relocation	239	291	401	216	(185)	
Tolls	0	1	0	0	0	
Advertising	1,642	1,585	1,304	994	(310)	
Other	217	352	408	375	(34)	
Reimbursements	(1,680)	(1,680)	(1,104)	(1,264)	(160)	
Capital Allocation	0	(19,442)	(15,711)	(14,058)	1,653	
Total Non-Personnel Cost	**$95,849**	**$95,512**	**$139,548**	**$129,141**	**($10,406)**	**-7%**
Total Cost	**$584,986**	**$600,466**	**$689,799**	**$651,666**	**($38,133)**	**-6%**

Operating Budget by Mode: Metrorail

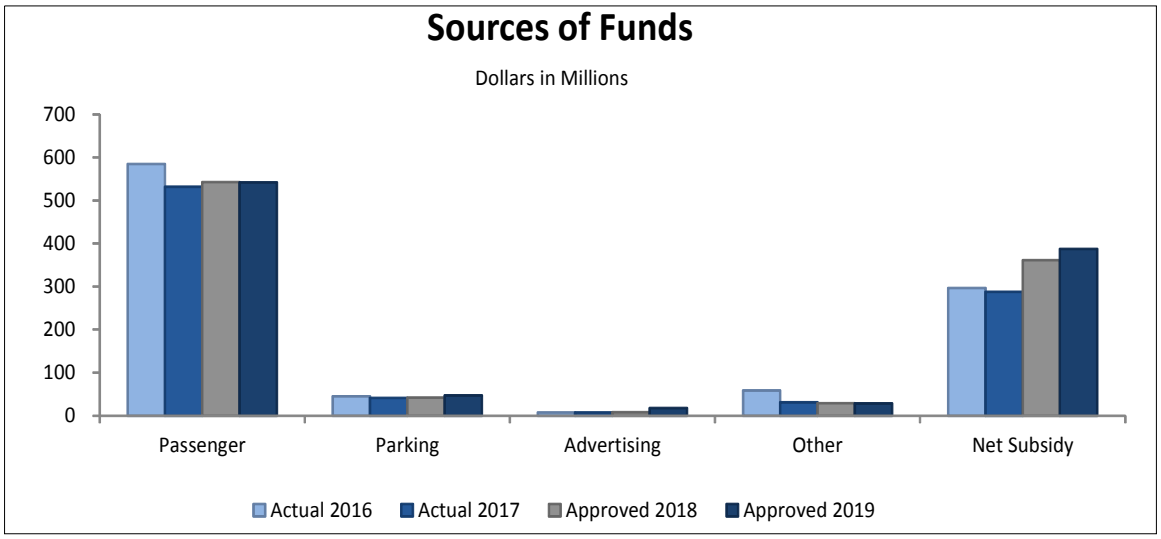
Sources of Funds

- Metrorail sources of funds consist of revenue (primarily passenger fares and parking fees, as well as advertising and lease revenues) and subsidy from Metro's jurisdictional partners.
- Total Metrorail revenue in FY2019 is projected at $635.4 million. Passenger revenues, including fares and passes, are projected at $542.0 million. This is a decrease of $0.8 million from the FY2018 budget. The decrease in passenger revenues is due to a projected reduction in ridership of 3 percent from the FY2018 budget, offset by an increased average fare. Declining ridership is expected to stabilize in FY2019, though service reliability and impacts related to the rail system preventive maintenance program continue to be a factor.
- Parking revenue at Metrorail facilities will contribute $47.2 million in revenue. This amount is $5.1 million higher than the FY2018 budget due to new initiatives, such as the expansion of hours for fee collection, additional stations with non-Metro rider fees and an increase in parking space leases by commercial entities.
- Advertising revenue applied to Metrorail is projected to generate $17.8 million in FY2019. This amount is $9.9 million higher than the FY2018 budget due to a reallocation of budget from Metrobus to align with current marketing trends.
- Other revenue, which includes joint development, fiber optics, and other miscellaneous revenue sources, is projected to contribute $28.3 million in FY2019.



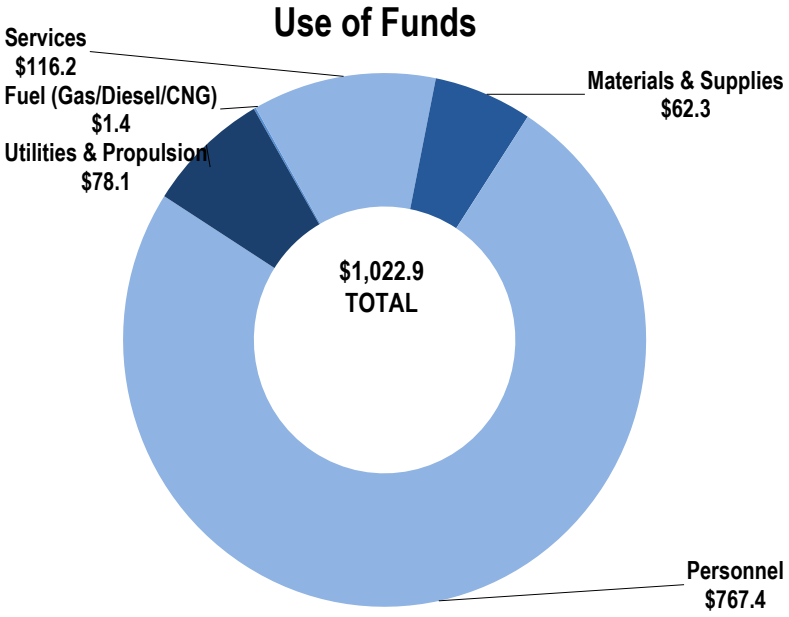
FY2016 - FY2019

Metrorail passenger fare revenue, the main source of revenue, is projected at $542.0 million in FY2019. The net local subsidy for FY2019 is $387.5 million, an increase of $26.1million from the FY2018 budget. Metrorail subsidy is 38.4 percent of the total FY2019 Metro net operating subsidy.



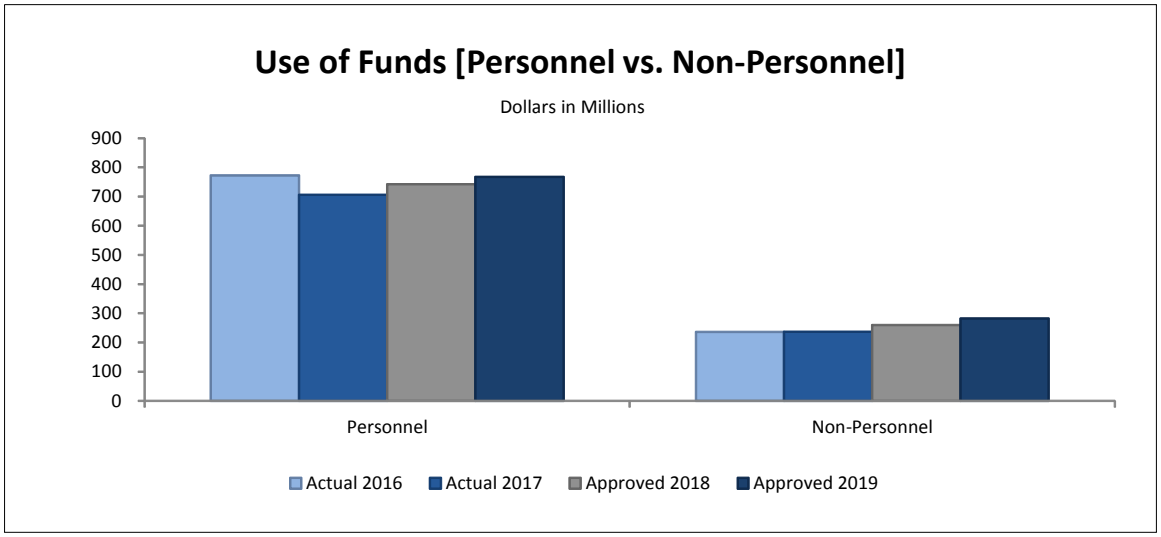
Uses of Funds

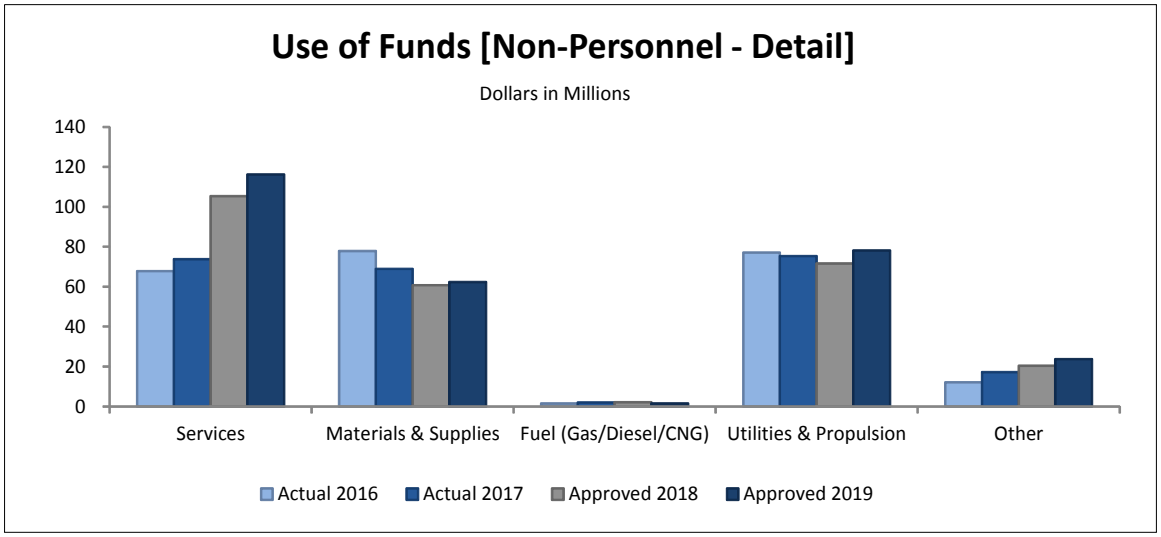
- Personnel expenses are the largest portion of the Metrorail budget for FY2019. Personnel costs are estimated at $767.4 million, or 75.0 percent of the Metrorail budget, which represents an increase of $25.4 million from the FY2018 budget. This increase is largely due to contractually obligated increases, as well as a shift in allocation indirect costs from Metrobus. The FY2019 rate allocation was modified using an FTA compliant model to calculate the modal impact by activity. For example, the updated calculation factors the number of Metrorail procurement activities handled by the Office of Procurement as compared to Bus procurement activities.
- Services are budgeted at $116.2 million, which is $10.9 million higher than the FY2018 budget. The increase is due to projected inflation impacts associated with the contract maintenance costs and the higher proportion of allocated indirect costs, as well as services associated with safety initiatives and reliability improvements.
- Materials and Supplies are budgeted at $62.3 million, which is $1.5 million higher than the FY2018 budget. This increase is primarily driven by railcar maintenance and repair.
- Energy costs which include fuel, propulsion and utilities are budgeted at $79.6 million. This amount is $5.8 million higher than FY2018 budget. The increase is driven by the projected increase in propulsion usage as more 7000 Series railcars are added to service.
- Other expenses for Metrorail total a credit of $2.6 million, an increased credit of $4.2 million from the FY2018 budget due to an increase in the capital overhead allocation.



FY2016 - FY2019

- Personnel actual expenses decreased $67.0 million or 8.7 percent from FY2016 to FY2017, and are projected to increase by $25.4 million or 3.4 percent from FY2018 budget to FY2019 budget, primarily due to contractually obligated increases, inflationary costs in fringe benefits, and the higher proportion of allocated indirect costs.
- Services increased from FY2016 to FY2017 by $6.0 million or 8.8 percent, and are projected to increase $10.9 million or 10.3 percent from FY2018 to FY2019. The increase accounts for projected inflation associated with contract maintenance costs and indirect costs as well as increases associated with safety initiatives, reliability service improvements and compliance requirements.
- Material and Supplies decreased $8.9 million or 11.4 percent from FY2016 to FY2017, and are projected to increase $1.5 million or 2.5 percent from FY2018 to FY2019 to support railcar and track maintenance to improve safety and reliability.





Metrorail

Revenue and Expenses

(Dollars in Thousands)	Actual FY2016	Actual FY2017	Approved FY2018	Approved FY2019	Variance
Revenues					
Passenger	$574,351	$521,846	$538,169	$534,180	($3,989)
Other Passenger	10,425	9,630	4,631	7,860	3,229
Parking	45,039	41,404	42,164	47,238	5,074
Advertising	7,519	7,230	7,920	17,840	9,920
Joint Development	11,139	9,897	8,000	9,750	1,750
Fiber Optics	15,583	15,703	15,600	15,468	(132)
Other	31,897	5,608	5,639	3,093	(2,546)
Reimbursables	0	0	0	0	0
Prior-Year Surplus	0	15,181	0	0	0
Total Revenues	**$695,953**	**$626,499**	**$622,123**	**$635,429**	**$13,305**
Expenses					
Personnel	$772,798	$705,753	$741,941	$767,350	$25,409
Services	67,777	73,732	105,345	116,248	10,903
Materials & Supplies	77,819	68,944	60,790	62,331	1,541
Fuel (Gas/Diesel/CNG)	1,514	1,932	2,075	1,435	(640)
Utilities & Propulsion	77,088	75,339	71,670	78,120	6,449
Casualty & Liability	9,451	14,485	16,936	20,061	3,126
Leases & Rentals	3,943	4,563	5,196	5,882	686
Miscellaneous	2,663	2,759	3,505	3,688	184
Capital Allocation	0	(28,241)	(24,012)	(32,215)	(8,202)
Total Expenses	**$1,013,054**	**$919,266**	**$983,447**	**$1,022,902**	**$39,455**
Net Subsidy	**$317,101**	**$292,767**	**$361,323**	**$387,473**	**$26,150**
Cost Recovery Ratio	68.7%	68.2%	63.3%	62.1%	-1.1%

Operating Expense Budget

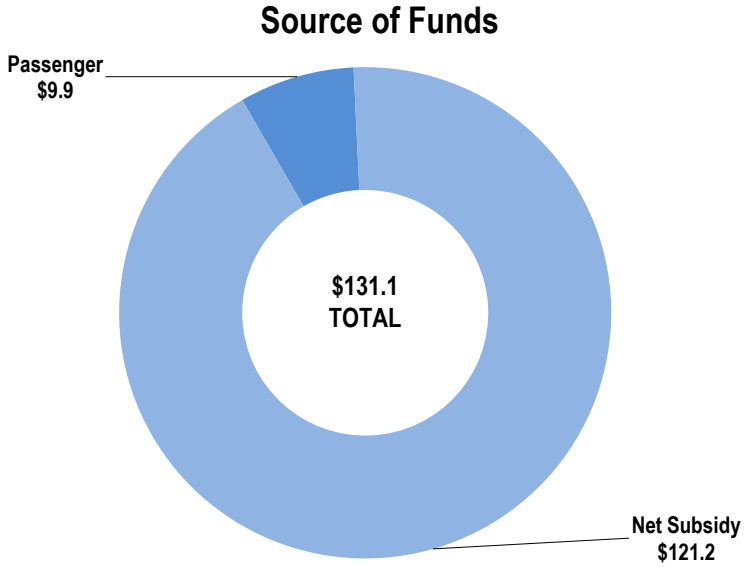
Metrorail

(Dollars in Thousands)	Actual 2016	Actual 2017	Approved 2018	Approved 2019	$ Variance	% Change
Salaries	$192,405	$189,569	$187,091	$204,012	$16,921	9%
Wages	$283,524	$248,973	$269,115	$265,181	($3,935)	-1%
Overtime	$48,853	$45,900	$46,836	$43,606	($3,229)	-7%
Total Salaries and Wages	**$524,781**	**$484,442**	**$503,042**	**$512,799**	**$9,757**	**2%**
Fringes	**$248,018**	**$221,310**	**$238,899**	**$254,551**	**$15,652**	**7%**
Fringe Health	(3,374)	103,415	104,162	111,299	7,136	
Fringe Pension	0	82,752	79,635	85,721	6,087	
Other Fringe Benefits	238,044	22,614	40,560	41,820	1,260	
Workman Compensation	13,348	12,529	14,542	15,711	1,169	
Total Personnel Cost	**$772,798**	**$705,752**	**$741,941**	**$767,350**	**$25,409**	**3%**
Services	**$67,777**	**$73,732**	**$105,345**	**$116,248**	**$10,903**	**10%**
Management Fee	186	209	433	360	(72)	
Professional & Technical	18,163	25,024	40,586	48,710	8,124	
Temporary Help	2,332	2,380	1,348	1,935	586	
Contract Maintenance	25,296	26,777	37,408	38,908	1,500	
Custodial Services	1	1	4	1	(3)	
Paratransit	9	29	0	0	0	
Services - Other	21,790	19,311	25,567	26,335	768	
Materials & Supplies	**$77,819**	**$68,944**	**$60,790**	**$62,331**	**$1,541**	**3%**
Fuels and Lubricants	764	1,005	597	1,005	408	
Tires	97	63	273	64	(209)	
Materials & Supplies - Other	76,958	67,875	59,920	61,261	1,342	
Fuel (Gas/Diesel/CNG)	**$1,514**	**$1,932**	**$2,075**	**$1,435**	**($640)**	**-31%**
Diesel Fuel	54	4	377	312	(64)	
Gasoline	1,460	1,819	1,698	1,123	(575)	
Clean Natural Gas	0	109	0	0	0	
Utilities & Propulsion	**$77,088**	**$75,339**	**$71,670**	**$78,120**	**$6,449**	**9%**
Electricity	21,787	22,573	17,102	17,839	737	
Propulsion	49,354	47,990	47,937	53,879	5,942	
Utilities - Other	5,947	4,776	6,632	6,402	(230)	
Casualty & Liability	**$9,451**	**$14,485**	**$16,936**	**$20,061**	**$3,126**	**18%**
Insurance	7,695	8,641	9,488	9,013	(475)	
Claims	1,756	5,844	7,448	11,049	3,601	
Leases	**$3,943**	**$4,563**	**$5,196**	**$5,882**	**$686**	**13%**
Property	872	1,229	1,246	1,443	198	
Equipment	3,070	3,334	3,951	4,439	488	
Miscellaneous	**$2,663**	**($25,481)**	**($20,507)**	**($28,526)**	**($8,019)**	**39%**
Dues and Subscriptions	241	246	359	468	109	
Conferences and Meetings	65	78	145	244	99	
Business Travel/Public Hearings	213	165	340	340	0	
Interview & Relocation	366	448	688	496	(192)	
Tolls	3	2	3	5	2	
Advertising	346	2,348	1,841	2,296	456	
Other	2,362	549	900	728	(172)	
Reimbursements	(933)	(1,075)	(771)	(889)	(118)	
Capital Allocation	0	(28,241)	(24,012)	(32,215)	(8,202)	
Total Non-Personnel Cost	**$240,256**	**$213,514**	**$241,505**	**$255,552**	**$14,046**	**6%**
Total Cost	**$1,013,054**	**$919,266**	**$983,447**	**$1,022,902**	**$39,455**	**4%**

Operating Budget by Mode: MetroAccess

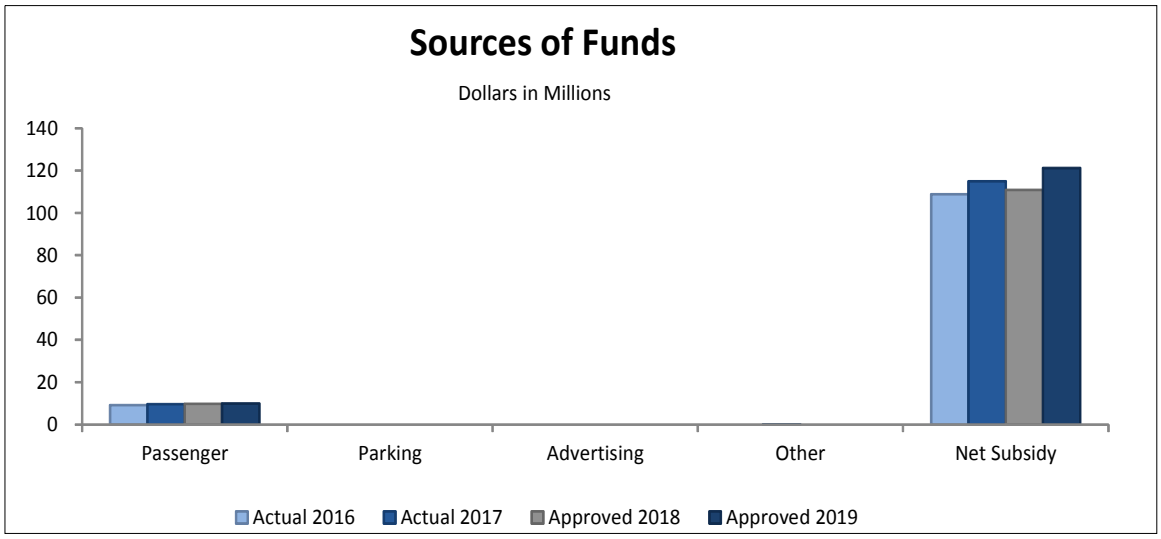
Sources of Funds

- MetroAccess sources of funds include passenger revenue and net subsidy from Metro's jurisdictional partners. MetroAccess passenger revenues are projected at $9.9 million and cover 7.6 percent of Metro's paratransit costs; jurisdictional subsidies fund the balance of 92.4 percent.
- MetroAccess passenger revenues are budgeted to increase $0.2 million or 2.1 percent in comparison to the FY2018 budget. The increase in fare revenue is tied to a projected ridership increase of 13,000 trips in FY2019. Larger growth in paratransit ridership is projected to be offset by the shifting of trips to alternate modes of transportation in the District of Columbia with TransportDC and the Abilities-Ride program in Maryland.

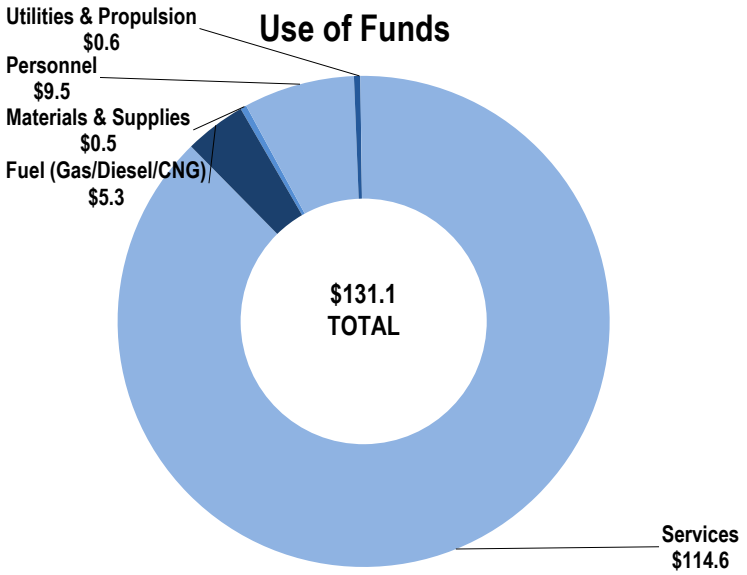


FY2016 - FY2019

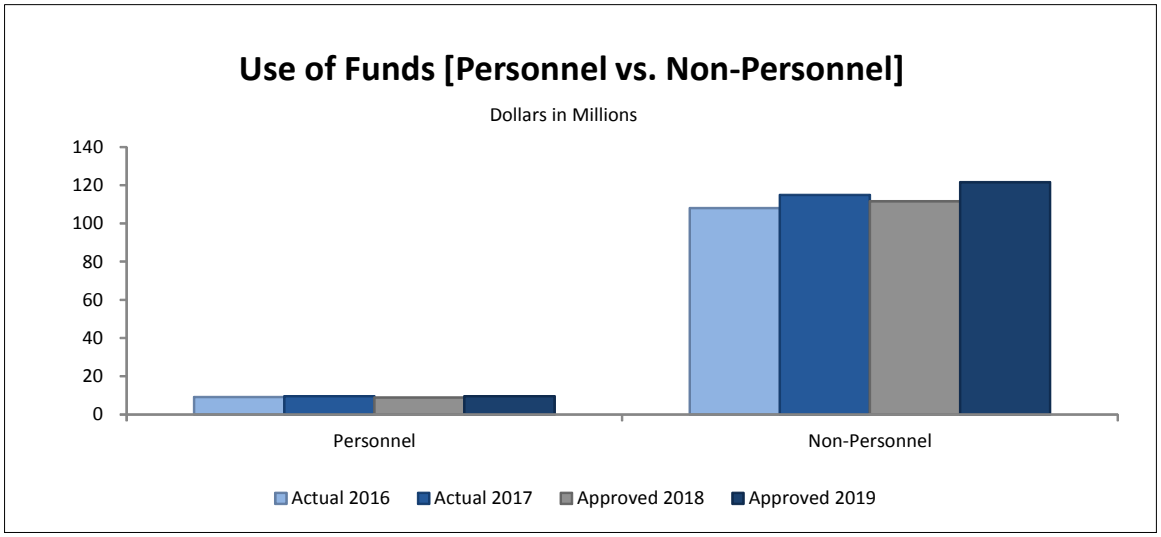
Net local subsidy is projected to increase by $10.4 million or 9.4 percent from FY2018 to FY2019. The subsidy growth is due to increased operating costs for service providers in FY2019. Subsidy for MetroAccess is 12.0 percent of the total FY2019 Metro net operating subsidy.

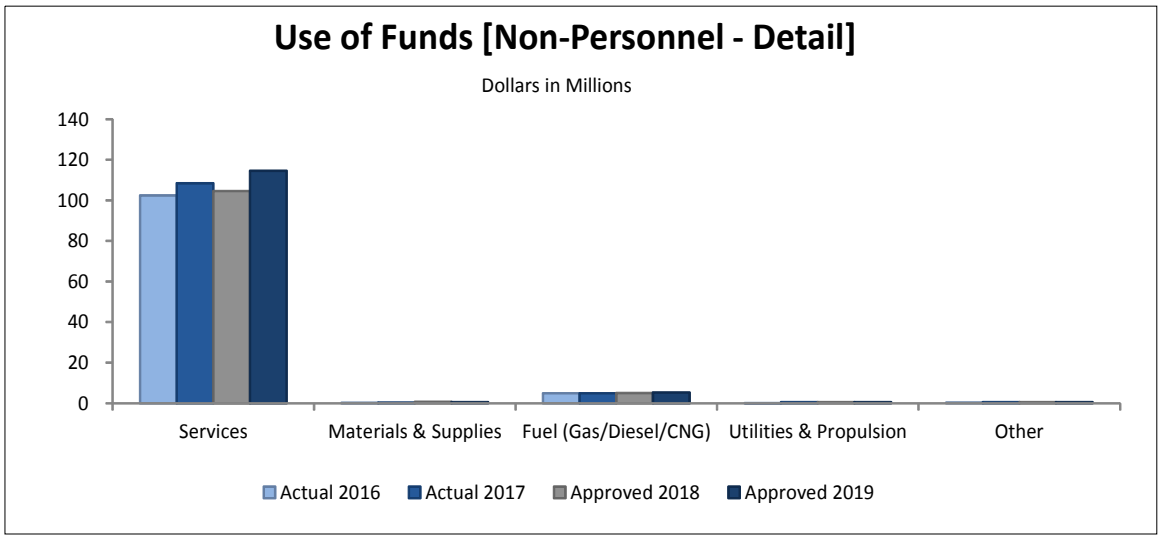


Uses of Funds



- Personnel costs are budgeted at $9.5 million, which is a $0.6 million increase in comparison to the FY2018 budget. This is primarily due to salary, health care and pension increases offset slightly by the impact of MetroAccess absorbing a lower proportion of allocated indirect costs.
- Services are budgeted at $114.6 million and represent an increase of $10.0 million in comparison to the FY2018 budget. This is due to contract cost escalations for paratransit service providers offset through cost savings in other technical services. Paratransit related services account for 83.3 percent of the total MetroAccess budget.





FY2016 - FY2019

- Services actual expenses increased by $6.0 million or 5.9 percent from FY2016 to FY2017, and are projected to increase by $10.0 million or 9.6 percent from FY2018 budget to FY2019. The cost savings associated with Metro's facilitation of alternate service options have been offset by cost escalation and increased ridership.
- Energy costs, consisting of fuel, increased by $0.1 million or 2.5 percent from FY2018 to FY2019. The increase is primarily due to inflation in gasoline prices.

MetroAccess
Revenue and Expenses

(Dollars in Thousands)	Actual FY2016	Actual FY2017	Approved FY2018	Approved FY2019	Variance
Revenues					
Passenger	$9,156	$9,660	$9,732	$9,940	$208
Other Passenger	0	0	0	0	0
Parking	0	0	0	0	0
Advertising	0	0	0	0	0
Joint Development	0	0	0	0	0
Fiber Optics	0	0	0	0	0
Other	0	1	0	0	0
Reimbursables	0	0	0	0	0
Total Revenues	**$9,156**	**$9,661**	**$9,732**	**$9,940**	**$208**
Expenses					
Personnel	$9,088	$9,568	$8,882	$9,512	$630
Services	102,430	108,430	104,559	114,563	10,004
Materials & Supplies	151	351	701	530	(171)
Fuel (Gas/Diesel/CNG)	4,994	4,988	5,113	5,275	162
Utilities & Propulsion	106	547	569	550	(19)
Casualty & Liability	296	462	543	522	(20)
Leases & Rentals	799	837	878	890	12
Miscellaneous	46	86	58	103	45
Capital Allocation	0	(742)	(769)	(839)	(69)
Total Expenses	**$117,910**	**$124,527**	**$120,533**	**$131,107**	**$10,574**
Net Subsidy	**$108,753**	**$114,866**	**$110,801**	**$121,167**	**$10,366**
Cost Recovery Ratio	7.8%	7.8%	8.1%	7.6%	-0.5%

Operating Expense Budget

MetroAccess

(Dollars in Thousands)	Actual 2016	Actual 2017	Approved 2018	Approved 2019	$ Variance	% Change
Salaries	$5,796	$6,246	$5,529	$5,679	$150	3%
Wages	$175	$232	$427	$642	$215	50%
Overtime	$17	$23	$43	$23	($20)	-46%
Total Salaries and Wages	**$5,988**	**$6,501**	**$6,000**	**$6,345**	**$345**	**6%**
Fringes	**$3,100**	**$3,067**	**$2,882**	**$3,167**	**$285**	**10%**
Fringe Health	0	1,331	1,268	1,409	141	
Fringe Pension	0	1,106	969	1,060	90	
Other Fringe Benefits	2,673	256	468	504	37	
Workman Compensation	428	374	177	194	17	
Total Personnel Cost	**$9,088**	**$9,568**	**$8,882**	**$9,512**	**$630**	**7%**
Services	**$102,430**	**$108,430**	**$104,559**	**$114,563**	**$10,004**	**10%**
Management Fee	1	1	0	0	0	
Professional & Technical	2,936	3,213	3,898	3,660	(238)	
Temporary Help	21	79	43	55	12	
Contract Maintenance	355	409	486	459	(27)	
Custodial Services	0	0	0	0	0	
Paratransit	98,421	103,710	98,520	109,220	10,700	
Services - Other	697	1,018	1,612	1,168	(443)	
Materials & Supplies	**$151**	**$351**	**$701**	**$530**	**($171)**	**-24%**
Fuels and Lubricants	0	0	0	0	0	
Materials & Supplies - Other	151	351	701	530	(171)	
Fuel (Gas/Diesel/CNG)	**$4,994**	**$4,988**	**$5,113**	**$5,275**	**$162**	**3%**
Diesel Fuel	0	0	0	0	0	
Gasoline	4,994	4,988	5,113	5,275	162	
Utilities & Propulsion	**$106**	**$547**	**$569**	**$550**	**($19)**	**-3%**
Electricity	64	410	412	393	(19)	
Utilities - Other	42	138	157	157	0	
Casualty & Liability	**$296**	**$462**	**$543**	**$522**	**($20)**	**-4%**
Insurance	241	276	304	235	(69)	
Claims	55	185	239	288	49	
Leases	**$799**	**$837**	**$878**	**$890**	**$12**	**1%**
Property	751	763	772	812	40	
Equipment	49	74	106	78	(28)	
Miscellaneous	**$46**	**($656)**	**($712)**	**($735)**	**($24)**	**3%**
Dues and Subscriptions	7	7	13	12	(1)	
Conferences and Meetings	4	2	7	6	(1)	
Business Travel/Public Hearings	11	7	21	19	(2)	
Interview & Relocation	11	14	20	13	(7)	
Tolls	0	0	0	0	0	
Advertising	8	75	5	59	54	
Other	6	15	18	18	0	
Reimbursements	(1)	(34)	(25)	(23)	2	
Capital Allocation	0	(742)	(769)	(839)	(69)	
Total Non-Personnel Cost	**$108,822**	**$114,959**	**$111,651**	**$121,595**	**$9,944**	**9%**
Total Cost	**$117,910**	**$124,527**	**$120,533**	**$131,107**	**$10,574**	**9%**

Reimbursable Budget

Reimbursable projects are those unique services, programs and projects for which separate funding is provided by a jurisdiction or third-party entity. Metro is reimbursed on a dollar-for-dollar basis to provide the arranged services. Prior to FY2018, reimbursable operating revenues and expenditures were not included in the operating budget, and were reported separately.

Reimbursable Operating Projects

	FY2017 Approved	FY2018 Approved	FY2019 Approved	Change
State & Local Funding				
DC Circulator [1]	$22,775	$21,464	$21,132	($332)
Federal Grant Funding				
Safety & Security grants	$4,701	$3,647	$4,174	$527
Bus Bridges/Transit Works	$618	—	—	—
Other Sources of Funding				
DC Circulator - Passenger fare revenue	$3,314	$2,900	$2,868	($32)
Neutral Host agreement with carrier team	—	$750	$1,422	$672
Joint Development & Adjacent Construction projects	$2,788	$2,006	$1,972	($34)
Total	**$34,196**	**$30,767**	**$31,568**	**$801**

1 Local Funding equals expenditures less passenger revenue

DC Circulator

The DC Circulator is the product of an agreement between the District Department of Transportation (DDOT) and WMATA, and is the fourth-largest bus system in the region.

- Through a partnership between DDOT, DC Sustainable Transportation and National Park Services (NPS), the Circulator provides visitors, commuters and residents door-to-door transportation to museums, monuments and memorials along the National Mall
- System consists of six distinct routes across Washington, DC and Rosslyn, VA
- Provides approximately five million trips a year, using a fleet of 67 buses servicing each of the 136 stops every 10 minutes
- DC Circulator provides public transportation to the District's main attractions for a fare price of $1
- Cost of operating and managing contract service is fully reimbursed by the District of Columbia

Safety and Security Grants

Metro receives several security grants through the Transit Security Grant Program (TSGP) and National Explosive Detection Canine Team Program (NEDCTP) under the Department of Homeland Security (DHS).

The grants provide funding for capital and operational security activities. The funding enhances the ability of Metropolitan Transit Police Department (MTPD) to detect and deter potential attacks of terrorism through increased visibility, unpredictable presence, identification of areas of critical infrastructure, security assessments, and employee/public awareness. As Federal appropriations become available, Metro continues to pursue new funding to further enhance security activities.

Joint Development and Adjacent Construction Projects

Metro's Office of Joint Development and Adjacent Construction (JDAC) reviews and approves construction activities for those jurisdictional projects adjacent to Metrorail and Metrobus property, facilities, and operations in order to ensure that:

- Metro facilities and operations are not damaged or affected by the proposed project
- Metro operations are not affected during and after the project construction
- Metro station capacity is not adversely affected by the ridership generated by the project

JDAC expenditures are reimbursed by the requesting private entity or jurisdiction. JDAC performs the following activities for the entities:

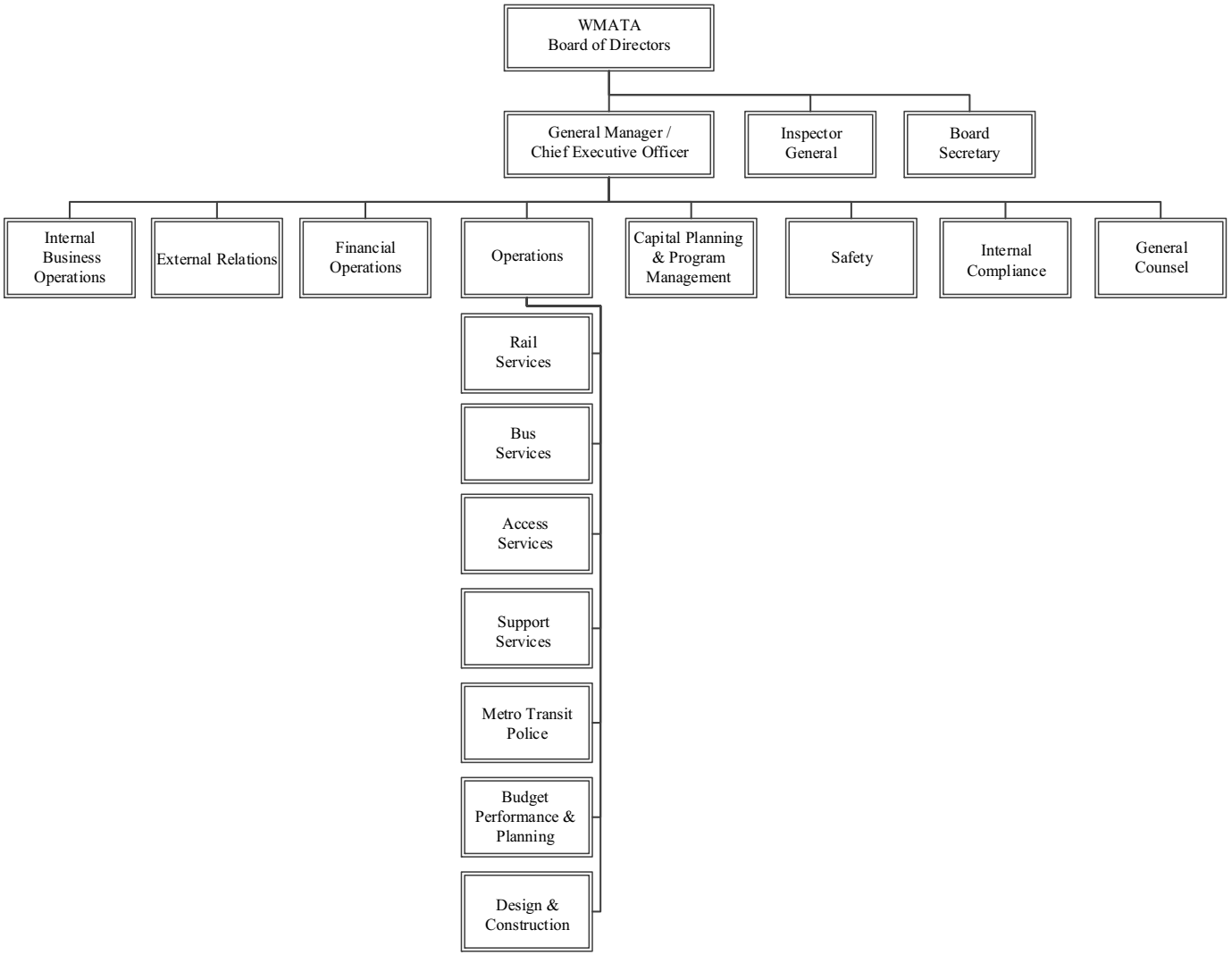
- Provides coordination with Owner/Developer/ Contractor (ODC) including agencies, jurisdictions, property owners, consultants, developers, utilities and/ or anyone who has an impact on Metro property, facilities and/or operations
- Prepares project agreements in conjunction with Real Estate and Station Area Planning and General Counsel
- Provides coordination/oversight for all aspects of a project including design, safety, operations, construct ability, assuring compliance with Metro standards, monitoring/coordinating construction activities and acceptance of on-site installations and facilities
- Provides oversight and acceptance for Joint Development and Jurisdictional Reimbursable projects that will ultimately be owned and operated by Metro

Neutral Host

The Authority issues master license contract agreements with telecommunications providers to design, build, operate, and maintain a wireless communication infrastructure throughout Metro's underground stations and tunnels. The agreements for neutral host projects are at no cost to Metro and enable wireless cellular phone and data services throughout the underground infrastructure. Metro seeks to provide an, open, comprehensive wireless communication infrastructure, in order to achieve the following objectives:

- Establish reliable, seamless wireless communications coverage in all of Metro's 47 underground stations and 50.5 miles of tunnels
- Improve the safety, security, and information opportunities for the Metro riders
- Maximize the revenue to Metro with minimal operational complexity and impact to transit operations
- Leverage the economic value of Metro's facilities, infrastructure, ridership, and presence within the Washington metropolitan area
- Allow Metro to use wireless communications for its operational and administrative needs

WMATA Organizational Chart



General Manager

(Dollars in Thousands)	Actual 2016	Actual 2017	Approved 2018	Approved 2019	$ Variance	% Change
Personnel	$1,254	$1,207	$819	$695	($125)	-15.2%
Non-Personnel	452	719	585	703	118	20.2%
Total Cost	**$1,707**	**$1,926**	**$1,404**	**$1,397**	**($7)**	**-0.5%**
Authorized Positions	4	6	4	3	-1	-25.0%

1. FY2016 actuals include the department's respective share of all fringe expenses. FY2017, FY2018 and FY2019 figures include only the department's respective share of unallocated fringe expenses due to a change in the recording of fringe expenses.
2. Authorized positions reflect the department's headcount based on Metro's FY2019 organizational structure. Similarly, expense figures consist of the costs allocated to the department based on the FY2019 structure.

The General Manager and Chief Executive Officer (GM/CEO) is responsible for the management of Metro's intermodal system - Metrorail, Metrobus, and MetroAccess. Under the direction of the GM/CEO, over 11,000 Metro employees strive each day to get transit customers in the National Capital Region to their destinations safely and in a reliable manner. The GM/CEO provides strategic leadership on improving passenger and employee safety through regulatory compliance and system maintenance, increasing service reliability through innovative and more efficient approaches to operations management, and enhancing fiscal accountability. In addition, the GM/CEO provides direction and oversight on Metro's capital improvement program which is critical to the long-term safety and reliability of the system.

The GM/CEO's business actions are designed to build a strong foundation for achieving best in class status among U.S. transit systems. This includes effective management, strong partnership with regional stakeholders, dedicated capital funding and long-term fiscal accountability through the GM/CEO's plan to Keep Metro Safe, Reliable and Affordable (KMSRA).

With the General Manager/CEO at the helm, Metro received commitment from the three jurisdictions to provide $500 million in permanent annual dedicated funding for the capital program. Metro received the third and final 'yes' on March 22, 2018 as Maryland committed to its full share of dedicated funding.

FY2019 Business Plan

The GM/CEO's FY2019 budget funds the objectives of Metro's business plan and system safety and reliability, which remain essential elements to restoring public confidence. Building on recent safety initiatives and system maintenance efforts under SafeTrack, the budget remains focused on safety and system performance with a proactive preventive maintenance program to further reduce track-related delays, repair structural components and improve system reliability.

The GM/CEO's FY2019 budget delivers the same level of Metrobus and Metrorail service and does not raise fares. Consistent with KMSRA, the GM/CEO's FY2019 budget holds operating subsidy at a three percent growth through additional management actions and further reductions in overtime, outsourcing and increases in parking and advertising revenue. Taken together, these actions partly offset rising expenses that are outside of management's control, including legacy pension and health care costs, mandated paratransit services, and inflation.

For the fourth year in a row, WMATA is poised to invest more than $1 billion in FY2019 to continue rebuilding rail, bus and paratransit services with over 85 percent of planned investments already underway. Key components of the capital budget include:

- rehabilitation/replacement of two bus garages
- new railcar overhaul facility addressing the backlog of track and structure maintenance and repairs
- tunnel water mitigation and ventilation systems
- core station passenger circulation improvements

Not funded in the GM/CEO's FY2019 budget, however, are additional services including bus service adjustments, additional staffing required to ramp up for Silver Line Phase 2, new bus services and wages adjustments. WMATA is embarking on a major effort for a comprehensive review of the regional bus network to help establish the future operating strategy.

Keeping Metro Safe, Reliable and Affordable Activities

- Customer Focus
  - Improve reliability with completed delivery of the 7000-Series railcars
  - Continue expansion of underground cellular service throughout the Metrorail system and the station wi-fi program
- Employee Focus

  - Support recognition programs for outstanding safety and customer service accomplishments
  - Pursue new standards in uniforms that improve the look and identification of personnel, and restore pride in the organization
- Internal Management Focus
  - Improve productivity through strengthened management of absenteeism and overtime
  - Explore opportunities to gain efficiencies by outsourcing new functions, facilities and operations
- In collaboration with regional jurisdictions, community leaders, and business partners, successfully supported the introduction of dedicated funding legislation in all three jurisdictions

FY2018 Major Accomplishments

- Successfully obtained funding to meet operating and capital budget requirements, including the execution of a Capital Funding Agreement extension, through jurisdictional staff work
- Hosted an international rail conference that attracted transit leaders from five continents to D.C., a first of its kind
- Launched the Rush Hour Promise customer service guarantee, a culmination of progress achieved through the Back2Good program and a tangible commitment to continued service improvements
- Explored opportunities to gain efficiencies by outsourcing new functions, facilities and operations and increase revenue through creative partnerships
- Improved productivity through strengthened management of absenteeism and overtime
- Continued support of our safety and customer service accomplishments through programs that recognize Metro employees

Office of Inspector General

(Dollars in Thousands)	Actual 2016	Actual 2017	Approved 2018	Approved 2019	$ Variance	% Change
Personnel	$3,402	$3,726	$3,461	$3,989	$529	15.3%
Non-Personnel	1,285	1,176	1,623	1,693	71	4.3%
Total Cost	**$4,687**	**$4,902**	**$5,084**	**$5,683**	**$599**	**11.8%**
Authorized Positions	34	36	35	38	3	8.6%

1. FY2016 actuals include the department's respective share of all fringe expenses. FY2017, FY2018 and FY2019 figures include only the department's respective share of unallocated fringe expenses due to a change in the recording of fringe expenses.
2. Authorized positions reflect the department's headcount based on Metro's FY2019 organizational structure. Similarly, expense figures consist of the costs allocated to the department based on the FY2019 structure.

The Office of Inspector General (OIG) is an independent office that reports to the WMATA Board of Directors. The OIG supervises and conducts independent and objective audits, evaluations, investigations, and reviews of Metro programs and operations to promote economy, efficiency and effectiveness, as well as to prevent and detect fraud, waste and abuse in such programs and operations.

The Inspector General provides advice to the Board of Directors and the GM/CEO to assist in achieving the highest levels of program and operational performance in Metro.

FY2019 Business Plan

OIG's Audit component will:

- Conduct risk-based performance audits and evaluations to promote economy, efficiency and effectiveness of Metro programs, operations, and activities
- Perform reviews and analyses of contractor proposals to determine reasonableness of cost/pricing information and compliance with the Buy America Act
- Oversee the independent public accounting firm conducting Metro's annual financial statement audit

OIG's Investigation component will:

- Handle and issue confidential reports of investigations involving fraud, waste, abuse, and gross mismanagement
- Provide all oversight and administration of the OIG hotline
- Oversee and administer Metro's whistleblower/ retaliation, as well as provide confidential and timely investigative reports to the Whistleblower Panel
- Issue management alerts to the GM/CEO for issues with time sensitivity and those requiring management action
- Lead coordination of investigations with outside agencies and/or Metro Transit Police (MTPD)
- Provide Whistleblower/Retaliation training to Metro departments and offices

FY2018 Major Accomplishments

- Issued ten performance audits/evaluations
- Reviewed seven contractor proposals for reasonableness of cost/pricing information and recommended $2.9 million in net adjustments
- Issued 80 other attestation reports for billing rate, pre-award and Buy America reviews
- Oversaw Metro's annual independent audit of financial accounts
- Conducted the review, referral or subsequent investigation of over 400 complaints to the OIG hotline
- Issued 25 confidential Reports of Investigation involving fraud, waste and abuse
- Investigated seven whistleblower cases providing confidential and timely investigative reports to the WMATA Whistleblower Panel
- Continued to coordinate investigations with federal and state prosecutors; federal and state law enforcement agencies; and/or MTPD, when appropriate
- Provided internal controls and fraud awareness training to Metro departments and offices, including the New Employee Orientation

Board Corporate Secretary

(Dollars in Thousands)	Actual 2016	Actual 2017	Approved 2018	Approved 2019	$ Variance	% Change
Personnel	$508	$474	$447	$447	$0	0.0%
Non-Personnel	70	121	230	228	(2)	-0.9%
Total Cost	**$578**	**$595**	**$677**	**$675**	**($2)**	**-0.3%**
Authorized Positions	5	4	4	4	0	0.0%

1. FY2016 actuals include the department's respective share of all fringe expenses. FY2017, FY2018 and FY2019 figures include only the department's respective share of unallocated fringe expenses due to a change in the recording of fringe expenses.
2. Authorized positions reflect the department's headcount based on Metro's FY2019 organizational structure. Similarly, expense figures consist of the costs allocated to the department based on the FY2019 structure.

The Office of the Board Corporate Secretary (SECT) is an independent office that reports to the WMATA Board of Directors. SECT serves as a resource to advance the Board's goals and policies, and Metro's strategic plan. SECT works with the Board and management to review policy issues and provide consultation, represents the Board in policy matters, and researches and advises on governance best practices.

SECT is responsible for managing the Board's decision-making process, the exchange of information and documentation in support of Board activities.

> *The Office of the Board Corporate Secretary works proactively with the GM/CEO and his staff to carry out the policies, goals and initiatives of WMATA Board; and serves as liaison between the Board, the Authority, Board advisory bodies and customers.*

Other responsibilities include the coordination, review and distribution of WMATA Board materials; maintaining official records of the Board actions and resolutions; publishing legal notices and arranging public hearings approved by the Board, as well as representing the Board on a variety of issues relating to stakeholder groups including the Accessibility Advisory Committee and the Riders' Advisory Council.

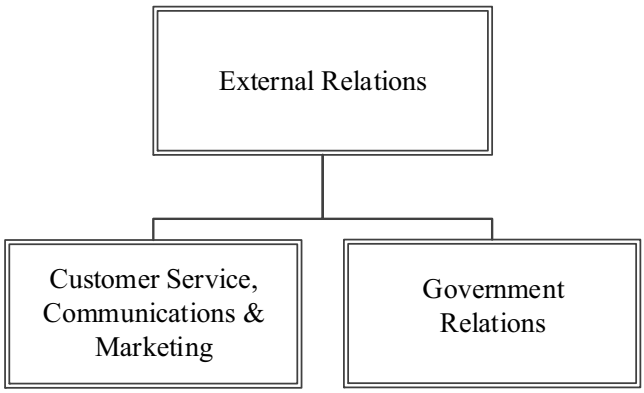
FY2019 Business Plan

- Continue acting as a vital bridge between the Board, executive leadership and the public
- Manage the Board retreat to address strategic issues
- Ensure the Board's committee work plans are in sync with the Board's priorities
- Provide recommendations regarding the Board initiatives and policies
- Ensure Compact requirements are met, along with Board directives, including the implementation of the Public Participation Plan
- Develop and lead Board orientation for new members when appointed
- Review Board delegations and make recommendations to ensure the Board is fulfilling its oversight role

FY2018 Major Accomplishments

- Assisted the Board with adopting, through revised bylaws, a new streamlined committee structure to better align with its strategic priorities, and promote Committee efficiency and effectiveness
- Developed committee work plans that reflect Board's strategic priorities
- On-boarded three new Board members and conducted Metro orientations
- Updated the internal Board materials review process to encourage timely submissions to the Board
- Facilitated the Board members to meet regularly with Riders' Advisory Council and Accessibility Advisory Council

External Relations



(Dollars in Thousands)	Actual 2016	Actual 2017	Approved 2018	Approved 2019	$ Variance	% Change
Personnel	$14,737	$11,643	$9,733	$9,582	($152)	-1.6%
Non-Personnel	5,621	6,482	8,802	8,766	(36)	-0.4%
Total Cost	**$20,359**	**$18,125**	**$18,535**	**$18,348**	**($187)**	**-1.0%**
Authorized Positions	141	139	115	112	-3	-2.6%

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The Department of External Relations (EXRL), in support of Metro's business priorities and objectives, is responsible for building and maintaining strong relationships with Metro's many stakeholders and partners, including its customers, regional elected officials, business and community groups, and the WMATA Board of Directors.

Key priorities include the following:

- Working with funding jurisdictions and Congress to ensure needed operating and capital support, including new dedicated capital funding
- Engaging all stakeholders in support of Metro's business goals and objectives
- Improving customer experience and public confidence in Metro through in system passenger information, as well as through media relations and marketing channels
- Responding and providing input on Metro's priorities to Federal agencies and oversight organizations on safety and other matters
- Serving as management's Board liaison and overseeing management's work with the Board of Directors

FY2019 Business Plan

In FY2019, External Relations will continue to integrate the efforts of several functional areas to further develop and enhance its comprehensive program to strengthen Metro's brand.

- Ensure adequate funding from jurisdictions for the Keep Metro Safe, Reliable and Affordable (KMSRA) plan that enables the safe and efficient operation of Metro
- Maintain support and ensure a smooth transition and transfer of Metro's newly obtained dedicated capital funding
- Implement a strategy, in collaboration with business, regional and elected leaders, in support of the reauthorization of the Passenger Rail Investment and Improvement Act
- Work to amplify public and stakeholder awareness of Metro's progress in achieving KMSRA objectives, including sustaining and growing ridership, increasing confidence for investments, building internal pride and morale, and continuing to improve safety and financial stability
- Maintain an effective Board-management relationship to achieve business goals and objectives of KMSRA and ensure effective policymaking

- Provide strategic and tactical leadership for all aspects of external relations and marketing that support the public relations, community relations, and government relations objectives of the Authority

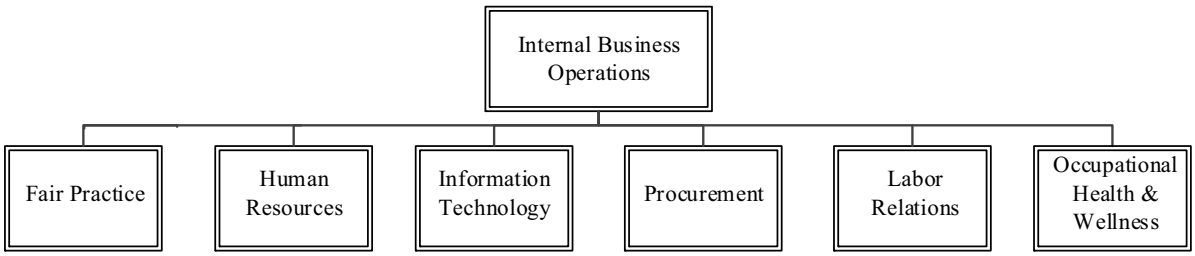
Keeping Metro Safe, Reliable and Affordable Activities

- Customer Focus
  - Build on the Back2Good campaign and Rush Hour Promise to increase public confidence in service reliability
  - Develop better understanding of overall travel market to inform strategies for maintaining, recovering and increasing ridership on Metrobus and Metrorail
  - Continue to serve communities during major regional events and boost destination travel via Metro
- Employee Focus
  - Communicate leadership objectives to build a sustainable business model, improve service delivery and enhance employee pride
  - Recognize employees both internally and externally for safety and customer service excellence
- Internal Management Focus
  - Continue to enhance delivery of customer preferred digital information channels to improve cost effective service
  - Increase non-fare revenue through expanded digital advertising, new commercial and retail opportunities, and special event cost recovery

FY2018 Major Accomplishments

- Presented the committed funding legislation in all three jurisdictions (DC, MD, and VA) with a support of regional jurisdictions, community leaders, and business partners
- Effectively worked with jurisdictional staffs to execute a Capital Funding Agreement extension
- Launched the Rush Hour Promise program to improve WMATA on-time performance and customer service experience
- Kept stakeholders and customers informed of safety progress, including SafeTrack program, which concluded with a Customer Appreciation event in which staff was deployed at stations throughout the system
- Provided successful community outreach and passenger communication to ensure a smooth transition to new Metrorail operating hours and the launch of Metro's preventive maintenance rail infrastructure program
- Enhanced customer service by extending Live Chat via Metro's website hours by 3 hours per day
- Exceeded all customer satisfaction goals of 80% for the call center
- Hosted the Back2Business Procurement Fair to educate and encourage minority-owned, local, disadvantaged, and woman-owned businesses to compete for Metro contracts as primes or subcontractors.
- Expanded employee engagement within the Support Services Departments by launching new Local Customer Care meetings, and conducting Employee Town Halls at five Metro facilities

Internal Business Operations



(Dollars in Thousands)	Actual 2016	Actual 2017	Approved 2018	Approved 2019	$ Variance	% Change
Personnel	$60,641	$61,855	$57,033	$57,648	$615	1.1%
Non-Personnel	38,261	45,959	58,818	57,919	(899)	-1.5%
Total Cost	**$98,902**	**$107,814**	**$115,851**	**$115,567**	**($284)**	**-0.2%**
Authorized Positions	610	583	542	542	0	0.0%

1. FY2016 actuals include the department's respective share of all fringe expenses. FY2017, FY2018 and FY2019 figures include only the department's respective share of unallocated fringe expenses due to a change in the recording of fringe expenses.
2. Authorized positions reflect the department's headcount based on Metro's FY2019 organizational structure. Similarly, expense figures consist of the costs allocated to the department based on the FY2019 structure.

The Department of Internal Business Operations (IBOP) is comprised of six internal business operations that play integral roles in supporting all operating components of Metro: Human Resources, Information Technology, Labor Relations, Occupational Health and Wellness, Procurement and Materials, and Fair Practices. These offices provide leadership, direction, guidance, advice and support to all offices throughout the Authority, delivering high quality services and promoting principles and practices of fairness in accordance with established policies, rules and regulations.

IBOP implements and supports information management solutions, provides acquisition services, manages unionized employment matters, and provides medical and clinical services to Metro employees and prospective employees. In addition, IBOP sources and enables the selection of highly qualified talent, provides inclusive employee performance management programs, employee development and training opportunities, as well as administering affirmative employment planning and implementation, and education and training for cultural/ ethnic diversity programs.

Performance Indicator	Actual FY2016	Actual FY2017	Target FY2018	Target FY2019
Improve reliability and win back riders				
Overall vacancy rate	7%	5%	5%	5%
Operations critical vacancy rate	-	8%	9%	9%

FY2019 Business Plan

- Design and implement proactive sourcing and recruitment strategies in support of Metro's talent and diverse workforce requirements
- Develop, implement, and deliver information technology and telecommunication services in support of Metro's strategic goals and objectives
- Promote fair and open competition, procure quality goods and services, and meet the needs of Metro's customers while maintaining public trust and integrity
- Represent the Authority and conduct all labor relations between Metro and the labor unions representing Metro employees
- Improve outreach efforts to encourage vendor participation and provide accurate and comprehensive information to the contracting community
- Strengthen policies and procedures to ensure proper controls are in place to detect and prevent misuse and fraudulent activity

- Generate efficiencies by completing projects in the pipeline and focusing on initiatives with high return on investment
- Research and apply responsive diversity awareness engagement activities based on indicative data to support a respectable and high-performing work environment
- Revise and implement Title VI knowledge management and Public Participation Plan (PPP) activities that increase cultural awareness, cultural sensitivity and support a positive experience for all customers

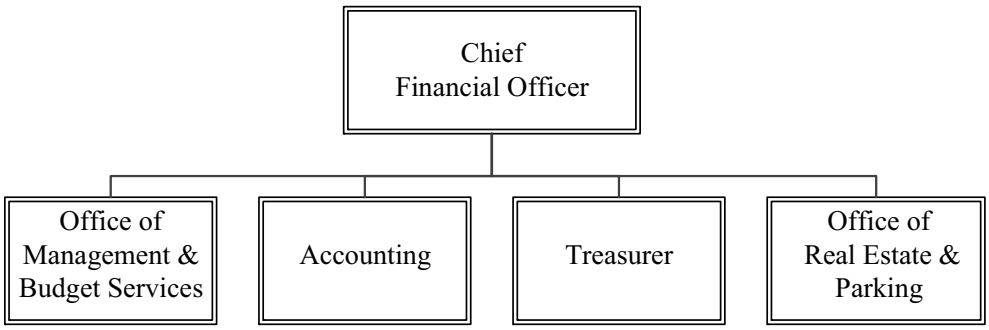
Keeping Metro Safe, Reliable and Affordable

- Customer Focus
  - By end of FY2019, provide free public Wi-Fi at all underground and at-grade stations
  - Collaborate with internal departments and develop communication strategies that effectively engage community-based organizations regarding Metro's service and planning information for specific communities/neighborhoods
- Employee Focus
  - Implement a mentoring program to identify and develop high potential employees
  - Negotiate sustainable and cost-effective collective bargaining agreements
  - Create a phased retirement program to enable employees to continue working with a reduced workload and transition from full-time work to full-time retirement, while transitioning knowledge for succession planning purposes
  - Complete phase 2 of Metro's One Badge program to include an integration of exit swipe capability and card reader upgrade and expansion in other facilities
  - Promote a working environment that reinforces Metro's values of fairness, hard work, respect and integrity
  - Establish agency-wide attendance protocols and implement consistent management practices for improving attendance
- Internal Management Focus
  - Coordinate with leadership to develop competencies that are specific to the business performance goals of Metro
  - Emphasize training for new supervisors and provide department specific labor relations training
  - Improve strategic sourcing by awarding more enterprise wide contracts to reduce the number of procurement requests, thus gaining economies of scale and creating efficiencies for product and service delivery times

FY2018 Major Accomplishments

- Developed and delivered information technology and telecommunication services
  - Completed phase 1 implementation of a One-Badge System for all Metro employees, which allows access to work areas while providing improved security and accountability
  - Completed Phase 1 of implementation of free public Wi-Fi at 36 underground Metro Stations
  - Supported the rollout of the MetroTime Timekeeping System
- Promoted fair and open competition in the procurement of quality goods and services, while maintaining public trust and integrity
- Created efficiencies in procurement activities by developing contracting vehicles for: enterprise-wide contracts, intergovernmental cooperative contracts, and long-term contracts
- Held inaugural Cooperative Purchasing Day in November 2017
- Implemented phase 2 of the healthcare transition plan to help achieve Metro's financial objectives while maintaining competitive healthcare benefits packages
- Developed and improved strategic human resources service programs
  - Continued diversity outreach and recruitment programs
  - Gained momentum by promoting Metro job opportunities within diverse communities
- Formed MetroBeyondBarriers, a new diversity outreach program that promotes job opportunities to individuals with disabilities
- Completed rollout of the Staged Retirement program, which leverages key, retirement-eligible employees to prepare potential successors to transition into management positions
- Completed the pilot rollout of the High Potential Leadership Development Program in Operations
- Redesigned the New Employee Orientation (NEO) program to improve and streamline the employee onboarding experience

Financial Operations



(Dollars in Thousands)	Actual 2016	Actual 2017	Approved 2018	Approved 2019	$ Variance	% Change
Personnel	$52,567	$30,200	$23,345	$23,005	($341)	-1.5%
Non-Personnel	37,597	53,233	62,569	57,676	(4,892)	-7.8%
Total Cost	**$90,176**	**$83,433**	**$85,914**	**$80,681**	**($5,233)**	**-6.1%**
Authorized Positions	295	271	252	243	-9	-3.6%

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The Department of Financial Operations (CFO) plans, allocates and manages the Authority's financial resources, programs and priorities, as well as monitors its financial condition and ensures fiscal integrity.

Financial Operations provides accurate and timely financial services to stakeholders while fostering accountability. The department is instrumental in achieving the GM/CEO's priority of fiscal responsibility.

The Office of Management and Budget Services is responsible for formulating the annual operating budget, six-year capital improvement program, long-range financial planning and revenue management. The Office of Accounting manages payroll operations, accounts payable, accounts receivable and financial reporting. The Office of the Treasurer is responsible for risk management, revenue collection, liquidity management, corporate investments, and debt management as well as fare media sales and distribution. The Office of Real Estate and Parking optimizes Metro's real estate and parking portfolios.

FY2019 Business Plan

The Chief Financial Officer is leading the corporate effort to address Metro's fiscal challenges and improve the organization's fiscal accountability. The department will continue to ensure Metro remains an affordable transit service provider by aligning resources with Metro's safety and reliability initiatives and promoting effective and efficient resource allocation and utilization.

Keeping Metro Safe, Reliable and Affordable

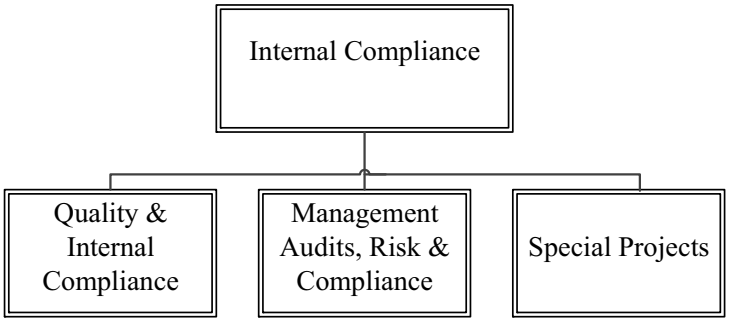
- Customer Focus
  - Accelerate delivery of joint development projects
  - Support new fare payment options and develop new ways for customers to pay for fares thus streamlining the customer experience
  - Modernize fare media operations and maximize technology to produce efficiencies
  - Maintain a safe and user-friendly environment for Metro's parking customers
- Employee Focus
  - Explore innovative approaches to reduce costs such as consolidation of Metro's health insurance plans without negatively impacting current employees' compensation and benefits
- Internal Management Focus
  - Maximize revenue and reduce expenses generated by Metro's real estate and parking assets
  - Evaluate and implement Metro's office consolidation strategy
  - Implement a new commercial banking platform that takes advantage of current banking technology and maximize Enterprise Resource Planning treasury capabilities, to drive management effectiveness

- Launch a commercialization process to improve customer engagement and satisfaction
- Modernize risk management information system to reduce paper files by 90 percent, and take advantage of a third-party administrative platform for the workers' compensation program

FY2018 Major Accomplishments

- Conducted industry peer review of revenue collections operations and executed several recommended improvements
- Issued new long term debt for $496.5M to provide resources to continue to fund the capital improvement plan
- Expanded bank relationships to lower the cost of Metro's credit line program
- Reduced the amount of average employee time out due to workers' compensation claims by expanding use of the light duty program
- Initiated parking revenue initiatives, including expanded non-rider fees, earlier operating hours, marketing of under-utilized parking lots for leases, and a pilot program for weekend parking fees
- Completed FY2017 financial audit on time and received an unmodified opinion
- Awarded the Certificate of Achievement for Excellence in Financial Reporting Program
- Implemented numerous process improvements, closed out all corrective actions required from FTA's 2014 Financial Management Oversight Report, and restored Metro's ability to access funding up front for all Federal grants
- Proactively worked with Jurisdictional partners and other external financial stakeholders to ensure they were well informed on the status of Metro's budget and planning
- Managed WMATA's financial resources to proactively address emerging requirements and other challenges during the course of FY2018
- Completed drawdown of $281 million federal legacy grant funds

Internal Compliance



(Dollars in Thousands)	Actual 2016	Actual 2017	Approved 2018	Approved 2019	$ Variance	% Change
Personnel	$8,978	$6,590	$5,234	$5,809	$575	11.0%
Non-Personnel	513	1,257	5,166	5,506	340	6.6%
Total Cost	**$9,490**	**$7,847**	**$10,400**	**$11,316**	**$915**	**8.8%**
Authorized Positions	90	118	60	64	4	6.7%

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The Office of Internal Compliance (INCP) is an internal management function reporting to the General Manager, committed to driving improvement in Metro's processes and services through planned quality assurance, safety & security and business operations compliance activities. INCP ensure departments are fulfilling business objectives, addressing corrective actions, and complying with the Federal Transit Administration (FTA) and the National Transportation Safety Board (NTSB) and other agency requirements and recommendations.

Under INCP, the Offices of Quality Assurance, Internal Compliance & Oversight (QICO) and Management Audits, Risk and Compliance (MARC) are responsible for performing internal reviews, audits, and compliance assessments according to defined areas of review. INCP executes the coordination of management responses and the central management of all findings, observations, issues and related corrective action plans (CAPs) across the organization while promoting a system-wide Quality Management System Plan (QMSP) to ensure adequate management controls are in place to prevent future occurrence of issues.

INCP identifies, plans, and performs internal reviews as a preventive measure to ensure potential issues are identified early, managed efficiently and corrected according to schedule. Internal reviews comprise a key component of Metro's quality assurance and safety and security assurance programs. Each internal review is followed by corresponding internal Corrective & Preventive Action (iCAPA) plan that outlines the review findings, recommendations and action items required to be addressed.

Performance Indicator	Actual FY2016	Actual FY2017	Target FY2018	Target FY2019
Improve Safety and Security and Restore Public Trust				
RWP Compliance/ Safety Stand Down Participation	100%	100%	100%	TBD
% of Employee Injury Investigation Completed to Standard	100%	100%	100%	TBD
Improve reliability and win back riders				
Implement QICO Internal Review Schedule	N/A	18	11	TBD
Implement Follow-up Improvement Program Schedule	N/A	N/A	75	TBD
New 7000 Series Railcar - Reduce Conditional Acceptance Open Items from CY 2016	25.7	15	10	7
Identification and Monitoring of CAP items (FTA Directives & NTSB Recommendations)	282	282	202	TBD

Performance Indicator	Actual FY2016	Actual FY2017	Target FY2018	Target FY2019
Alter fiscal trajectory and renew jurisdictional confidence				
Implement MARC Audit Schedule - Auditable Areas (business support services and financial management functions)	25	13	15	TBD
Identification and Monitoring of CAPs	186	186	154	<10%
Percentage of Certified risk and audit professionals	N/A	N/A	13	70%
Percentage of identified high risk areas addressed by advisory or assurance services	N/A	N/A	N/A	100%
Number of MARC recommendations implemented by audit clients	N/A	N/A	N/A	TBD
Number of unscheduled activities and management request - advisory and assurance services	N/A	N/A	N/A	TBD

Areas of Focus

- QICO's internal reviews and quality assurance assessments provide an unbiased review of Metrobus, Metrorail and MetroAccess service delivery, engineering & maintenance, capital program management and safe & security functions. QICO coordinates and oversees the corrective/preventive actions developed and implemented for these areas to address regulatory (e.g. FTA, NTSB, TOC, GAO, etc.), recommendations and required actions. QICO also manages control and administration of Metro's Policy Instruction Manual, ensuring that policies are clearly documented and updated to support day-to-day operations. In addition, QICO also leads the development and implementation of Metro's Quality Management System Plan (QMSP), approved by the GM/CEO in August 2017, to ensure an organizational framework is in place to govern functions and activities consistently and effectively.
- MARC conducts objective internal audits, reviews, and assessments of Metro's system of internal control and underlying business processes with a primary focus on financial management and internal business support services. This mission is accomplished by bringing a systematic and disciplined approach to evaluating and improving the management of related risks, internal controls and governance processes. In addition to internal audits, MARC is responsible for facilitating Enterprise Risk Management (ERM) across the organization and regulatory compliance monitoring and oversight with an emphasis on proactive management of risks to Metro's strategic, operational, financial, and compliance objectives. In support of its mission, MARC also facilitates organizational wide training on internal controls, risk management and compliance.
- Special Projects Office (SPEC) leads and manages special and strategic projects at the direction of the General Manager/CEO and other senior management. In addition, SPEC provides oversight and policy leadership, coordination, and negotiations with external stakeholders and Metro senior leadership on major projects such as the Dulles Corridor Metrorail Project and reconstruction of the I-66 corridor inside and outside the Capital Beltway.

FY2019 Business Plan

- Conduct quality assurance internal reviews and risk-based assessments of Metrobus, Metrorail and MetroAccess service delivery, engineering & maintenance, and capital programs inclusive of safety and security internal business functions Transform data derived from quality assurance compliance and oversight activities and independent quality audits, reviews and assessments to mitigate and close Corrective Action Plans and Internal Corrective and Preventive Actions in response to federal oversight inquiries and external auditors
- Implement a Quality Management System Plan (QMSP) and training program for Metro management and staff to ensure core compliance standards and requirements are uniformly met and activities and functions are governed consistently and effectively
- Conduct risk-based internal audits, reviews and assessments with a focus on financial management oversight and internal business support services, while administering financial management oversight to ensure established objectives are met in compliance with governing processes, policies, and in accordance with regulatory oversight

- Collaborate with external audit entities and Metro's Office of Inspector General (OIG) on internal audit findings and management responses to audits and investigations; and work with departments and offices to strengthen internal controls, identify key business process areas for improvement, and improve data integrity
- Implement an Enterprise Risk Management (ERM) framework to holistically manage risk across the organization

Keeping Metro Safe, Reliable and Affordable

- Customer Focus
  - Oversee the regulatory and internal compliance-monitoring program to provide reasonable assurance that Metro complies with all regulatory/ internal requirements and expectations
  - Provide assurance and accountability to external customers regarding the GM/CEO commitment to transparency initiatives by ensuring public accessibility to current information pertaining to internal reviews and corrective action plans via an online tracker
- Employee Focus
  - Develop an annual set of required training inclusive of the Metro QMSP and implementation of ERM for applicable Metro staff across the agency
  - Facilitate Risk and Control Self-Assessment as part of the ERM rollout plan to provide management with tools to proactively manage risks and related controls and other risk responses, staring with financial management processes
- Internal Management Focus
  - Guide internal departments in the development of its divisional QMSP to ensure the organization's approach to managing and controlling the execution of work activities meet customer needs and complies with regulatory requirements that lead to safe and reliable service delivery
  - Facilitate core functions of the ERM to ensure Metro's internal controls and financial management process evaluates and improve the management of related risks in regards to internal business support services

FY2018 Major Accomplishments

- Completed 21 internal reviews of Metro's engineering & maintenance, service delivery, and capital program management functions
- Reinforced organizational improvement with internal departments through 69 internal Corrective & Preventive Actions (iCAPAs) with commitment signatures
- Performed quality assurance oversight of SafeTrack throughout the program to promote continuous precision of surge activities
- Developed a quality assurance process for radio communication to support closure of multiple FTA CAPs, and drive continuous improvement in communications
- Launched the organizational Quality Management System Plan (QMSP), combining guidance from Federal Transit Administration (FTA) and International Organization for Standardization (ISO) to encompass all Authority functions
- Supported the closing of 91 Corrective Action Plans (CAPs) by FTA & NTSB, and four iCAPAs.
- Identified $1.4 million of unbilled FY2017 fringe benefits amount related to MWAA labor, which led to corrective measures to accurately calculate fringe benefit cost
- Established a Purchase Card oversight program to provide independent and objective oversight of purchase cardholders and related transactions, with approximately $16.5 million in annual purchase card-spend
- Facilitated the management and formal closeout of all FTA FY2017 Triennial Review findings and related corrective actions
- Introduced Fraud Awareness, Detection, and Internal Control training for Metro executives and staff with financial management control responsibilities
- Facilitated the assessment of 24 entity level risks and prioritized for action as part of the ERM implementation plan

General Counsel

(Dollars in Thousands)	Actual 2016	Actual 2017	Approved 2018	Approved 2019	$ Variance	% Change
Personnel	$5,666	$6,228	$6,022	$6,070	$48	0.8%
Non-Personnel	1,057	2,089	2,794	2,836	42	1.5%
Total Cost	**$6,722**	**$8,317**	**$8,816**	**$8,907**	**$90**	**1.0%**
Authorized Positions	48	48	48	48	0	0.0%

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The Office of General Counsel (COUN) is responsible for all legal affairs for Metro and provides high quality legal advice and counsel to the Board of Directors, executive management, and all Metro departments and offices.

FY2019 Business Plan

COUN's FY2019 business plan:

- Defending Metro in all disputes and litigation, including providing legal advice and counsel to all Metro departments and offices to mitigate the risk of exposure
- Providing legal advice and counsel to obtain jurisdictional and federal funding and financing, including jurisdictional operating and capital subsidies
- Providing legal support to facilitate delivery of capital projects, including bus fleet replacement, station lighting, fare gate replacement, and the Red Line rehabilitation

Keeping Metro Safe, Reliable and Affordable

- Customer Focus
  - Provide legal support to obtain dedicated funding, including drafting relevant legislation
  - Provide legal support to contract out services in an effort to keep costs down and improve service quality and safety
- Employee Focus
  - Provide legal support to implement efficiency and productivity initiatives, including absenteeism, workers' compensation, and the MetroTime Automation Project
  - Promote and enforce Metro's Code of Ethics
  - Develop and provide employee training, including ADA, MTPD cadet, and COTR
- Internal Management Focus
  - Provide legal support to close out FTA safety and other corrective action plans
  - Provide legal support for interest arbitrations, including collective bargaining agreements

FY2018 Accomplishments

- During calendar year 2017, successfully resolved approximately 600 disputes and litigation matters, and approximately 230 general law matters, including government contracts and real estate
- Led and provided legal support for development and release of request for proposal for contracting out bus operation and maintenance services for the Cinder Bed Road facility
- Provided direct legal support for the refinancing and defeasance of the 2009 series bonds, issuance of the 2017 bonds, and retirement of all remaining tax leases
- Successfully closed 445 PARP and privacy requests in calendar year 2017

Safety and Environmental Management

(Dollars in Thousands)	Actual 2016	Actual 2017	Approved 2018	Approved 2019	$ Variance	% Change
Personnel	$8,143	$7,310	$8,067	$7,249	($818)	-10.1%
Non-Personnel	6,541	7,776	9,266	8,224	(1,042)	-11.2%
Total Cost	**$14,684**	**$15,086**	**$17,333**	**$15,473**	**($1,860)**	**-10.7%**
Authorized Positions	67	66	76	74	-2	-2.6%

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The Department of Safety & Environmental Management (SAFE) ensures that Metrobus, Metrorail, MetroAccess and Metro's facilities are operationally safe, and environmentally sound for all employees, customers, and surrounding communities. The overall goal is zero accidents, injuries, and fatalities.

SAFE, in collaboration with all other departments, promotes Metro's safety culture throughout the organization, from the Board of Directors to every employee regardless of position or location.

SAFE is responsible for the management and/or compliance of policies and procedures in following areas:

- System safety training
- Occupational safety and health
- Accident and incident investigation
- Hazard identification and mitigation
- Oversight of construction safety
- Safety and security certification
- Environmental management and industrial hygiene
- Safety data and analysis
- Corporate safety programs

Performance Indicator	Actual FY2016	Actual FY2017	Target FY2018	Target FY2019
Improve Safety and Security and Restore Public Trust				
WMATA Employee Injury Rate (per 200,000 work hours)	5.00	5.90	5.10	6.42
Customer Injury Rate (per million passengers)	1.91	1.97	1.75	1.80
Percentage of Employee Injury Investigations Completed in SMS Within 30 days	67%	66%	67%	95%
Percentage of Safety Data Sheet reviews completed in a timely manner (within 15 working days)	95%	97%	90%	95%

FY2019 Business Plan

- Continuous improvement of Metro's corporate safety culture for customers and employees
- Document and close open Corrective Action Plans (CAPs)/Accident Reports
- Implement the Federal Transit Administration (FTA) Safety Management System (MAP21) directive to improve and strengthen Metro's safety culture
- Implement Metro's 2017 System Safety Program Plan approved by the Federal Transit Administration
- Perform safety inspections throughout the system in support of rehabilitation/state of good repair efforts
- Take proactive actions to improve employee and customer injury rates
- Update internal policies and procedures and maintain adequate staffing levels
- Enhance Roadway Worker Protection Program
- Expand Fire Life Safety Program
- Implement Fatigue Risk Management System
- Implement Process Safety Program
- Improve Safety Measurement System Compliance

Keeping Metro Safe, Reliable and Affordable

- Customer Focus
  - Revise the Safety Hotline reporting structure and documentation process
  - Ensure compliance with federal, state, and local environmental laws and regulations by reviewing permit requirements, conducting monthly

inspections, and completing annual equipment maintenance where required
    - Complete checklists and document activities to maintain systems for permit compliance
- Employee Focus
    - Continue training of staff on the Safety Measurement System to collect, track, analyze, and report safety data
    - Perform an in-depth assessment of the Traction Power department to improve employee safety, performance and reliability
    - Use the Fatigue Risk Management System to prevent safety incidents and protect employees
- Internal Management Focus
    - Review and revise the Fire Life/Safety process, training and documentation
    - Execute measures of Metro's 2017 System Safety Program Plan

FY2018 Accomplishments

- Improved Roadway Worker Protection Program, which includes substantial progress in updating the Roadway Access Guide, and introducing Advanced Mobile Flagger procedures
- Developed the third rail mat protection program for workers in close proximity to a de-energized third rail
- Installed CCTVs at two curved stations for improved train operator sight lines (i.e. Brookland and Silver Spring)
- Installed station platform signage to identify optimal train boarding at Braddock Rd and Rhode Island Avenue
- Performed industrial hygiene assessments in rail stations to test levels of airborne dust and metals and ensure compliance with OSHA regulations
- Completed four Internal Safety and Security Reviews on the 7000 Series Rail Car Safety Certification and three offices
- Senior Safety Staff attended all local safety committee meetings that occur throughout various facilities within Metro
- Performed 24 FTA audits
- Performed 10 Safety Audits that included:
    - DC Circulator maintenance compliance audit
    - SafeTrack contractor compliance audit
    - Repair and inspection compliance audit
    - Rail Station Emergency Call Systems operational audit
    - Rail Service Vehicle Equipment Operator process audit
    - Rail Yard Tower Electrical Hazard audit
    - Structures inspection process audit, RWP SOP #9 compliance audit
    - Bus Maintenance audit of onboard safety devices
    - Shops and Material Support (SAMS) Fire/Life equipment repair process audit
    - Storage of combustible containers compliance audit

Capital Planning and Program Management

(Dollars in Thousands)	Actual 2016	Actual 2017	Approved 2018	Approved 2019	$ Variance	% Change
Personnel	$5,407	$7,551	$3,943	$5,467	$1,656	38.65%
Non-Personnel	231	308	780	3,343	2,563	328.6%
Total Cost	**$5,638**	**$7,859**	**$4,723**	**$8,810**	**$4,087**	**86.5%**
Authorized Positions	89	80	44	80	36	81.8%

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The Department of Capital Planning and Program Management (CPPM) builds the Authority's prioritized capital program and is the lead organization responsible for project development, strategic planning, asset management, and sustainability. CPPM also delivers capital program oversight, reporting, and overall capital program management thus ensuring that the budgeted capital program links to the executed work and Metro regularly reports on active progress towards FTA-required State of Good Repair targets. CPPM works to provide a safe and reliable system through programs that enhance and maintain the operating conditions of the Metrorail and Metrobus system.

FY2019 Business Plan

CPPM's business plan is designed to help Metro progress towards the Authority's strategic goals and implement the GM/CEO's capital program priorities with specific focus on the following:

- Build prioritized capital program based on asset management principles and incorporating sustainable practices
- Deliver capital program oversight, reporting, and overall capital program management
- Provide innovative solutions and data based strategies that inform improved operations, including implementing next generation fare collection system
- Develop enterprise asset management system and transit asset management plan

Keeping Metro Safe, Reliable and Affordable

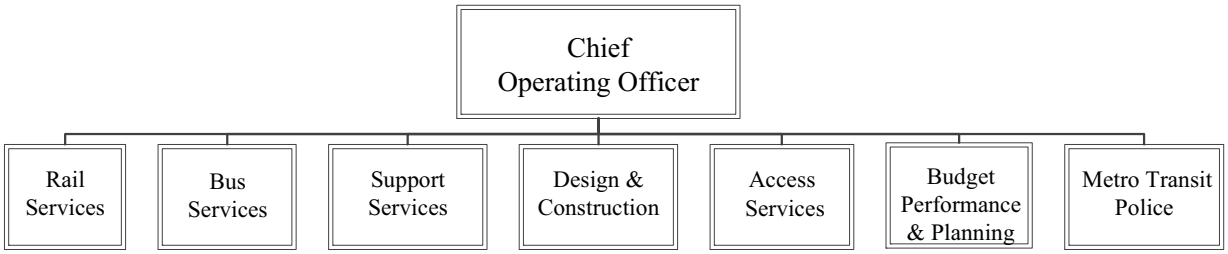
- Customer Focus
  - Continue to execute customer travel monitoring and impact analyses to fare and/or service changes
  - Explore ways to make it easier for customers to plan trips and pay fares, including payment options and fare products as well as communication strategies and tools
  - Ensure that the Authority maintains a focus on equity through timely and thorough Title VI impact analyses
  - Coordinate with External Relations to inform customers about the capital program
- Employee Focus
  - Disseminate actionable intelligence about customer behavior, system safety, and reliability to employees throughout the organization
  - Create a consolidated reference tool for Metro that contains the processes, rules, approval requirements, decision-making criteria, and approval sequences for the prioritized capital program of projects
- Internal Management Focus
  - Improve capital program development, management, and execution to increase agency capacity to deliver capital projects
  - Improve asset management by delivering actionable capital investment intelligence based on asset conditions, monitoring, and continuous feedback loops from asset maintenance groups
  - Ensure the accuracy and timeliness on progress towards capital program targets

FY2018 Major Accomplishments

- Created a capital program manual that provides clear and transparent roles, responsibilities, processes, and calendars of events to inform the FY2020 capital program
- Launched Enterprise Asset Management Initiative to rationalize Metro's various business systems that touch Asset Management in order to present a single source of information
- Completed development of the mobile app program; issued a notice to proceed to start development of deliverables

- Substantially completed upgrades to station mezzanine power and communications for faregates in advance of new faregate program
- Completed development and issued solicitation documents for new system-wide faregates that will combat fare evasion; commenced vendor selection process
- Completed development and testing of updated bus farebox system
- Established a standard monthly capital program review package in order to monitor and track budget and schedule performance, and enable timely, effective discussion with the executives. Setup staff training curriculum on capital project reporting requirements
- Commenced development of the Capital Program Management Information System (PMIS) tool to integrate with the reporting process
- Created a Capital Program dashboard using a business intelligence (BI) tool, which provides timely and insightful analysis
- Secured DC sustainable Energy Utility funding for LED retrofit of Bus Garage (Shephard Parkway) and competed installation, reducing equipment and maintenance costs for approximately 6 years
- Secured $17.4 million from NVTA for traction power upgrades on the Blue Line to allow 100 percent 8-car train peak service
- Secured $3.5 million in CMAQ funds for the bus replacement program
- Launched a two-pronged effort to strengthen Metrobus for the next 50 years: first, a suite of operational improvements to drive ridership/revenue while cutting costs, and second a comprehensive strategy and roadmap for the future Metrobus business model and structure
- Developed a 5-year Metrobus and Metrorail ridership forecast with a platform for scenario modeling in order to understand the impacts of Metro actions and changes
- Developed and deployed a platform for customer and force impact analysis, which informs the Authority on the ridership, revenue, and safety impacts of Major Capital Projects
- Completed agency-wide energy audit and identified significant opportunities for investment in cost-saving energy efficient equipment and practices.

Chief Operating Officer



(Dollars in Thousands)	Actual 2016	Actual 2017	Approved 2018	Approved 2019	$ Variance	% Change
Personnel	$1,109,126	$812,347	$789,145	$785,386	($3,758)	-0.5%
Non-Personnel	356,203	356,146	360,612	369,884	9,273	2.6%
Total Cost	**$1,465,329**	**$1,168,493**	**$1,149,756**	**$1,155,271**	**$5,515**	**0.5%**
Authorized Positions	11,612	11,681	11,052	11,054	2	0.0%

1. FY2016 actuals include the department's respective share of all fringe expenses. FY2017, FY2018 and FY2019 figures include only the department's respective share of unallocated fringe expenses due to a change in the recording of fringe expenses.
2. Authorized positions reflect the department's headcount based on Metro's FY2019 organizational structure. Similarly, expense figures consist of the costs allocated to the department based on the FY2019 structure.

The Chief Operating Officer (COO) is responsible for all passenger services, maintaining Metro vehicle fleets and facilities, and ensuring a safe and secure environment for passengers and employees.

The department consists of Rail Services (RAIL), Bus Services (BUS), Access Services (ACCS), Metro Transit Police (MTPD), the Office of Budget, Planning, and Performance (OBPP), Design and Construction (DECO) and Support Services (SSRV), which includes, Plant, Elevators/Escalators, Systems Maintenance, and Supply Chain. Each organization has a business plan articulating actions consistent with the above strategies. The COO also created a Strategic Initiatives team to secure long-term improvements in process and delivery across COO departments.

FY2019 Business Plan

The COO's business plan is organized around advancing the GM/CEO's Keeping Metro Safe, Reliable and Affordable plan through these three core strategies:

- Keep employees and customers safe through adherence to processes and investments in technology
- Shift to a preventive maintenance model and improve service reliability
- Ensure operations are fiscally sustainable over the long-term

Keeping Metro Safe, Reliable and Affordable

The following are the most relevant Keeping Metro Safe, Reliable and Affordable initiatives among the COO departments.

- Customer Focus
  - Make bus service faster and more reliable for customers
  - Upgrade rail station environment
- Employee Focus
  - Increase employee availability through absenteeism reduction
  - Implement workforce development strategy
- Internal Management Focus
  - COO Productivity Project to chart a course toward sustainable operating cost growth
  - Shift to forward-looking asset maintenance

FY2018 Major Accomplishments

- Developed department-wide business plan to guide activities
- Introduced regular status meetings for rail, bus, and support services to monitor performance and identify opportunities to improve safety and reliability
- Retired 1000 and 4000 series railcars and improved performance of the railcar fleet, including reduced customer offloads
- Introduced COO Problem Solving teams to engage front-line management in solving problems and improving efficiency of operations
- Directed Strategic Initiatives team to launch a rail track access efficiency effort to improve wrench time management during overnight maintenance
- Developed new tools to manage bus headways and improve on-time performance

Rail Services

(Dollars in Thousands)	Actual 2016	Actual 2017	Approved 2018	Approved 2019	$ Variance	% Change
Personnel	$404,306	$258,890	$254,926	$254,882	($44)	0.0%
Non-Personnel	142,195	137,489	117,972	120,048	2,076	1.8%
Total Cost	**$546,501**	**$396,379**	**$372,898**	**$374,930**	**$2,035**	**0.5%**
Authorized Positions	4,380	4,412	4,068	4,084	16	0.4%

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2. Authorized positions reflect the department's headcount based on Metro's FY2019 organizational structure. Similarly, expense figures consist of the costs allocated to the department based on the FY2019 structure.

The Rail Services (RAIL) department operates and maintains Metro's rail system in a safe, reliable and efficient manner, providing service across 118 miles of track and 91 stations. RAIL is responsible for all facets of rail operations including, train operations, stations, the rail operations control center and the maintenance of all assets necessary to move customers through the system including railcars, track, traction power and the automatic train control system. The Office is comprised of Rail Transportation (RTRA), Chief Mechanical Officer (CMOR) that includes Car Maintenance (CMNT) and Chief Engineer Vehicles (CENV), Track and Structures (TRST), Automatic Train Control Maintenance (ATCM), Material & Inventory Planning (MIPN), Traction Power Maintenance (TRPM), Maintenance of Way Engineering (MOWE), and Reliability Centered Maintenance Planning (RCMP).

Performance Indicator	Actual FY2016	Actual FY2017	Target FY2018	Target FY2019
Improve Safety & Security and Restore Public Trust				
Safety Measurement System Compliance	N/A	N/A	N/A	95%
Improve Reliability and Win Back Riders				
MyTripTime: Rail Customer On-Time Performance	74%	70%	88%	88%
Trains in Service	N/A	97%	98%	98%
Headway Adherence	**82%**	**79%**	**91%**	**91%**
Railcar Reliability (Mean Distance Between Delay)	60,105	79,656	85,000	85,000
Railcar Reliability (Mean Distance Between Failure)	5,104	6,395	7,500	7,500
Railcar Offloads	1,644	1,097	1,200	1,200
Rail Infrastructure Availability (New Measure Piloted in FY18)		N/A	N/A	TBD
Alter fiscal trajectory and renew jurisdictional confidence				
Rail Vacancy Rate	N/A	8%	5%	5%

FY2019 Business Plan

In FY2019, RAIL will focus on increasing Metrorail ridership and customer satisfaction by improving service, safety, quality and reliability of train service, while maintaining Metro's assets in a state of good repair to ensure they are available for service.

- Improve operations at the Rail Operations Control Center (ROCC) by strengthening its safety culture, management, and work flow
- Improve the reliability of the Traction Power and High Voltage systems, overhauling maintenance procedures, developing solutions to reliability challenges
- Execute a forward-looking reliability-centered maintenance strategy, including a robust preventive maintenance and capital renewal program (e.g., interlockings, tunnel leak mitigation)
- Increase track access efficiency, reducing canceled maintenance tasks and increasing percentage of time spent executing tasks, to maximize productivity
- Complete assessment of Maintenance of Way work equipment leading to a long-term fleet plan
- Introduce new railcar maintenance strategy, including 8000 Series procurement plan

In addition to improving service safety, quality and reliability for our customers, RAIL is also focused on the following actions for improving operational safety and efficiency:

- Employ job hazard analysis within Maintenance Departments to identify and mitigate potential hazards before a job starts
- Enhance roadway worker protection through improved procedures and deployment of vehicle awareness technology to protect track personnel with warnings of approaching trains and alert operators to the presence of workers and other vehicles
- Sustain RailStat monthly departmental performance meeting as a forum to review performance, promote accountability and strategic problem solving, and increase communication within RAIL

Keeping Metro Safe, Reliable and Affordable

- Customer Focus
  - Aggressively work to increase safety and reduce delays caused by problems with the track and railcars while improving operations to increase customer satisfaction
- Employee Focus
  - Improve the safety and reliability of rail operations by working with front-line staff to identify and implement ideas to improve efficiency and effectiveness
  - Investigate all employee injuries and safety incidents to identify and address root causes
  - Increase employee availability through reducing absenteeism and the number of inactive staff
- Internal Management Focus
  - Execute rail preventive maintenance and capital renewal program designed to cut infrastructure-related delays in half by July 2019
  - Execute a get well program for railcars, which focuses on improving reliability of our legacy fleet by addressing recurring problems with railcar doors, propulsion, brakes and HVAC

FY2018 Major Accomplishments

- On-time performance has improved by over 20 percentage points, with 87 percent of all customer trips completed on-time
- Best railcar performance achieved in eight years with railcars traveling over 80,000 miles before causing a customer delay. Offloads are down over 30 percent compared to FY2017
- Acceptance of the new 7000 series railcars is one year ahead of schedule, and the removal of the 5000-series railcars has begun
- Demonstrated accountability to customers for delivering reliable service by launching Rush Hour Promise. Customers who experience a delay of 15 minutes or more during rush hour service receive a credit to cover the cost of their trip. To date, less than 0.2% of trips have been refunded
- Red signal overruns are down 70 percent
- Launched six new preventive maintenance programs for rail infrastructure
- Piloted new waterproofing technique to reduce water infiltration in the Red Line's deep tunnel segments that are prone to leaks, aiming to reduce arcing incidents and improve reliability
- Executed two major capital improvement projects to replace interlockings outside Takoma and Branch Avenue stations; projects also included signal upgrades, power cable renewal, grout pad replacement, station rehabilitation, and crosstie renewal

Bus Services

(Dollars in Thousands)	Actual 2016	Actual 2017	Approved 2018	Approved 2019	$ Variance	% Change
Personnel	$406,544	$308,845	$305,020	$300,691	($4,330)	-1.4%
Non-Personnel	62,726	61,730	68,888	72,493	3,605	5.2%
Total Cost	**$469,270**	**$370,574**	**$373,908**	**$373,183**	**($725)**	**-0.2%**
Authorized Positions	4,097	4,086	3,937	3,937	0	0%

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2. Authorized positions reflect the department's headcount based on Metro's FY2019 organizational structure. Similarly, expense figures consist of the costs allocated to the department based on the FY2019 structure.

The Department of Bus Services (BUS) is committed to being an integral part of the Washington metropolitan area by ensuring safe, clean, reliable, cost effective and responsive bus service, while promoting regional mobility and contributing to the social, economic, and environmental well-being of the community.

Bus Services is the transportation provider for more than 110 million customers each year, and handles the operation and maintenance of Metrobus service in the District of Columbia, Maryland and Virginia.

Bus Services is responsible for 1,583 buses and 3,937 employees. Additionally, Bus Services handles the maintenance of Metro's service vehicles and equipment.

Performance Indicator	Actual FY2016	Actual FY2017	Target FY2018	Target FY2019*
Improve Safety & Security and Restore Public Trust				
Safety Measurement System Compliance	N/A	N/A	N/A	95%
Improve reliability and win back riders				
Bus On-Time Performance	77.2%	75.7%	79.0%	79.0%
Bus Fleet Reliability	7,945	8,283	8,000	8,000
Alter fiscal trajectory and renew jurisdictional confidence				
Bus Vacancy Rate	3.0%	5.0%	5.0%	5.0%

*Preliminary targets for FY2019, targets will be published in the Q1/FY2019 Metro Performance Report (September 2018).

FY2019 Business Plan

In support of Metro's strategic goals, BUS's core services are to deliver quality, reliable bus transportation; and manage people and the departmental budget wisely.

In FY2019, Bus Services is focused on increasing Metrobus ridership and customer satisfaction by improving service, safety, quality and reliability. This will be achieved by:

- Ensuring new buses display CCTV feeds which will remind customers their actions are recorded
- Identifying routes with low On-Time Performance (OTP) and implementing schedule adjustments to allow for adequate run-time resulting in more-realistic schedules for our customers and our operators
- Continuing the Active Service Management on our headway-managed and high-frequency routes to ensure reliable, evenly-spaced service
- Continuing the implementation of the Metrobus Priority Corridor Network (PCN) to speed up bus travel times and improve passenger amenities, access, and information
- Continuing the installation of electronic signs at bus stop shelters to provide accurate and concise information on when the next bus is expected to arrive and to provide alerts or advisory notifications that may impact service
- Continuing the deployment of SmartYard at all divisions ensuring on-time departures from the garage
- Continue to partner with jurisdictions on assigning dedicated bus lanes and Transit Signal Priority (TSP) which will improve on-time performance

In addition to improving service safety, quality and reliability for our customers, Bus Services is also focused on the following actions for improving operational safety and efficiency:

- Investigating all employee injuries and safety incidents to identify and address root causes
- Employing job hazard analysis within Bus Maintenance to identify and mitigate potential hazards
- Increasing employee availability by managing employee absenteeism and reducing the number of inactive employees
- Sustaining monthly departmental performance meetings (BusStat) as a forum to review performance, promote accountability and strategic problem solving, and increase communication within Bus Services and between different departments

Keeping Metro Safe, Reliable and Affordable Activities

- Customer Focus
  - Continue procurement and acceptance of 100 replacement buses
  - Complete installation of strobe and deceleration lights which warns pedestrians of approaching buses and vehicles of stopping buses
- Employee Focus
  - Pursue new standards in uniforms improving the look and identification of personnel
  - Continue improvement to supervisory and frontline training
- Internal Management Focus
  - Facilitate the opening of Cinder Bed Road and Andrews bus facilities, and institute long-term replacement plans for Northern & Bladensburg garages
  - Continue process improvement within bus divisions to improve efficiencies and reduce unscheduled overtime

FY2018 Major Accomplishments

- Improved On-Time Performance (OTP) to 79 percent through the implementation of schedule adjustments to routes with low OTP – the highest OTP achieved in three years
- Expanded service on 14th street with new MetroExtra limited-stop Route 59
- Rehabilitated 68 buses under the capital program
- Prepared the 2017 Metrobus Fleet Management Plan – projecting fleet needs through FY2025 – which was approved by the Board in September 2017
- Issued a Request for Proposals (RFP) for the management and operation of bus service out of Cinder Bed Road in support of Keeping Metro Safe, Reliable, and Affordable
- Completed installation, on 60 percent of the fleet, of strobe lights on the front of the buses to increase visibility with the goal to reduce pedestrian/cyclists incidents
- Completed installation, on 60 percent of the fleet, of deceleration lights to increase visibility in order to reduce rear-end collisions

Access Services

(Dollars in Thousands)	Actual 2016	Actual 2017	Approved 2018	Approved 2019	$ Variance	% Change
Personnel	$6,382	$4,894	$4,534	$4,473	($61)	-1.3%
Non-Personnel	107,727	112,933	108,450	118,913	10,463	9.6%
Total Cost	**$114,109**	**$117,827**	**$112,983**	**$123,386**	**$10,403**	**9.2%**
Authorized Positions	56	53	50	50	0	0.0%

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2. Authorized positions reflect the department's headcount based on Metro's FY2019 organizational structure. Similarly, expense figures consist of the costs allocated to the department based on the FY2019 structure.

The Department of Access Services (ACCS) ensures that Metro remains in compliance with the provisions of the Americans with Disabilities Act (ADA) and other federal, state, and local laws and regulations related to providing equitable access to transportation services by people with disabilities.

ACCS is responsible for:

- MetroAccess ADA paratransit service delivery
- Regulatory compliance with ADA and other relevant legislation
- Eligibility assessments for MetroAccess service and the Reduced Fare Program
- Accessibility planning and design support for Metro facilities, equipment, and services
- Metro accessibility policy leadership
- Ombudsman service for issues related to accessibility
- Accessibility Advisory Committee administrative and policy support
- Community engagement to ensure that existing and prospective customers are aware of and know how to use the full array of transportation choices available to them (i.e., not just ADA paratransit service)

ACCS supports the cause of accessibility through its three offices: ADA Policy & Planning (ADAP), Eligibility Certification & Outreach (ELIG), and MetroAccess Service (MACS). ADAP provides guidance on the application of the ADA to Metro business; interacts with operations departments to ensure that existing and future fleets and facilities continue to be both ADA compliant and optimally accessible; and engages regional organizations and policy makers to ensure that funding and resources are effectively channeled to sustain accessibility for a growing constituency. ELIG responds directly to those customers with disabilities who approach Metro seeking accessible transportation options to navigate the region. ELIG matches the customer with the service or product that most effectively meets the customer's needs (with an eye toward bus and rail wherever possible, augmented by proactive community outreach and travel training functions) while conserving the greater levels of assistance (i.e., paratransit service) for those customers who have no other options. MACS provides the vital paratransit service that spans the region. MACS management and staff work in conjunction with contractors (service delivery, call center operations, and quality assurance) to ensure safe, quality, and efficient paratransit services.

Performance Indicator	Actual FY2016	Actual FY2017	Target FY2018	Target FY2019
Improve Safety and Security and Restore Public Trust				
Preventable incidents per 100,000 service miles	1.53	1.39	<2.0	<2.0
Passenger injuries per 100,000 passengers	2.67	2.45	<3.0	<3.0
Improve reliability and win back riders				
On-time performance	93.4%	87.4%	92.0%	92.0%
Valid customer complaints per 1,000 trips requested	4.10	5.81	< 5.0	< 5.0
Alter fiscal trajectory and renew jurisdictional confidence				
Free-ride trips taken on Metrobus and Metrorail (millions)	2.61	2.50	3.75	4.00
Trips taken on Paratransit Alternatives	221,249	250,000	275,000	350,000

FY2019 Business Plan

The ACCS Business Plan is centered on five strategic objectives:

- Ensure Metro's new facilities, equipment, and services are, designed, and built or procured in complete compliance with the provisions of the ADA and all other applicable accessibility-related guidelines and regulations
- Ensure Metro's existing accessible features are maintained in good working order
- Ensure MetroAccess paratransit service is delivered safely, efficiently, and in compliance with ADA
- Ensure eligibility determinations maximize customers' ability to travel independently, matching them to the appropriate service or program and offering travel training to ensure they receive the maximum benefit
- Incentivize MetroAccess customers to increase use of established paratransit alternatives

Growing MetroAccess ridership requires a regional strategy emphasizing the availability and use of alternative services. MetroAccess ridership has increased from just under a million trips in 2003 to 2.4 million trips in 2017. The increase was driven largely by an aging population and reductions in transportation services offered by human service agencies. Metro has facilitated the establishment of lower cost taxi-based paratransit alternatives as a means of addressing the growing demand for MetroAccess service, forecasted to be 2.4 million trips in FY19, while attempting to lower overall cost.

Keeping Metro Safe, Reliable and Affordable Activities

- Customer Focus
  - Facilitate the identification of optimal boarding areas on select station platforms
  - Installation of electronic beacons at the Gallery Place station to help Blind/Low Vision customers find accessibility features using a smartphone
- Employee Focus
  - Increase the frequency of ADA refresher training conducted with customer-facing employees
  - Recognize individual employees who display stellar customer service to people with disabilities
- Internal Management Focus
  - Facilitate the growth in use of the Abilities-Ride program and other MetroAccess alternatives
  - Support establishment of a third party Elevator-Outage Shuttle Bus Service

FY2018 Major Accomplishments

- Established the Abilities-Ride Program as an alternative to MetroAccess for Maryland-to-Maryland trips
- Secured $1.4 million in Federal Capital grant fund to purchase new MetroAccess vehicles



Metro Transit Police

(Dollars in Thousands)	Actual 2016	Actual 2017	Approved 2018	Approved 2019	$ Variance	% Change
Personnel	$72,839	$58,546	$57,675	$57,084	($590)	-1.0%
Non-Personnel	4,393	6,145	6,970	6,686	(284)	-4.1%
Total Cost	**$77,231**	**$64,691**	**$64,645**	**$63,771**	**($874)**	**-1.4%**
Authorized Positions	729	726	694	694	0	0.0%

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2. Authorized positions reflect the department's headcount based on Metro's FY2019 organizational structure. Similarly, expense figures consist of the costs allocated to the department based on the FY2019 structure.

Metro Transit Police is responsible for the protection of Metro customers, personnel, and transit facilities over a 1,500 square mile transit zone, comprised of three jurisdictions.

The Metro Transit Police Department (MTPD) is composed of both uniformed and plain clothes sworn Police Officers charged with the duty of enforcing the laws of the signatories; the laws, ordinances and regulations of the political subdivisions; and the rules and regulations of Metro. Additionally, Special Police Officers are responsible for the physical security at rail yards, bus divisions, and other Metro properties. MTPD is also responsible for digital video management of cameras throughout the Metro system, Finally, as well as crime analysis and police records management, police radio communications and various administrative support functions. The Office of Emergency Management (OEM) consisting of civilian personnel, plans, trains, and provides on-scene assistance for natural and man-made emergencies.

Performance Indicator	Actual FY2016	Actual FY2017	Target FY2018	Target FY2019
Improve Safety & Security and Restore Public Trust				
Safety Measurement System Compliance	N/A	N/A	N/A	95%
Improve reliability and win back riders				
Part I Crimes	1,694	1,442	1,750	1,600
Alter fiscal trajectory and renew jurisdictional confidence				
MTPD Vacancy Rate	11%	12%	5%	5%

FY2019 Business Plan

In support of Metro's strategic goals, the Metro Transit Police Department is investing in technologies to improve security across the Metro system. Metro's investment in security technologies is aimed to deter crime before it happens and help Metro Transit Police quickly and effectively respond to incidents when they occur. While only approximately five Part I crimes are committed per million passenger trips, all customers deserve a safe journey. In addition, assaults are a significant cause of employee injuries, especially for bus operators.

With Metro Transit Police already making use of data analytics to set strategy and tactics through MetroStat, investing in security technology is the most promising option for further reductions in crime. Investments include expanded closed-circuit television (CCTV), tasers, and access control equipment:

- Expand the scope and quality of closed-circuit television (CCTV) coverage. Building on the substantial progress in developing real-time monitoring and retrieval capabilities at the Security Operational Control Center (SOCC), install additional CCTV cameras at rail stations and other Metro facilities to improve coverage and video quality
- Deploy tasers to patrol officers to provide a less-lethal capability for officers that is superior to pepper spray for use in confined spaces such as rail stations
- Equip officers with handheld devices to more rapidly share information and document incidents
- Enhance access control on doors at Metro facilities, prioritizing security of critical infrastructure
- Install video displays on new buses to increase deterrent value of bus cameras, displaying CCTV feeds to remind customers their actions are recorded, and continue bus operator assault reduction campaign

Keeping Metro Safe, Reliable and Affordable

- Customer Focus
  - Enhance and expand youth outreach and safety training by establishing a dedicated MTPD Youth Liaison Coordinator, continuing the Respect Your Ride Program and coordinating more opportunities to partner with CSCM on youth focus groups
  - Improve visibility in the Metro system with targeted deployment of uniformed patrol officers and reducing response time to calls for service via technology enhancement
  - Design and repurpose Metro property at Morgan Boulevard Station for MTPD. This project will improve response times to Blue/Orange Line stations in response to crime and or emergency incidents
- Employee Focus
  - Explore opportunities to improve safety and security by reducing employee assaults
  - Reduce the vacancy rate of MTPD by increasing recruiting activities of both internal and external police and civilian candidates
- Internal Management Focus
  - Improve performance of MTPD command staff by conducting DiSC¨ 363™ for leaders featuring 360º feedback, coaching, counseling and encouraging participants to improve through the initiation of behavioral change
  - Improve management of emergency incidents by training Metro frontline employees through mandatory Incident Command Service (ICS-100) training available on the Enterprise Learning Management (ELM) system facilitated by MTPD Training Division

FY2018 Major Accomplishments

- The number of Part I Crimes (murder and non-negligent homicide, rape (legacy & revised), robbery, aggravated assault, burglary, motor vehicle theft, larceny-theft, and arson) in calendar year 2017 was 1,282 crimes, a 19 percent decrease from 2016, and well below the target of 1750
- MTPD continued to partner with local law enforcement officials district commanders to share information, patrol hot spots, and use 'Be on the Look Out" (BOLO) messaging
- MTPD controlled costs by awarding a competitive contract to outsource a segment of the facilities security function

Support Services

(Dollars in Thousands)	Actual 2016	Actual 2017	Approved 2018	Approved 2019	$ Variance	% Change
Personnel	$166,381	$138,329	$131,047	$131,692	$644	0.5%
Non-Personnel	34,611	33,460	51,949	46,294	(5,655)	-10.9%
Total Cost	**$200,992**	**$171,789**	**$182,996**	**$177,986**	**($5,011)**	**-2.7%**
Authorized Positions	1,715	1,718	1,714	1,714	0	0.0%

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The mission of the office of Support Services (SSRV) is to support Metrobus and Metrorail operations and maintain infrastructure and equipment systems in a state of good repair by providing: a coordinated approach to maintain elevators and escalators, electro-mechanical equipment systems, infrastructure, facilities and grounds. SSRV is composed of a broad range of offices, including:

- Office of Elevators and Escalators (ELES) manages and maintain all vertical transportation equipment within the auspices of the Authority
- Office of Supply Chain Enterprise Services (SCES) provides inventory management services and warehouse solutions
- Office of Plant Maintenance (PLNT) manages and maintains Metro's facilities, grounds, and mechanical equipment systems in support of Metrorail and Metrobus operations
- Office of Systems Maintenance (SMNT) manages the electrical maintenance activities to include: station and parking lot fare collection systems and equipment; radio communication systems, 480 volt electrical distribution systems; and provides component-level repair of electronic systems, and radio and WSAD calibration; SMNT is composed of the following branches:
  - Automatic Fare Collection Section (AFCS) manages the installation, maintenance, and repairs of fare collection and parking lot equipment
  - Communications Sections (COMM) maintains Metro's communications systems in support of Metrobus, Metrorail and Metro Transit Police Officers operations, as well as fire/life safety systems in order to help ensure public safety
  - Low Voltage Power (LVP) maintains and distribute all 480 volt electrical systems for Metro's facilities
  - Shops and Material Support (SAMS) provides component-level repair and supports procurement actions for all of SMNT

Performance Indicator	Actual FY2016	Actual FY2017	Target FY2018	Target FY2019
Improve Safety & Security and Restore Public Trust				
Safety Measurement System Compliance	N/A	N/A	N/A	95%
Improve reliability and win back riders				
ELES - Elevator Availability	97%	97%	97%	97%
ELES - Escalator Availability	93%	94%	93%	93%
Alter fiscal trajectory and renew jurisdictional confidence				
SSRV Vacancy Rate	N/A	5%	5%	5%

FY2019 Business Plan

In FY2019, Support Services is focused on enhancing the customers' experience through a variety of initiatives:

- Continue a strategic station cleaning program to pressure wash entrances, mezzanines, and platforms; and general cleaning of surfaces at high volume stations

- Station Restoration of lighting and bathrooms - in partnership with Capital Planning and Program Management, tunnel and platform level lighting in underground stations will be upgraded with new energy efficient LED technology and platform edge lights at 24 stations; additionally, bathroom renovations will be completed at 5 stations
- Under the 'Rail Station Champion" Program will continue to promote collaboration between senior managers and station personnel to ensure internal coordination of timely repair to equipment and systems
- Sustain high levels of escalator availability by advancing escalator rehabilitation and replacement program, including completing replacement of 128 escalators by 2020
- The following ongoing key actions will be conducted to continue SSRV's focus on safety:
  - Bi-annual Safety Stand Down to re-emphasize key safety issues
  - Complete injury investigations within 30 days of being reported

Keep Metro Safe, Reliable and Affordable

- Customer Focus
  - Rail station environment upgrades, including lighting and cleanliness
  - Escalator and elevator investments to increase reliability
  - Fare collection system upgrades
- Employee Focus
  - Upgrade employee bathrooms and breakrooms
- Internal Management Focus
  - Support Stat meetings - Provide a forum wherein the COO and the Office of Support Services (SSRV) management team can review trends in corrective maintenance work orders and preventive maintenance compliance, and develop solutions to improve performance

FY2018 Major Accomplishments

- Improved station environment by continuing aggressive $151 million campaign to upgrade unreliable escalators and elevators. Efforts remains on schedule; over 80 of 128 designated escalators have been replaced, and over 50 of 100 designated elevators have been rehabilitated
- Achieved elevator availability and escalator availability targets
- Implemented a strategic cleaning program to pressure wash entrances, mezzanines, and platforms; and general cleaning of surfaces at high volume stations
- 'Rail Station Champion" Program was launched, which promotes collaboration between senior managers and station personnel to improve internal coordination for the timely station work order management
- Monitored chiller and cooler tower water treatment via remote monitoring
- Increased collaboration between Communications Section (COMM) and Office of Rail Transportation (RTRA) to identify strategies to enhance service disruption communications for customer (i.e. announcements, email alerts, website reports, station signage, etc.)
- Additional members of Supply Chain Enterprise Services group completed material handling training and certification
- Maintain the stock out rate (parts at zero balance) for 'critical items" below target (lower is better)

COO Office of Budget, Performance and Planning

(Dollars in Thousands)	Actual 2016	Actual 2017	Approved 2018	Approved 2019	$ Variance	% Change
Personnel	$33,616	$25,763	$25,246	$25,144	($102)	-0.4%
Non-Personnel	1,671	1,267	2,335	2,392	57	2.4%
Total Cost	**$35,287**	**$27,030**	**$27,581**	**$27,536**	**($45)**	**-0.2%**
Authorized Positions	244	261	209	211	2	1.0%

1. FY2016 actuals include the department's respective share of all fringe expenses. FY2017, FY2018 and FY2019 figures include only the department's respective share of unallocated fringe expenses due to a change in the recording of fringe expenses.
2. Authorized positions reflect the department's headcount based on Metro's FY2019 organizational structure. Similarly, expense figures consist of the costs allocated to the department based on the FY2019 structure.

The Office of Budget, Performance and Planning (OBPP) provides administrative and analytical support for the Chief Operating Officer and operating departments, using data effectively to improve decisions and operational performance.

- Operations Management Services (OPMS) ensures Metro's internal clients are well-equipped to serve our customers, supporting responsible budgeting and operational productivity, technical training, and employee availability management
- Office of Performance (CPO) assists Metro in achieving its strategic goals by measuring and publicly reporting results via a set of Key Performance Indicators (KPI's), and produces and presents to the Board of Directors the quarterly Metro Performance Report, communicating why performance has changed and what actions will be taken to improve any deficiencies. CPO works collaboratively across the agency to turn data into performance information to help prioritize decision making on actions. Through performance reporting, target-setting (KPI's, MAP-21 measures), monthly performance stat meetings, industry benchmarking, business plan development, and departmental risk management
- Office of Intermodal Planning (IPLN) performs operations planning for all rail and bus operations, including headway and route definitions, manpower and vehicle requirements. In addition, IPLN coordinates the implementation of all changes for work assignments, signage changes, facility improvements and coordination efforts with other local carriers and jurisdictions

Performance Indicator	Actual FY2016	Actual FY2017	Target FY2018	Target FY2019
Improve Safety and Security and Restore Public Trust				
Safety Measurement System Compliance	N/A	N/A	N/A	95%
Part I Crime	1,694	1,442	1,750	1,750
Improve reliability and win back riders				
Bus Customer Satisfaction	76%	75%	85%	85%
Rail Customer Satisfaction	67%	71%	85%	85%
Rail Customer On-Time Performance	74%	70%	88%	88%
Railcar Mean Distance Between Delay	60,105	79,656	85,000	85,000
Bus On-Time Performance	77%	76%	79%	79%
Bus Mean Distance Between Failure	7,945	8,283	8,000	8,000
Elevator Availability	97%	97%	97%	97%
Escalator Availability	93%	94.30%	93%	93%
Alter fiscal trajectory and renew jurisdictional confidence				
Ridership	321	301	298	298
Vacancy Rate	7%	7%	5%	5%
Capital Funds Invested	85%	99%	95%	95%
Balanced Budget	0%	-1%	0 to 2%	0 to 2%

FY2019 Business Plan

- Partner with Bus Services to make bus service faster and more reliable for customers. Provide analysis and support for schedule adjustments on routes with low on-time performance, management of headway-managed and high-frequency routes and initiating service from Cinder Bed Road facility
- Improve performance management and business processes. Produce quarterly customer-focused Metro Performance Report to demonstrate progress toward Metro's strategic goals, and deploy performance review tools to assist department leadership and superintendents in identifying business process improvement areas. This includes COO Dashboard enhancements, Stat meetings and participation in industry best practice and benchmarking organizations
- Chart the course for sustaining and reinvesting in operations over the long term (COO Productivity Project). Develop multi-year initiatives to achieve cost management targets that is beneficial for service and operations and enables reinvestment in priority areas to meet Metro's commitment to limit the operating subsidy growth
- Tackle fare evasion holistically through cost effective actions to make fare evasion harder, make fare payment easier and change customer attitudes around fare evasion, coordinate actions across the agency relevant to fare evasion
- Increase employee availability through absenteeism reduction. The COO organization is focused on monitoring 'Employee Absence Days' to measure progress as well as managing overtime utilization through tracking and improved workforce and project planning

Keeping Metro Safe, Reliable and Affordable Activities

- Customer Focus
  - Provide performance analysis support to ensure the railcar and elevator/escalator programs are achieving their goals. Report results quarterly in the Vital Signs Report
- Employee Focus
  - Ensure training plans are in place for all operational and mechanical classifications and deliver timely, high quality training with qualified instructors and the latest technology
  - Update the Confidential Close Call Reporting agreement and continue to partner with Local 689 and Local 922 to increase employee reporting on safety concerns
- Internal Management Focus
  - Continue to enhance new dashboard to help executives monitor and manage performance
  - Assist operational departments in meeting manpower requirements through oversight of Absenteeism Policy and providing At-Risk, Transitional Duty and Long Term Absence Management support

FY2018 Major Accomplishments

- Established monthly monitoring of Excess Hours/ Overtime Hours and top 100 employees
- Implemented Operations Overtime SOP audits to ensure policy adherence
- Maintained Roadway Worker Protection certification compliance at 99 percent since July 2016 that requires training 5,300 plus employees annually
- Developed and implemented 21 new training curriculum's ranging from Traction Power to Road Mechanic Train Operation
- Graduated 17 initial training classes covering train operators, interlockers, station managers, ROCC controllers, rail supervisors and platform instructors
- Introduced new quarterly Metro Performance Report to the Board with SAFE
- Led FY2019-2021 Business Planning, introducing Chief-level plans and aligning plans with the Enterprise Risk Management program
- Launched COO and Human Capital Dashboards for management
- Provided research and implementation support to Bus Transportation to pilot initiatives that improve bus speeds and shorten customer travel times
- Supported the Title VI analysis and public information requirements for the Metrobus state of good operations plans
- Initiated the Rail Fleet Plan update in coordination with Planning, Railcar Maintenance and the Chief Engineer
- Completed implementation of the new rail scheduling and operations software, and upgraded the bus planning and scheduling system, which includes new manpower, absenteeism, and fatigue reports
- Partnered with the Office of Planning to scope a Metrobus Network Study, and designed a package of improvements for the 70/79 corridor to demonstrate concepts for a future Metrobus model

Design and Construction

(Dollars in Thousands)	Actual 2016	Actual 2017	Approved 2018	Approved 2019	$ Variance	% Change
Personnel	$18,562	$16,889	$10,052	$10,334	$282	2.8%
Non-Personnel	666	887	1,117	824	(293)	-26.2%
Total Cost	**$19,229**	**$17,776**	**$11,169**	**$11,158**	**($11)**	**-0.1%**
Authorized Positions	384	419	375	352	-23	-6.1%

1. FY2016 actuals include the department's respective share of all fringe expenses. FY2017, FY2018 and FY2019 figures include only the department's respective share of unallocated fringe expenses due to a change in the recording of fringe expenses.
2. Authorized positions reflect the department's headcount based on Metro's FY2019 organizational structure. Similarly, expense figures consist of the costs allocated to the department based on the FY2019 structure.

The Office of Design and Construction (DECO) provides leadership and expertise in management and delivery of capital projects in support of Metro's overall mission to delivery safe, reliable and affordable transportation options throughout the region. DECO's Department of Engineering and Architecture (ENGA) is responsible for providing Authority-wide engineering and project management services, including development of design criteria and standards. ENGA works closely with Maintenance and Operations to ensure the transit system is maintained, and any engineering issues on existing systems are properly evaluated and remediated. DECO's program delivery arm consists of the departments of Infrastructure Renewal Program (IRPG), Major Capital Projects (MCAP) and Silver Line Extension Program (DULS). These offices assure that projects comprising Metro's Capital Improvement Program are accomplished within scope, schedule and budget. DECO's Office of Capital Program Support (OCPS) provides strategic and programmatic support to the capital program through improvement and standardization of project management and business operations processes.

FY2019 Business Plan

DECO's business plan aims to advance Metro's GM/CEO's agenda of keeping Metro safe, reliable and affordable.

- Keep customers and employees safe by rehabilitating existing infrastructure to maintain a state of good repair
- Improve Metro's system reliability by performing routine infrastructure inspections
- Ensure projects are delivered in the most cost-effective manner and compliant with all fiscal regulations while delivering best value to the Authority and its customers

Keeping Metro Safe, Reliable and Affordable

- Customer Focus
  - Deliver projects that provide a safe and reliable means of transportation and improve the passenger experience
  - Plan the execution of capital projects to minimize extraneous impact on customers
- Employee Focus
  - Improve hiring processes and develop outsourcing mechanisms to address staffing shortages to provide continuity of project delivery and reduce workload over-allocation
  - Continue to invest in the workforce by providing appropriate training and other opportunities for professional development
- Internal Management Focus
  - Increase collaboration with Metro's departments to achieve capital program delivery transparency, increase efficiency of the program delivery methods and benefit from institutional knowledge and expertise
  - Utilize existing contracting vehicles to produce construction design and contract packages to provide for consistent capital investments
  - Continue development and procurement of major multi-year rehabilitation and major capital programs planned to commence in FY2019

FY 2018 Major Accomplishments

- Completed upgrades as part of the 100 percent 8-car train program of 6 Tie Breaker Stations (TBS) along the Orange and Blue lines
- Completed upgrades of 3 Traction Power Sub-Stations (TPSS) metro station locations. Began construction of the final TPPS at East Falls Church station

- Completed contract package preparation, advertised and awarded a new contract to complete Blue Line upgrades as part of the 100 percent 8-car train program of 7 TPSS and 7 TBS and Priority Transformer Replacements at 18 locations
- Completed lighting upgrades and replacement at 6 mezzanines at 5 stations
- Awarded a platform level lighting upgrades contract for 51 platforms in 48 underground stations to commence in FY2019
- Completed relamping work to increase footcandle measurements at 25 stations. A total of 3,500 lamps were replaced
- Completed installation of CCTV cameras at 9 stations
- Commenced with design for CCTV camera installation at 4 additional stations
- Completed locking of emergency swings gates at 46 locations
- Completed construction of the new Metro Center sales office
- Completed fire alarm upgrades at Alexandria Yard
- Completed sprinkler upgrades at 4 facilities
- Radio Infrastructure upgrades: completed Factory Acceptance Testing of Fixed Network Equipment; received initial mobile and portable radios; and completed Distributed Antenna System (DAS) work to provide for radio and cellular availability within 3 segments
- Improved safety by installing 158 wayside ranging units (WRUs) which communicate with worker armbands to provide enhanced track safety and train approach alerts
- Replaced 30,000 linear feet (LF) of track circuit cable to satisfy NTSB requirement
- Surpassed a goal of 200 cables to be meggered by completing 243 cables
- Completed 65 locations for Train Control Rooms (TCR) and corresponding wayside asset inventory collection and assessment
- Completed replacement of 10 out of 22 planned switch machines on the Mainline
- Commenced construction work for Rhode Island station track desk slab and concrete ceiling panels
- Commenced Uninterruptible Power Supplies (UPS) installation work at various locations. 12 UPS unit delivered; installed UPS at 6 locations
- Completed design for AC Switchgear Room Rehabilitation for 5 stations
- Completed AC Switchgear Room Rehabilitation at Capital Heights
- Completed 100 percent (7,474) installation of Orange Boots on the Mainline
- Completed 1,688 out of 2,106 of Orange Boots at Metro yards
- Completed Traction Power Coordination studies for 80 out of 126 locations
- Completed rail yard rehab work and rehabilitation of rail car lifts at 3 yards
- Completed replacement of Wet Standpipe at Anacostia station
- Developed contract package for replacement of dry standpipes along E-Line (Green) at 29 locations
- Completed Chiller and Colling tower overhauls at five locations
- Completed rehabilitation of two parking garages, while work continued at two additional stations
- Awarded a new construction contract for rehabilitation of parking garages at 6 stations
- Completed roof replacement at 8 facilities
- Continued with construction of the Andrews Federal Bus Garage and bus HR&O facilities, expected to be completed in FY2019
- Completed pilot project to test new grouting solution between Medical Center and Bethesda stations as part of the water leak mitigation program, evaluation of the pilot program results in process
- Completed Drainage Pump System (DPS) rehabilitation at 3 stations
- Awarded a new contract to perform DPS rehabilitation and replacement at 9 locations
- Completed designs for elevating of vent shafts, which will protect station from floodwaters entering into the rail system. Advertised and awarded for construction in FY2019 for 4 stations
- Completed installation of stations entrance canopies at Shady Grove, Brookland and Metro Center stations
  - Continued installation work at 2 additional stations
- Awarded contract for the construction of the new Potomac Yard Station
- Commenced Development & Evaluation (D&E) efforts for the following needs:

- Follow-on program of 8 Metro facilities D&E phase is completed with the contract award expected in FY2019
- Submitted energy recovery specifications and one-line diagrams
- Completed 8-Car Trains with 8-Minute Headway simulation analysis intended to determine what modifications to current configuration are required to support operation of 8-car trains using Metro civil alignment, design criteria requirements, vehicle technical data, operational data and wayside distribution network
- Developed 100 percent design and technical specifications for the installation of tagging relays on the existing Silver Line phase 1 traction power facilities

- Commenced D&E and design efforts for the following structural initiatives:
  - Retrofit of Minnesota Aerial Structure Pier Caps
  - Design of bearing, expansion joint and drainage system replacement/repair at L (Yellow), E (Green) Line and Greenbelt Bridges
  - Designed and developed contract package for rehabilitation of eight segmental bridges
  - Condition assessment, repair/retrofit and rehabilitation package to bring various station platform and canopy stations back into a state of good repair

Chapter 4 - Capital Budget



Overview

Metro's FY2019-FY2024 Capital Improvement Program (CIP) totals $8.5 billion with funding from the federal government, state and local contributions, and other sources. Of this amount, $1.28 billion is planned for investment in FY2019.

Metro's capital program is grouped into six major Investment Categories, which are comprised of 17 Programs. The Investments are organized within these Categories and Programs by both asset type and function. Across all Programs, investments are also structured into three functional classifications – Safety & State of Good Repair; Major Active Capital Projects; Development & Evaluation initiatives (D&E) and Future Major Projects.

Safety & State of Good Repair

Safety & State of Good Repair is the largest segment of the capital program. This includes annual, recurring investments in the replacement, rehabilitation, and maintenance of existing assets to ensure the safety of Metro's core infrastructure and to promote a state of good repair. Prioritization of assets for replacement or rehabilitation is done using the age and condition of specific assets. Examples of Safety and State of Good Repair investments include, among others: railcar component maintenance and rehabilitation; bus and paratransit vehicle repair, rehabilitation, and replacement; rail crosstie and track fastener replacement; track circuit replacement; power cable replacement; and elevator/ escalator repair, rehabilitation, and replacement. These programs also include programs initiated through oversight recommendations or identified capital maintenance needs.

Major Active Capital Projects

Major Active Capital Projects are large, multi-year construction and acquisition projects, such as the construction of a new maintenance facility or the acquisition of railcars. Several major capital projects are currently underway, including the 7000 series railcar acquisition; construction of the Andrews Federal Center Bus Maintenance and Storage facilities; the Radio and Wireless Infrastructure project, which will facilitate wireless communication in the underground segments of the rail system and upgrade radio communications system-wide; and construction of Silver Line Phase 2 to Dulles Airport and Loudoun County, for which Metro is providing technical support.

Development & Evaluation

WMATA's Development and Evaluation (D&E) programs include activities that support the Authority's capital investment needs but are still under evaluation or planning and development for execution as Major Active Capital Projects or Safety & State of Good Repair programs. This process ensures that capital investments are efficient and effective and that project risks are mitigated prior to initiation or commitment. The D&E process also helps to ensure that projects have clearly defined scopes, schedules, and cost estimates with appropriate consideration for risks and alternative solutions. Funding will be allocated when initiatives are sufficiently developed to advance to the next stage. When initiatives are fully evaluated and developed, they may require full funding for construction and/or acquisition.

Development & Evaluation activities establish project scopes and plans for existing needs in the Capital Needs Inventory's (CNI) if they do not already have established scoping documentation. Initiatives that are not already in the CNI can be submitted into the program by a member of the Capital Program Executive Oversight Committee (currently comprised of the Department heads of CPPM, CFO, COO, and SAFE).

For the FY2019-FY2024 capital program cycle, Metro has included funding for D&E and project initiation, but full cost estimates for these potential projects will only be identified when the needs are fully developed into Major Projects.

The following needs are highlighted examples of activities that will be included in the broader FY2019-FY2024 programs:

- The replacement of 2000 and 3000 Series railcars
- Core station passenger circulation improvements
- Ventilation Systems and water mitigation in tunnels
- The rehabilitation/replacement of Bladensburg and Northern bus garages
- A new railcar overhaul facility

It is expected that additional candidates for the D&E process will be identified, subject to the availability of funding and regional and system capacity to advance major capital projects.

Each October, the Office of Planning will assemble the submissions and present them to the capital program Executive Oversight Committee (EOC) for consideration. The EOC will then determine which proposals to include in the subsequent FY capital budget and prepare an aggregate D&E amount to include in the budget proposal. The EOC will make modifications to this proposal through the budget approval process and will finalize the FY D&E program alongside the final budget approval each year.

Successful applicants will be notified of their status by the following May and are expected to be prepared to commence work on or about July 1 of the new fiscal year. The EOC will monitor progress such that D&E initiatives may roll into the CIP upon scoping document completion.

Future Major Projects

Future Major Projects is the classification for provisional funding allocated for the initiation of projects expected to progress beyond the Development & Evaluation phase and into initial design, engineering, and construction.

Investment Categories

Railcar Investments

The Railcar Investment category includes three programs: Railcar Acquisition; Railcar Maintenance & Overhaul; and Railcar Maintenance Facilities. Over the next six years, investment priorities in this category will address major projects and safety imperatives within each program.

Metro will advance the 'Get Well" initiative for railcars – commissioning 160 new 7000 series railcars and completing the acceptance of all 748 new 7000 series railcars. Targeted repair campaigns will also continue to address defective components on the legacy fleet, and substantial upgrades are being made to Metro's railcar maintenance equipment and facilities through the on-going rehabilitation of the railyards, such as those currently underway at Brentwood, New Carrollton, and Alexandria yards.

Component improvements on the legacy fleet, including the 2000, 3000, and 6000 Series railcars will continue, including HVAC, propulsion systems, and pneumatic brakes to reinforce the safety and reliability of the fleet and to reduce train offloads. The replacement of the 2000 and 3000 Series railcars will also begin during the six-year period.

Metro is also planning to construct a new railcar maintenance and overhaul facility to better service, rehabilitate and enhance the rail fleet.

Rail Systems

The Rail Systems Investment category includes two programs: Propulsion and Signals & Communications. Investment priorities over the next six years are focused on safety, state of good repair and capacity improvements in rail propulsion power systems and communication systems in support of Metro's continued deployment of 8-car trains.

In addition to the on-going 8-car train power upgrades throughout the system, Metro will also complete the replacement of the existing Comprehensive Radio Communications System (CRCS) with a new system operating in the 700MHz band.

At the same time wireless communication infrastructure is being installed throughout the system to improve safety, security, efficiency of operations, and customer convenience, and a track inspector location system is in development to alert train, operations control, and other workers to the location of workers on the tracks.

Additionally, Metro will address critical state of good repair needs in Automatic Train Control (ATC) equipment throughout the rail system as work on the replacement of all Generation 3 track circuits is completed.

Track & Structures

The Track & Structures Investment category includes two programs – Fixed Rail and Structures. The investment priorities in these areas will continue to be the rehabilitation and maintenance of the Metrorail track and right of way as well as regular repair and replacement of track components (such as running rail, crossties, and fasteners) and structures (such as bridges, tunnels, and retaining walls).

Safety critical initiatives are also underway in tunnels. New industrial enhancements are being applied to reinforce bridge structures, replace aging track components, and to upgrade tunnel liners and mitigate issues related to water intrusion.

Metro's track rehabilitation and maintenance program will also address the potential for hazardous track conditions with on-going infrastructure rehabilitation and replacement and the reconfiguration of the third rail.

Stations & Passenger Facilities

The Station & Passenger Facilities Investment category encompasses three programs – Platforms & Structures, Vertical Transportation, and Station Systems.

Investment priorities over the next six years will focus on the repair, rehabilitation and replacement of elevators and escalators; capacity and passenger circulation improvements at core stations including L'Enfant Plaza, Union Station, Gallery Place and Farragut North; development of the Purple Line in Maryland; and six new stations under construction on the Silver Line Phase 2 extension to Dulles Airport and Loudoun County.

Metro will also invest in lighting upgrades to increase visibility on mezzanines and platforms at key stations, modernize fare collection equipment and systems, rehabilitate parking garages and lots, and rehabilitate and replace station cooling infrastructure and equipment.

Bus & Paratransit

The Bus & Paratransit category covers four programs – Bus & Paratransit Acquisition, Bus Maintenance & Overhaul, Bus Maintenance Facilities, & Bus Passenger Facilities/Systems.

Metro's investments in these programs include the acquisition, regular replacement and rehabilitation of buses and paratransit vans to maintain a safe and reliable vehicle fleet in accordance with approved fleet plans.

Construction of the new bus facility at Andrews Federal Center – replacing a facility that is more than 90 years old – will also be completed, and the Bladensburg and Northern bus garages will be rehabilitated or replaced (as determined in the D&E process).

Business Support

The Business Support Investment category includes three programs – Information Technology (IT), Metro Transit Police Department (MTPD), and Support Equipment & Services.

Investment priorities in these programs include MTPD equipment for public safety and security, system-wide facility roof replacement, and IT investments including:

An enterprise financial system upgrade to improve financial management and reporting practices, updated software to improve scheduling of track access for maintenance work and construction, and the integration of Geographic Information System (GIS) technology to leverage real time traffic data and optimize bus scheduling and planning.

This program also supports the monitoring, surveys, testing and remediation initiatives necessary to maintain compliance with all applicable environmental standards. Business Support investments also include the consolidation of WMATA offices, audits of system wide energy usage, and other efforts to discover, implement, and leverage efficiencies across the Authority.

Financial Plan by Investment Category

(Dollars in Millions)	FY2019 Plan	FY2020 Plan	FY2021 Plan	FY2022 Plan	FY2023 Plan	FY2024 Plan	6 Year Total
Railcar	445.1	254.1	330.7	305.5	339.8	543.2	2,218.4
Rail Systems	173.3	175.1	162.6	129.1	117.0	103.4	860.4
Track and Structures Rehabilitation	105.4	144.1	167.2	201.5	317.4	239.5	1,175.1
Stations and Passenger Facilities	251.8	300.3	307.0	321.0	246.2	239.6	1,665.9
Bus and Paratransit	203.6	314.2	292.9	308.0	316.3	288.1	1,723.2
Business Support	99.8	112.1	114.8	235.3	188.3	136.5	886.8
Total Capital Programs	**1,279.1**	**1,300.0**	**1,375.2**	**1,500.3**	**1,525.0**	**1,550.2**	**8,529.8**

CIP Multiyear Investments

Dollars in Millions

(Dollars in Millions)	FY2019 Plan	FY2020 Plan	FY2021 Plan	FY2022 Plan	FY2023 Plan	FY2024 Plan	6 Year Total
Railcar Acquisition	304.0	59.1	145.4	93.0	19.7	226.9	848.2
Railcar Maintenance/Overhaul	116.7	89.3	94.0	105.6	147.0	134.0	686.7
Railcar Maintenance Facilities	24.4	105.8	91.2	106.8	173.1	182.3	683.6
Total Railcar	**445.1**	**254.1**	**330.7**	**305.5**	**339.8**	**543.2**	**2,218.4**
Propulsion	66.2	75.0	89.0	75.1	74.4	74.4	453.9
Signals & Communications	107.1	100.1	73.6	54.0	42.6	29.0	406.5
Total Rail Systems	**173.3**	**175.1**	**162.6**	**129.1**	**117.0**	**103.4**	**860.4**
Fixed Rail	85.6	101.2	110.3	114.2	142.7	134.8	688.9
Structures	19.8	42.9	56.8	87.3	174.7	104.7	486.1
Total Track & Structures	**105.4**	**144.1**	**167.2**	**201.5**	**317.4**	**239.5**	**1,175.1**
Platforms & Structures	116.9	118.0	106.3	152.5	92.7	90.6	677.1
Vertical Transportation	58.0	62.4	62.4	56.7	58.0	59.1	356.6
Station Systems	76.9	119.9	138.3	111.8	95.5	89.9	632.3
Total Stations & Passenger Facilities	**251.8**	**300.3**	**307.0**	**321.0**	**246.2**	**239.6**	**1,665.9**
Bus and Paratransit Acquisition	110.1	122.2	136.5	105.0	106.9	109.7	690.3
Bus Maintenance/Overhaul	58.5	64.7	64.4	69.0	76.9	78.8	412.3
Bus Maintenance Facilities	30.0	93.6	65.3	99.6	75.3	47.3	411.1
Bus Passenger Facilities/Systems	5.1	33.8	26.8	34.4	57.2	52.2	209.4
Total Bus & Paratransit	**203.6**	**314.2**	**292.9**	**308.0**	**316.3**	**288.1**	**1,723.2**
IT	67.5	53.5	44.2	59.2	55.4	52.6	332.3

CIP Multiyear Investments
Dollars in Millions

(Dollars in Millions)	FY2019 Plan	FY2020 Plan	FY2021 Plan	FY2022 Plan	FY2023 Plan	FY2024 Plan	6 Year Total
MTPD	1.0	1.0	1.0	1.0	1.0	1.0	6.0
Support Equipment/Services	31.4	57.6	69.6	175.1	131.9	82.8	548.4
Total Business Support	**99.8**	**112.1**	**114.8**	**235.3**	**188.3**	**136.5**	**886.8**
Total	**1,279.1**	**1,300.0**	**1,375.2**	**1,500.3**	**1,525.0**	**1,550.2**	**8,529.8**

Funding Sources

By the end of FY2018 all available Federal grant funds, except for some small, restricted competitive grants, will be fully utilized and there will be no Federal PRIIA or Formula funds carried forward into FY2019. The FY2019-2024 capital funding projection assumes that Federal Formula grant funding continues at current levels and that PRIIA funding ends after FY2020. The increasing capital program therefore necessitates a significant increase in jurisdictional contributions to fund the program, as shown below. Metro expects the recently approved $500 million in annual dedicated funding from the region to contribute significantly to this need. (The FY2019 budget was established prior to the approval of the dedicated funding legislation).

FY2019-2024 Approved Capital Improvement Program

(Dollars in Millions)	FY2019 Plan	FY2020 Plan	FY2021 Plan	FY2022 Plan	FY2023 Plan	FY2024 Plan	6 Year Total
Federal							
Federal Formula Programs	304.9	320.9	312.9	312.9	312.9	312.9	1,877.3
Federal PRIIA	148.5	148.5	-	-	-	-	297.0
Other Federal Grants	5.9	3.6	4.1	4.4	4.0	4.0	26.1
Subtotal, Federal Grants	**459.3**	**472.9**	**317.0**	**317.3**	**316.9**	**316.9**	**2,200.4**
Match to Federal Formula	76.2	80.2	78.2	78.2	78.2	78.2	469.3
System Performance and Debt Strategy	560.8	551.8	911.5	1,068.6	1,112.7	1,149.1	5,354.6
Subtotal, Match, System Performance and Debt Strategy	**637.0**	**631.9**	**989.7**	**1,146.9**	**1,190.9**	**1,227.3**	**5,823.9**
State and Local PRIIA	148.5	148.5	-	-	-	-	297.0
Other State and Local	1.5	0.9	1.0	1.1	0.7	-	5.2
Long Term Debt Strategy		-	-	-	-	-	-
Subtotal, State & Local	**787.0**	**781.4**	**990.8**	**1,147.9**	**1,191.6**	**1,227.3**	**6,126.2**
Jurisdictional Reimbursable Projects	5.3	5.0	3.0	3.0	3.0	3.0	22.3
Subtotal, State and Local, including Reimbursable Jurisdictional Projects	**792.3**	**786.4**	**993.8**	**1,150.9**	**1,194.6**	**1,230.3**	**6,148.4**
MWAA	27.5	40.6	64.4	32.0	13.5	3.0	181.1
Grand Total	**1,279.1**	**1,300.0**	**1,375.2**	**1,500.3**	**1,525.0**	**1,550.2**	**8,529.8**

Federal Programs

In FY2019, Metro expects to receive approximately $311 million from Federal formula grants and other smaller discretionary grant programs, as well as $148.5 million from the Passenger Rail Investment and Improvement Act (PRIIA). The formula and discretionary grants generally require a 20 percent local match, while the PRIIA funds require a 50 percent match, so the total required match to federal grants in FY2019 will be approximately $226 million.

The six-year funding plan assumes that Federal grant funding will continue to be appropriated by Congress at a level consistent with Federal Fiscal Year 2017 - with the exception of PRIIA funding, which is assumed to end in FY2020 - amounting to a total of $2.2 billion over six years.

State & Local Programs

In addition to providing the required match to Federal grants, Metro's funding jurisdictions also contribute unmatched capital funds (referred to as system performance funds) and participate in Metro's long-term debt issuances. The Approved FY2019 capital budget includes $787 million in total state and local investment.

The Approved FY2019 capital budget also includes locally requested and funded investments within the appropriate capital program. Integrating these investments into the overall program improves awareness and oversight but has

no impact on regional funding requirements, as the projects are fully funded by the sponsoring entity. Current active jurisdictional projects include the development of the Purple Line in Maryland, Union Station improvements, and the jurisdictional project development program.

Financial Plan - Allocation of State & Local Contributions

Dollars in Millions

(Dollars in Millions)	FY2019 Plan	FY2020 Plan	FY2021 Plan	FY2022 Plan	FY2023 Plan	FY2024 Plan	6 Year Total
Federal Formula Match, System Performance & Long Term Debt Strategy							
District of Columbia	**226.9**	**219.5**	**343.8**	**398.4**	**413.7**	**426.4**	**2,028.8**
Montgomery County	112.3	108.5	169.9	196.8	204.4	210.6	1,002.5
Prince George's County	107.5	104.0	162.9	188.8	196.0	202.0	961.4
Maryland Subtotal	**219.8**	**212.5**	**332.8**	**385.6**	**400.4**	**412.7**	**1,963.9**
City of Alexandria	30.4	29.3	46.0	53.2	55.3	57.0	271.2
Arlington County	58.5	56.5	88.5	102.6	106.5	109.8	522.5
City of Fairfax	1.8	1.8	2.8	3.2	3.3	3.4	16.3
Fairfax County	97.8	94.4	147.9	171.4	177.9	183.4	872.7
City of Falls Church	1.8	1.7	2.7	3.1	3.3	3.4	16.0
Loudoun County	-	16.2	25.3	29.3	30.4	31.4	132.6
Virginia Subtotal	**190.3**	**199.9**	**313.1**	**362.8**	**376.8**	**388.3**	**1,831.2**
Subtotal Federal Formula Match & System Performance	**637.0**	**631.9**	**989.7**	**1,146.9**	**1,190.9**	**1,227.3**	**5,823.9**
State and Local PRIIA							
District of Columbia	49.5	49.5	-	-	-	-	99.0
State of Maryland	49.5	49.5	-	-	-	-	99.0
Commonwealth of Virginia	49.5	49.5	-	-	-	-	99.0
Subtotal State and Local PRIIA	**148.5**	**148.5**	**-**	**-**	**-**	**-**	**297.0**
Other State and Local							
District of Columbia	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Montgomery County	-	-	-	-	-	-	-
Prince George's County	-	-	-	-	-	-	-
State of Maryland	-	-	-	-	-	-	-
State of Maryland	**-**	**-**	**-**	**-**	**-**	**-**	**-**
DRPT (CMAQ Match)	1.5	0.9	1.0	1.1	0.7	-	5.2
City of Alexandria	-	-	-	-	-	-	-
Arlington County	-	-	-	-	-	-	-
City of Fairfax	-	-	-	-	-	-	-
Fairfax County	-	-	-	-	-	-	-
City of Falls Church	-	-	-	-	-	-	-
Commonwealth of Virginia	-	-	-	-	-	-	-
Virginia Subtotal	**1.5**	**0.9**	**1.0**	**1.1**	**0.7**	**-**	**5.2**
Total Other State and Local	**1.5**	**0.9**	**1.0**	**1.1**	**0.7**	**-**	**5.2**
Subtotal Before Jurisdictional Reimbursable Projects	**787.0**	**781.4**	**990.8**	**1,147.9**	**1,191.6**	**1,227.3**	**6,126.2**
Union Station							
District of Columbia	1.9	1.7	-	-	-	-	3.6
State of Maryland	0.4	0.3	-	-	-	-	0.7
Subtotal Union Station	**2.3**	**2.0**	**-**	**-**	**-**	**-**	**4.3**
Project Planning							
District of Columbia	1.0	1.0	1.0	1.0	1.0	1.0	6.0
State of Maryland	1.0	1.0	1.0	1.0	1.0	1.0	6.0
Commonwealth of Virginia	1.0	1.0	1.0	1.0	1.0	1.0	6.0
Subtotal Project Planning	**3.0**	**3.0**	**3.0**	**3.0**	**3.0**	**3.0**	**18.0**
Subtotal Jurisdictional Reimbursable Projects	**5.3**	**5.0**	**3.0**	**3.0**	**3.0**	**3.0**	**22.3**
Grand Total	**$792.3**	**$786.4**	**$993.8**	**$1,150.9**	**$1,194.6**	**$1,230.3**	**$6,148.4**

Financial Plan - FY2018 & FY2019 Allocation of State & Local Contributions

Dollars in Millions

	FY2018 Budget					FY2019Approved				
	Q1	Q2	Q3	Q4	Total	Q1	Q2	Q3	Q4	Total
Federal Formula Match & System Performance										
District of Columbia	**$20.9**	**$16.5**	**$18.7**	**$18.7**	**$74.8**	**$19.2**	**$19.0**	**$18.8**	**$18.2**	**$75.2**
Montgomery County	$10.6	$8.4	$9.5	$9.5	$38.0	$14.2	$14.1	$13.9	$13.4	$55.6
Prince George's County	$10.1	$7.9	$9.0	$9.0	$35.9	$13.6	$13.5	$13.3	$12.9	$53.2
Maryland Subtotal	**$20.7**	**$16.3**	**$18.5**	**$18.5**	**$73.9**	**$27.8**	**$27.5**	**$27.3**	**$26.3**	**$108.8**
City of Alexandria	$2.7	$2.1	$2.4	$2.4	$9.7	$1.1	$1.1	$1.1	$1.1	$4.4
Arlington County	$5.2	$4.1	$4.6	$4.6	$18.4	$6.0	$6.0	$5.9	$5.7	$23.5
City of Fairfax	$0.2	$0.1	$0.2	$0.2	$0.6	$0.1	$0.1	$0.1	$0.1	$0.3
Fairfax County	$9.1	$7.1	$8.1	$8.1	$32.4	$10.2	$10.1	$10.0	$9.6	$40.0
City of Falls Church	$0.2	$0.2	$0.2	$0.2	$0.7	$0.2	$0.2	$0.2	$0.2	$0.8
Commonwealth of Virginia	—				—					—
Virginia Subtotal	**$17.4**	**$13.6**	**$15.5**	**$15.5**	**$61.8**	**$17.6**	**$17.5**	**$17.3**	**$16.7**	**$69.0**
Subtotal Formula Match & System Performance	**$59.0**	**$46.4**	**$52.7**	**$52.7**	**$210.9**	**$64.5**	**$64.0**	**$63.4**	**$61.1**	**$253.0**
State and Local PRIIA										
District of Columbia	$16.3	$13.4	$9.9	$9.9	$49.5	$21.3	$12.7	$14.4	$1.1	$49.5
State of Maryland	$16.3	$13.4	$9.9	$9.9	$49.5	$21.3	$12.7	$14.4	$1.1	$49.5
Commonwealth of Virginia	$16.3	$13.4	$9.9	$9.9	$49.5	$21.3	$12.7	$14.4	$1.1	$49.5
Subtotal State and Local PRIIA	**$48.9**	**$40.2**	**$29.7**	**$29.7**	**$148.5**	**$63.9**	**$38.2**	**$43.2**	**$3.2**	**$148.5**
CMAQ Match	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Commonwealth of Virginia (DRPT)	$0.7	$0.7	-	-	$1.4	-	$0.2	$0.7	$0.6	$1.5
Subtotal CMAQ Match	**$0.7**	**$0.7**	**-**	**-**	**$1.4**	**-**	**$0.2**	**$0.7**	**$0.6**	**$1.5**
Subtotal Before Jurisdictional Reimbursable Projects	**$108.6**	**$87.3**	**$82.4**	**$82.4**	**$360.8**	**$128.4**	**$102.5**	**$107.3**	**$64.9**	**$403.0**
King Street Bus Loop (Alexandria)	**$0.3**	**$0.3**	**$0.3**	**$0.3**	**$1.2**	**-**	**-**	**-**	**-**	**-**
Potomac Yards (Alexandria)	**$1.3**	**$1.3**	**$1.3**	**$1.3**	**$5.2**	**-**	**-**	**-**	**-**	**-**
Purple Line (Maryland	**$1.0**	**$1.0**	**$1.0**	**$1.0**	**$4.0**	**-**	**-**	**-**	**-**	**-**
Union Station										
District of Columbia						$0.5	$0.5	$0.5	$0.5	$1.9
State of Maryland						$0.1	$0.1	$0.1	$0.1	$0.4
Subtotal Union Station						**$0.6**	**$0.6**	**$0.6**	**$0.6**	**$2.3**
Project Planning										
District of Columbia	$0.2	$0.2	$0.2	$0.2	$1.0	$0.2	$0.2	$0.3	$0.3	$1.0
State of Maryland	$0.2	$0.2	$0.2	$0.2	$1.0	$0.2	$0.2	$0.3	$0.3	$1.0
Commonwealth of Virginia (NVTA)	$0.2	$0.2	$0.2	$0.2	$1.0	$0.2	$0.2	$0.3	$0.3	$1.0
Subtotal Project Planning	**$0.7**	**$0.7**	**$0.7**	**$0.7**	**$2.9**	**$0.6**	**$0.6**	**$0.8**	**$1.0**	**$3.0**
Subtotal Before Jurisdictional Reimbursable Projects	**$3.3**	**$3.3**	**$3.3**	**$3.3**	**$13.6**	**$1.2**	**$1.2**	**$1.3**	**$1.6**	**$5.3**
Debt Strategy										**$384.0**
Total	**$112.0**	**$90.6**	**$85.8**	**$85.8**	**$374.4**	**$227.5**	**$200.8**	**$204.8**	**$159.2**	**$792.3**

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Appendix A - Capital Program Detail

Program: Railcar Acquisition **Category:** Railcar Investments

Program Description

Metro operates and maintains a fleet of over 1,200 railcars. New railcars are acquired to replace the oldest and least reliable vehicles, as well as to expand the fleet to support rail line extensions and ridership capacity needs. This program consists of projects that procure and prepare these new railcars for service.



Approved Budget (in 000s)	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	Total
Major Active Capital Projects	$299,440	$53,281	$139,040	$36,244	$8,254	$49,387	$585,645
Development & Evaluation	4,600	5,800	0	0	0	0	10,400
Future Major Projects	0	0	6,400	56,784	11,478	177,500	252,162
Budget Total	**$304,040**	**$59,081**	**$145,440**	**$93,028**	**$19,732**	**$226,887**	**$848,207**

Major Active Capital Projects

Project (FY2019 - 2024)	Objectives	Cost (in 000s)
7000 Series Railcar Procurement	Acquisition of 7000 Series Railcars	$585,645
	Total	**$585,645**

The Major Active Capital Projects will include the following:

7000 Series Railcar Procurement

Metro expects to conditionally accept 212 railcars during the 2018 fiscal year, bringing the total to 588 by the end of FY2018.

In FY2019, Metro expects to receive the remaining 160 railcars, all 748 of the 7000 series are expected to be delivered by the end of FY2019.

This project also includes the costs associated with retiring and disposing of the oldest and least reliable railcars and spare parts needed for the repair and maintenance of the assets.



Project Schedule	FY2005 -FY2025
Total Project Cost	$1,771,767
Expense thru FY 2017	$834,165
Projection for FY 2018	$325,304
Remaining Cost (FY2019 thru Completion)	$612,298

Development & Evaluation

Development & Evaluation funding of $10.4 million is included in this program. Through this process, Metro will evaluate alternatives for future railcar acquisition, including the need for the replacement of the 2000 and 3000 series railcars.

Future Major Projects

This program also includes provisional funding of $252.2 million for the initial payment and delivery of new railcars.

Program: Railcar Maintenance & Overhaul **Category:** Railcar Investments

Program Description

This program includes railcar preventive maintenance, railcar rehabilitation and railcar safety and reliability improvements. Approximately 225 vehicles are rehabilitated annually to replace railcar components – such as wheels, brake systems, traction motors, doors, etc. – before the end of their useful life is reached. The regular inspection and maintenance of the entire railcar fleet ensures that component defects are repaired, performance issues are remedied, and that railcars are safe and reliable.



Approved Budget (in 000s)	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	Total
Safety & State of Good Repair	$116,248	$88,765	$92,225	$96,636	$98,391	$100,199	$592,464
Development & Evaluation	500	500	1,000	1,000	3,000	3,000	9,000
Future Major Projects	0	0	800	8,000	45,600	30,800	85,200
Budget Total	**$116,748**	**$89,265**	**$94,025**	**$105,636**	**$146,991**	**$133,999**	**$686,664**

Safety, State of Good Repair & Minor Projects

Element (FY2019 - 2024)	Quantity	Cost (in 000s)
Rehab Railcars	225 cars annually	$346,469
Preventive Maintenance	1,240 cars annually	210,000
Safety & Reliability Enhancements	1,000 cars annually	35,995
	Total	**$592,464**

Metro will complete state of good repair efforts and component rehabilitations on the legacy fleet, including propulsion systems, pneumatic brakes, precision stop, door improvements, upgrades to converter function modules, and the replacement of carpeting on all 6000 series cars with resilient flooring.



Development & Evaluation

Development & Evaluation funding of $9 million will provide for the analysis of potential future needs to develop capabilities in the maintenance and rehabilitation of the 7000, 8000 and future series railcars and to keep pace with changing technology.

Future Major Projects

This program also includes provisional funding of $85.2 million for the initiation of future projects that progress beyond the Development & Evaluation phase.

Program: Railcar Maintenance Facilities **Category:** Railcar Investments

Program Description

The Railcar Maintenance Facilities program repairs, rehabilitates and replaces equipment and buildings at rail yards and other railcar maintenance facilities. Metro rehabilitates these facilities to provide a safe and modern work environment, with reliable equipment, to enable personnel to safely perform work and limit operational disruptions.



Approved Budget (in 000s)	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	Total
Safety & State of Good Repair	$4,500	$22,448	$21,188	$44,826	$49,076	$37,338	$179,375
Major Active Capital Projects	10,350	2,000	0	0	0	0	12,350
Development & Evaluation	2,000	4,345	2,000	2,000	40,000	40,000	90,345
Future Major Projects	7,500	77,000	68,000	60,000	84,000	105,000	401,500
Budget Total	**$24,350**	**$105,793**	**$91,188**	**$106,826**	**$173,076**	**$182,338**	**$683,570**

Safety, State of Good Repair & Minor Projects

Element (FY2019 - 2024)	Quantity	Cost (in 000s)
7000 Series Rail Car HVAC Maintenance Facility	5	$5,000
Brentwood Rail Yard Equipment Demolition	1	398
S&I Shop Safety Railings	1	2,296
Switchgear, Transformer, Switchboard, etc.	7 locations	20,098
Grinder, Lathe, Saw, Lift, etc.	7 locations	125,527
Sprinkler, Standpipe, Control Panel, etc.	7 locations	6,681
Air Handler, Condensing Unit, Heater, etc.	7 locations	12,196
Pavement Paintings, Riding Surfaces, etc.	6 locations	3,946
Roofing System	7 locations	3,133
Elevators	1 locations	101
	Total	**$179,375**

During the six year period, Safety, State of Good Repair & Minor Projects within the Railcar Maintenance Facilities program will focus on rehabilitating maintenance facilities, such as improvements to enable Metro safety and efficiency access and work on the 7000 series and future modern railcars.

The program will also address the installation and configuration of security equipment to ensure safety and protection for employees and assets at railcar maintenance facilities.

This program will also replace items that have reached their useful life including but not limited to switchgears, grinders, sprinklers, air handlers, transformers and lifts.



Major Active Capital Projects		
Project (FY2019 - 2024)	**Objectives**	**Cost (in 000s)**
Build-out of Good Luck Road Facility	Build-out and moving of various maintenance departments from rail yards	$7,550
Complete Remaining Work at the Yards	Extensive rehabilitation, repairs and improvements to facilities at rail yards. Completion of current projects.	4,800
	Total	**$12,350**

Active major projects in this program will include the following:

Build-out of Good Luck Road Facility

This project administers the purchase of a new facility at Good Luck Road, the design and construction to upgrade and repair the building, and the relocation of maintenance departments displaced by rail yard projects – those that are not required to be located in an active yard – to the facility (or to other locations as space allows).

In FY2019, Metro plans to have completed the building repairs and upgrades at Good Luck Road, along with the relocation of maintenance and other functions that will occupy the facility.



Project Schedule	Start: FY2016 - End: FY2019
Total Project Cost	$25,918
Expense thru FY 2017	$14,311
Projection for FY 2018	$4,057
Remaining Cost (FY2019 thru Completion)	$7,550

Rail Yard Facility Repairs

This project includes the rehabilitation and replacement of various rail maintenance facilities and equipment in order to provide a reliable, safe and modernized work environment and to enhance the capability of maintenance personnel to service the railcar fleet. The work conducted includes, but is not limited to, rehabilitation of railcar lifts, lighting system improvements, hazmat storage upgrades, and the replacement of switch gears.



Project Schedule	Start: FY2011 - End: FY2019
Total Project Cost	$174,798
Expense thru FY 2017	$143,098
Projection for FY 2018	$26,900
Remaining Cost (FY2019 thru Completion)	$4,800

Development & Evaluation

This program includes $90.3 million for Development & Evaluation, which will be used to conduct assessments of long-term capital investment opportunities, such as the expansion of Metro's nine rail yards and increases to the capacity of the facility network to store and service modern railcars. Metro will also be evaluating alternatives for a new heavy repair and overhaul facility that would improve the efficiency and effectiveness of these functions and free up capacity at existing rail yards for additional railcars and more routine maintenance activities.

Future Major Projects

This program also includes provisional funding of $401.5 million for the purchase of land and construction of a new heavy repair and overhaul facility, as well as purchase of equipment for the maintenance facilities, and other major projects.

Program: Propulsion **Category:** Rail Systems Investments

Program Description

The Propulsion program includes ongoing rehabilitation and improvement efforts critical to the safety and performance of the electrical system that powers Metrorail trains. The assets that make up this system include power substations, transformers, cabling, alternating current (AC) and direct current (DC) switchgears, insulators, and feeders/breakers. In order to prevent electrical hazards and optimize the performance and reliability of trains, Metro must repair, rehabilitate, and upgrade these assets when required due to age and/or condition.



Approved Budget (in 000s)	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	Total
Safety & State of Good Repair	$39,257	$41,499	$45,134	$49,356	$49,356	$49,356	$273,958
Major Active Capital Projects	26,449	29,455	22,585	0	0	0	78,489
Development & Evaluation	500	4,000	1,250	750	0	0	6,500
Future Major Projects	0	0	20,000	25,000	25,000	25,000	95,000
Budget Total	**$66,206**	**$74,954**	**$88,969**	**$75,106**	**$74,356**	**$74,356**	**$453,947**

Safety, State of Good Repair & Minor Projects		
Element (FY2019 - 2024)	**Quantity**	**Cost (in 000s)**
AC Rooms (2 rooms/station)	18	$108,129
Room Rehab Design	40	10,242
UPS Power Supplies	80	8,043
Traction Power Substations	28	84,257
Tie Breaker Stations	6	12,100
Cabling (per year)	30k ln. ft.	27,629
MPR/PQM/Rectifier/SCADA	Misc.	23,558
	Total	**$273,958**

This program will address electrical equipment throughout the system, including the rehabilitation of three additional Tie-Breaker Station (TBS) locations and five Traction Power Substations (TPSS).

A dedicated program to address the state of good repair of AC power systems began in FY2017. AC room rehabilitations will first take place on the Red Line, followed by the Orange and Blue Lines with equipment already in Metro's possession. Designs for future locations across the system are in development with a goal to increase to four stations per year. Metro's existing equipment inventory will be installed by FY2020. Installations in FY2021 and beyond are expected to continue

These assets will continue to be rehabilitated on an on-going basis, with approximately 30,000 feet of power cable installed per year.

Studies to determine the safest approach to the coordination between the alternating current and direct current power systems are underway.



Major Active Capital Projects		
Project (FY2019 - 2024)	**Objectives**	**Cost (in 000s)**
100% 8-Car Train - Power Upgrades	Completion of Orange and Blue Line Upgrades	$78,489
	Total	**$78,489**

In FY2019, Major Active Capital Projects in this program will include the following:

100% 8-Car Train - Power Upgrades

Metro's traction-power system is undergoing extensive improvements to increase power supply capacity and provide the infrastructure for the expanded use of eight-car trains. The increase from six to eight cars increases the power requirements of each train as well as the burden on the traction-power system.



In FY2019, Metro plans to deliver equipment through a newly procured Blue Line upgrade contract, and complete work on two Traction Power Substation locations along with seven Tie Breaker Stations.

Project Schedule	Start: FY2013 - End: FY2021
Total Project Cost	$161,285
Expense thru FY 2017	$64,275
Projection for FY 2018	$18,521
Remaining Cost (FY2019 thru Completion)	$78,489

Development & Evaluation

Metro has allocated $6.5 million to Development & Evaluation in this program and will plan the necessary upgrades for the operation of eight-car trains system-wide. This will include the evaluation of alternatives for upgrades to the power-system on the Red Line.

Future Major Projects

This program also includes provisional funding of $95 million for the improvements necessary to support more eight-car trains, as established in the Development & Evaluation phase.

Program: Signals & Communications **Category:** Rail Systems Investments

Program Description



The Signals & Communications program supports the ongoing rehabilitation of and upgrades to systems that locate and direct Metrorail trains, wireless systems used by Metro employees, safety personnel, and first responders, and wireless communication systems for cellular access in tunnels and underground stations. Metro's automatic train control system is made up of components that work together to guide trains. These include track circuits, modules, non-vital processors, switch signals, cabling, junction boxes, and other associated equipment. Signaling technology includes lighting and warning systems that alert workers and operators as to the location of other trains and personnel to prevent incidents and accidents. Metro regularly inspects and repairs these assets, while making upgrades to the technology to improve accuracy and safety. Emergency Trip Station infrastructure will also be upgraded, allowing for more direct response and communication with the Operations Control Center.

Approved Budget (in 000s)	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	Total
Safety & State of Good Repair	$24,478	$23,700	$20,000	$19,000	$21,000	$18,000	$126,178
Major Active Capital Projects	81,860	75,946	51,634	31,952	10,632	0	252,024
Development & Evaluation	800	500	0	0	5,000	5,000	11,300
Future Major Projects	0	0	2,000	3,000	6,000	6,000	17,000
Budget Total	**$107,138**	**$100,146**	**$73,634**	**$53,952**	**$42,632**	**$29,000**	**$406,502**

Safety, State of Good Repair & Minor Projects		
Element (FY2019 - 2024)	**Quantity**	**Cost (in 000s)**
Alexandria Yard ATC Rehab	46 switches	$18,342
Future NTSB Recommendations	TBD	5,620
Cabling (per year)	30,000 ln. ft.	21,000
High Current Bonds	1116	19,470
Switch Machines	132	9,306
EMIs	Various	15,420
Cross Bonds and D-loops	Various	5,020
Future Track Circuit Replacement	TBD	32,000
	Total	**$126,178**

Metro's 108 mainline switch machines and the 184 yard switch machines will be rehabilitated or replaced. Metro has a goal of renewing 30,000 linear feet of ATC cable per year. Cable meggering will take place at a rate of eight per week. The replacement of older track circuits with new, Generation 5, track circuits will also begin, along with the overhaul of the automatic train control system at the Alexandria Yard, and other rehabilitation efforts.

Metro will also continue to address FTA Safety Management Inspection recommendations including the installation of pneumatic control boxes to synchronize vent fans to ensure the proper direction of air flow during ventilation.



Major Active Capital Projects		
Project (FY2019 - 2024)	**Objectives**	**Cost (in 000s)**
Radio Infrastructure Replacement	Complete replacement of existing WMATA radio system	$231,473
ETS Infrastructure Improvements	Complete replacement of existing WMATA Emergency Trip Station telephones	20,000
Track Inspector Location	Complete pilot for bi-directional warning system for trains and track inspectors	551
	Total	**$252,024**

In FY2019, Major Active Capital Projects in this program will include the following:

Radio Infrastructure Replacement



This project will replace Metro's existing Comprehensive Radio Communications System (CRCS). The system is critical for communication among Metro and other public safety personnel. At the same time, this project will establish service for wireless customers in underground tunnels and stations, create an above ground antenna network, and provide new radios for bus, rail and MTPD. The CRCS currently operates in a 450-490 MHz frequency band (also referred to as T-Band), while the new system will be operating in a 700 MHz band. This upgrade will meet the Federal Communications Commission (FCC) T-Band relocation requirement.

In FY2019, Metro plans to have cellphone signal available and running in segments between Union Station to DuPont, Metro Center to Rosslyn, Rosslyn to Ballston, Pentagon to King St., and will begin tunnel installation work in the Gallery to Southern Ave. segment.

In addition, Metro plans to have all leases signed for above ground tower sites and most permitting completed. Metro expects to have construction under way at all sites. The installation of radios will also begin on railcars and buses.

Project Schedule	Start: FY2016 - End: FY2023
Total Project Cost	$322,391
Expense thru FY 2017	$31,472
Projection for FY 2018	$59,446
Remaining Cost (FY2019 thru Completion)	$231,473

ETS Infrastructure Improvements



The existing Emergency Trip Station (ETS) system has an aging, deteriorating infrastructure with obsolete electrical components and communications technology that frequently causes the system to fail. This project funds upgrades to the rail right-of-way ETS telephones. The new ETS telephone system will replace the existing ETS telephone instruments with intelligent telephones that can perform self-diagnosis.

Project Schedule	Start: FY2018 - End: FY2022
Total Project Cost	$21,500
Expense thru FY 2017	$0
Projection for FY 2018	$1,500
Remaining Cost (FY2019 thru Completion)	$20,000

Major Active Capital Projects (cont.)

Track Inspector Location



Metro will complete the implementation of pilot technology to evaluate track inspector location awareness systems and enhance transit worker protection. These pilot systems will include a wireless wayside radio anchor unit with flashing LED lights located 800 feet apart throughout the pilot segments. Wearable technology (worn by the track workers) will communicate with the full duplex radio creating bidirectional communication through the operation control center, which will be able to pinpoint the location of the track inspector within one meter. Metro will initially deploy the technology to blind spot locations and dangerous curves and will measure effectiveness against established performance criteria to ensure that the location of track inspectors is known when they are on the right-of-way and that transit workers are protected in the event of approaching trains. The results of these evaluations will determine whether the technology is the best approach for system-wide deployment.

In FY2019, Metro will complete the last three segments of the pilot program, and install equipment in Metro's revenue vehicles, then evaluate the operation and success of the system before making a decision on a future system wide approach.

Project Schedule	Start: FY2017 - End: FY2023
Total Project Cost	$2,300
Expense thru FY 2017	$0
Projection for FY 2018	$1,749
Remaining Cost (FY2019 thru Completion)	$551

Development & Evaluation

This program includes $11.3 million for the evaluation, testing, and development of new technology, cabling operations, and advancements in overall system design that will maintain the state of good repair of the ATC program and generate a substantial increase in repair and improvement rates.

Future Major Projects

This program also includes provisional funding of $17 million for the future development of track inspector location awareness.

Program: Fixed Rail **Category:** Track & Structures Investments

Program Description

Metro operates six lines and 117 miles of revenue track. The Fixed Rail program comprises the inspection, rehabilitation, and renewal of assets throughout the track infrastructure to maintain a state of good repair. Investments in this program are focused on replacing critical rail components – such as crossties, fasteners, switches, insulators and open joints – cleaning hazardous debris from the track bed, tamping track and stray current testing.

The program also provides for the timely rehabilitation or acquisition of heavy track equipment to ensure equipment reliability and worker safety. These efforts reduce the probability of delays due to equipment breakdowns and allow for efficient use of track outages.



Approved Budget (in 000s)	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	Total
Safety & State of Good Repair	$84,605	$93,239	$95,841	$98,716	$101,678	$108,345	$582,424
Development & Evaluation	500	1,000	1,000	1,000	15,000	11,500	30,000
Future Major Projects	500	7,000	13,500	14,500	26,000	15,000	76,500
Budget Total	**$85,605**	**$101,239**	**$110,341**	**$114,216**	**$142,678**	**$134,845**	**$688,924**

Safety, State of Good Repair & Minor Projects		
Element (FY2019 - 2024)	**Quantity**	**Cost (in 000s)**
Crossties	79,139	$120,547
DF Fasteners	129,258	146,678
Insulators	58,231	50,160
Track Tamping	330 (miles)	6,658
Switches	48	45,528
Running Rail	87 (miles)	125,732
Open Joints	9207	30,750
Engineering/Consulting	N/A	16,592
Locomotives	4	14,937
Snow Throwers	7	8,313
Ballast Cars	6	1,484
Switch/Spot Tampers	2	1,188
Prime Movers	7	13,855
	Total	**$582,424**

Safety, State of Good Repair & Minor Projects

In FY2019 there will be on-going, scheduled efforts to rehabilitate or replace infrastructure, such as crossties, direct fixation fasteners, insulators, switches, running rail, open joints, rail track signage and grout pads in priority areas throughout the system.

Consulting and Engineering services are engaged on an annual basis to perform studies, surveys, and design efforts that aid in the rehabilitation, safety and reliable operation of the rail system.

Metro will also acquire various track maintenance equipment – such as prime movers, locomotives, snow throwers, ballast cars and switch/spot tampers – over the next six years. This will ensure equipment reliability, reduce the probability of delays due to equipment breakdowns, and allow for efficient use of track outages.



Development & Evaluation

This program includes $30 million for the Development & Evaluation of potential projects such as third rail reconfiguration and technologies or procedural changes, which could enhance the program outcomes.

Future Major Projects

This program also includes funding of $76.5 million for the initiation of future projects that progress beyond the Development & Evaluation phase and into design and construction, such as third rail reconfiguration and other Fixed Rail improvements.

Program: Structures **Category:** Track & Structures Investments

Program Description

The Structures program rehabilitates structural components including elevated platforms, bridges, and retaining walls. Metro conducts inspections and critical engineering assessments to prevent the loss of use of these structures. One failure could affect entire rail line segments. This program also includes investments to prevent, mitigate and repair water intrusion into the underground system.



Approved Budget (in 000s)	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	Total
Safety & State of Good Repair	$13,973	$14,392	$14,824	$15,269	$15,727	$16,198	$90,382
Major Active Capital Projects	2,300	4,464	0	0	0	0	6,764
Development & Evaluation	1,500	4,000	4,000	1,000	40,000	15,000	65,500
Future Major Projects	2,000	20,000	38,000	71,000	119,000	73,500	323,500
Budget Total	**$19,773**	**$42,856**	**$56,824**	**$87,269**	**$174,727**	**$104,698**	**$486,146**

Safety, State of Good Repair & Minor Projects		
Element (FY2019 - 2024)	**Quantity**	**Cost (in 000s)**
Leak Repair	16,500	$44,676
Drain Repair	420,000 (linear feet)	1,665
Grout Pads	15 (miles)	38,944
Rail Track Signage	9,000	5,097
	Total	**$90,382**

These investments restore and maintain the integrity of support structures, tunnel liners, grout pads, rail track signage, eliminate leaks, and prevent corrosion of equipment and track components. This will prevent unsafe conditions for Metrorail passengers and service delays resulting from water intrusion.



Major Active Capital Projects		
Project (FY2019 - 2024)	**Objectives**	**Cost (in 000s)**
Bush Hill Aerial Structure	Rehabilitate the aerial structure	$6,764
	Total	**$6,764**

In FY2019, Major Active Capital Projects in this program will include the following:

Bush Hill Aerial Structure

This project will rehabilitate the Bush Hill Bridge in order to maintain structural integrity. This bridge was originally constructed in the late 1990's and has been identified for rehabilitation through an annual inspection. The Bush Hill Bridge is located on the Yellow line. This project will repair the post tension defects in the bridge structure in order to maintain safe operations as identified in inspections.

Construction on the Bush Hill Bridge is expected to begin in FY2019.



Project Schedule	Start: FY2015 - End: FY2020
Total Project Cost	$9,405
Expense thru FY 2017	$698
Projection for FY 2018	$1,943
Remaining Cost (FY2019 thru Completion)	$6,764

Development & Evaluation

Future bridge structure rehabilitation needs have been identified, including the aerial structure at Grosvenor-Strathmore on the Red Line and the aerial structure on the Orange, Blue and Silver Lines near Stadium Armory. Metro has included $65.5 million for the development & evaluation of specific needs related to the rehabilitation of these and other bridges.

Future Major Projects

This program also includes funding of $323.5 million for the initiation of future projects, which will include improvements to tunnel ventilation, mitigation of water intrusion in tunnels (following a pilot program initiated in FY2018), and the bridge rehabilitation program.

Program: Platforms & Structures **Category:** Stations & Passenger Facilities Investments

Program Description

The Platforms & Structures program includes construction, rehabilitation, or replacement of stations, platforms, pedestrian facilities, parking facilities, canopies, and other large scale structural work.

In order to ensure safe conditions for all Metro passengers and employees, Metro inspects and repairs these assets to prevent and mitigate negative effects, such as water intrusion, age, corrosion and surface damage from elements.



Approved Budget (in 000s)	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	Total
Safety & State of Good Repair	$23,226	$19,500	$19,500	$46,996	$36,022	$41,101	$186,344
Major Active Capital Projects	92,324	98,509	86,802	66,500	12,000	8,700	364,835
Development & Evaluation	1,400	0	0	500	9,700	11,300	22,900
Future Major Projects	0	0	0	38,500	35,000	29,500	103,000
Budget Total	**$116,950**	**$118,009**	**$106,302**	**$152,496**	**$92,722**	**$90,601**	**$677,079**

Safety, State of Good Repair & Minor Projects		
Element (FY2019 - 2024)	**Quantity**	**Cost (in 000s)**
Sprinkler, Standpipe, Control Panel, etc.	6	$2,225
Air Handler, Fan, Heater, etc.	6	18,459
Riding Surfaces, etc.	3	919
Roofing System	3	39
Bicycle & Pedestrian Improvements	26	22,200
Station Rehabilitation	162	66,436
Rehab Parking Garages	8 locations	24,089
Resurface parking lots	8 locations	2,925
Switchgear, Transformer, Switchboard, etc.	6	48,160
Power Supply	1	892
	Total	**$186,344**

Bicycle parking capacity will be increased at Metrorail stations, and connections for bicycles and pedestrians between stations and local communities will be improved and made more accessible.

Station rehabilitation will provide safer and brighter stations and improve the customer experience.

Parking garages will be rehabilitated at eight locations and parking lots will be resurfaced at eight locations, and designs for rehabilitation and resurfacing will be developed for additional locations to be completed within the FY2019-2024 period.

This program will replace items that have reached its useful life such as transformers, switchboards, switchgear, air handlers and heaters.



Major Active Capital Projects		
Project (FY2019 - 2024)	**Objectives**	**Cost (in 000s)**
Purple Line	Construction and integration efforts of Purple Line stations	$4,800
Platform Rehabilitation Phase 1	Repair of deteriorating platforms throughout the Metrorail system	155,000
Grosvenor Garage Expansion		16,700
Huntington Garage Demolition	Demolition and replacement of Huntington Parking Garage	10,000
Rhode Island Platform Rehab	Rehabilitates the Rhode Island Ave. station platform and aerial structure	6,000
Orange-Blue Line Rehab	Rehabilitation of stations, power, and systems	8,593
Silver Line Expansion	Construction support & project management	125,107
Escalator Canopies	Installation of canopies over exposed escalators	26,568
Union Station Project	Improve passenger circulation	4,250
CCTV Station Enhancements	Upgrade and installation of CCTV cameras at various station locations	7,817
	Total	**$364,835**

In FY2019, Major Active Capital Projects in this program will include the following:

CCTV Station Enhancements

This project will provide for the enhancement of CCTV security at various stations in an effort to provide a more secure and safer environment. A portion of the funding for this project is provided by dedicated Federal security grants.

In FY2019, Metro plans to complete CCTV upgrades at Friendship Heights, Grosvenor, White Flint, Brookland, Naylor Rd., Landover, Takoma, and Silver Spring



Project Schedule	Start: FY2016 - End: FY2020
Total Project Cost	$15,309
Expense thru FY 2017	$2,373
Projection for FY 2018	$5,119
Remaining Cost (FY2019 thru Completion)	$7,817

Purple Line Development

The Purple Line is a planned 16-mile light rail transit line extending from Bethesda (in Montogomery County) to New Carrollton (in Prince George's County). The Maryland Transit Administration (MTA), is managing the development of the line, which will connect four Metrorail station locations - Bethesda, Silver Spring, College Park, and New Carrollton.

Metro has established a reimbursable project for initial design and engineering support to plan for and manage the impacts of the Purple Line on Metro facilities.



Project Schedule	Start: FY2011 - End: FY2023
Total Project Cost	$8,203
Expense thru FY 2017	$1,956
Projection for FY 2018	$1,446
Remaining Cost (FY2019 thru Completion)	$4,800

Major Active Capital Projects (cont.)

Platform Rehabilitation

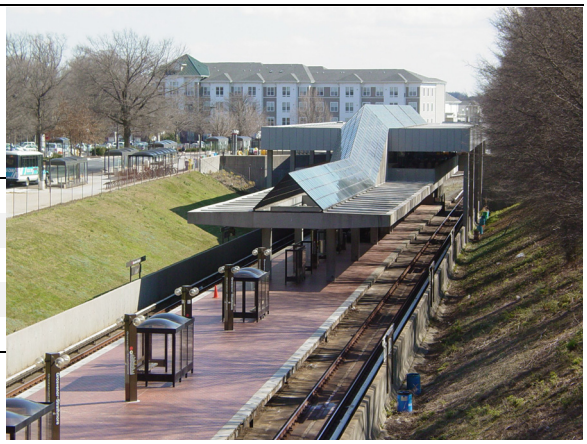
Of the 45 outdoor stations throughout the WMATA system, 20 have platforms in states of deterioration that require repair. These platforms will be rebuilt and rehabilitated, and each station will be closed as this work is underway to provide the contractor with unlimited access. This will decrease the overall construction time and enable additional repairs within the station. Temporary measures have been installed where needed to stabilize the platforms until the repairs are complete.



Project Schedule	Start: FY2019 - End: FY2022
Total Project Cost	$155,000
Expense thru FY 2017	$0
Projection for FY 2018	$0
Remaining Cost (FY2019 thru Completion)	$155,000

Grosvenor-Strathmore Garage Expansion Joint Development

Metro has entered into a joint development agreement to expand the existing 1,894-space garage at Grosvenor-Strathmore by 412 additional spaces. The agreement will allow Metro to recoup costs by collecting rent on ground-level retail space to be occupied by the development partner.



Project Schedule	Start: FY2018 - End: FY2020
Total Project Cost	$19,700
Expense thru FY 2017	$0
Projection for FY 2018	$3,000
Remaining Cost (FY2019 thru Completion)	$16,700

Huntington Parking Garage Demolition

Sections of the 32-year-old Huntington South Garage have been deemed unsafe and closed. After extensive analysis, Metro has determined to tear down the garage. In the future, Metro will evaluate plans for a replacement structure.



Project Schedule	Start: FY2019 - End: FY2022
Total Project Cost	$10,000
Expense thru FY 2017	$0
Projection for FY 2018	$0
Remaining Cost (FY2019 thru Completion)	$10,000

Major Active Capital Projects (cont.)

Rhode Island Platform Rehab

This project will address the rehabilitation and repair of concrete at the Rhode Island Avenue station platform. Work will be divided into two phases addressing each side of the platform as well as portions that crossover the roadway below.

The first phase of this project was completed in FY2018 consisting of emergency concrete repair to the structure. The second phase, beginning in FY2018 and completing in FY2019 will address the remaining concrete platform repair, as well as repair to the aerial structure that spans the roadway at Rhode Island Ave.

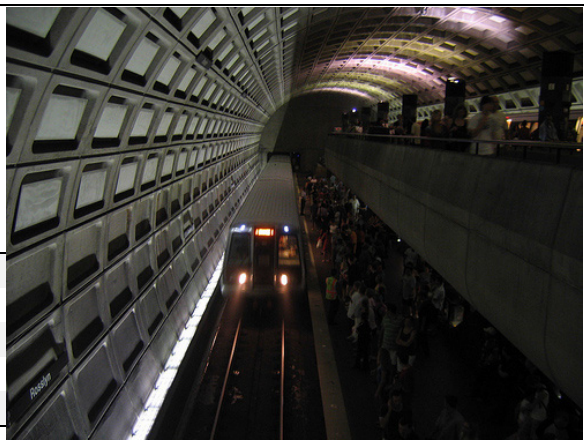


Project Schedule	Start: FY2017 - End: FY2019
Total Project Cost	$10,061
Expense thru FY 2017	$2,134
Projection for FY 2018	$1,927
Remaining Cost (FY2019 thru Completion)	$6,000

Orange-Blue Line Rehab

This project is a comprehensive rehabilitation of the Orange and Blue Lines that will focus on rebuilding systems and infrastructure to extend the useful life and improve the reliability of the Metro system.

In FY2019, Metro plans to complete work on the three remaining Traction Power Substation locations (providing access and labor support for this work through this program) and begin the process of contract close-out and final punch list items.



Project Schedule	Start: FY2011 - End: FY2019
Total Project Cost	$410,635
Expense thru FY 2017	$374,358
Projection for FY 2018	$27,684
Remaining Cost (FY2019 thru Completion)	$8,593

Construction Support Silver Line Phase I & II

Metro will provide engineering, safety assurance and design review support to the Metropolitan Washington Airports Authority (MWAA) in the development of the Silver Line extension infrastructure. Metro will assist MWAA in ensuring that critical infrastructure has been constructed to specifications and will provide support in safety inspections.



Project Schedule	FY2010 - FY2022
Total Project Cost	$261,631
Expense thru FY 2017	$125,972
Projection for FY 2018	$10,552
Remaining Cost (FY2019 thru Completion)	$125,107

Major Active Capital Projects (cont.)

Station Entrance Canopies

This project provides for the installation of canopies over 11 stations with exposed escalators to protect both riders and escalators from weather. Canopies aid in maintaining the reliability and state of good repair of escalators.



Project Schedule	Start: FY2016 - End: FY2022
Total Project Cost	$41,793
Expense thru FY 2017	$7,625
Projection for FY 2018	$7,600
Remaining Cost (FY2019 thru Completion)	$26,568

Union Station Project

This project will relieve the congestion at Union Station. The Union Station project will relocate the Union Station Metrorail station First Street NE entrance, expand the north mezzanine by adding stairs, adding additional fare gates and relocating existing fare vending machines. The forecasted amount will fund the first phase of the Union Station project, cost will be reevaluated after the project begins.



Project Schedule	Start: FY2016 - End: FY2022
Total Project Cost	$5,000
Expense thru FY 2017	$0
Projection for FY 2018	$750
Remaining Cost (FY2019 thru Completion)	$4,250

Development & Evaluation

This program includes $22.9 million for the evaluation and development of projects to address passenger congestion in core stations - improving safety, accessibility, and the flow of customers through the stations - and to evaluate parking expansion.

Development and evaluation of projects to address these substantial and complex needs will result in refined approaches and detailed plans for large scale, multi-year capital projects (which will require additional funding beyond current projections).

Future Major Projects

This program also includes provisional funding of $103 million for the initiation of projects that are determined, during the Development & Evaluation process, to decrease maintenance costs, extend the life of Metro assets, and increase service reliability and safety over the long-term. These will include the expansion of, and improvements to, Gallery Place and Union Station, as well as the expansion of parking garages at Grosvenor and Huntington.

Program: Vertical Transportation **Category:** Stations & Passenger Facilities Investments

Program Description

The Vertical Transportation program supports the repair, rehabilitation and replacement of Metro's elevators and escalators to support safety, availability and reliability. Metro maintains 278 elevators and 618 escalators. Elevators are rehabilitated every 12 to 15 years. Escalators are rehabilitated every 10 to 15 years and are replaced after 25 to 30 years. Metro determines which individual units are due for replacement by assessing both asset conditions and age.



Approved Budget (in 000s)	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	Total
Safety & State of Good Repair	$57,964	$62,419	$62,377	$56,688	$57,976	$59,140	$356,564
Budget Total	**$57,964**	**$62,419**	**$62,377**	**$56,688**	**$57,976**	**$59,140**	**$356,564**

Safety, State of Good Repair & Minor Projects		
Element (FY2019 - 2024)	**Quantity**	**Cost (in 000s)**
Elevator Rehabs	64	$49,344
Escalator Rehabs	118	85,507
Escalator Replacement	100	170,890
Break Boards	81	4,569
Reducer Refurbishments	203	8,136
Step Assembly	1,000	9,993
Steps	16,517	28,124
	Total	**$356,564**

The oldest and poorest performing elevators and escalators will be rehabilitated or replaced.

Escalator components will be replaced or refurbished – 81 brake boards, 203 reducers, 1,000 step assemblies, and 16,517 steps (which includes step molds to build out additional step replacements).

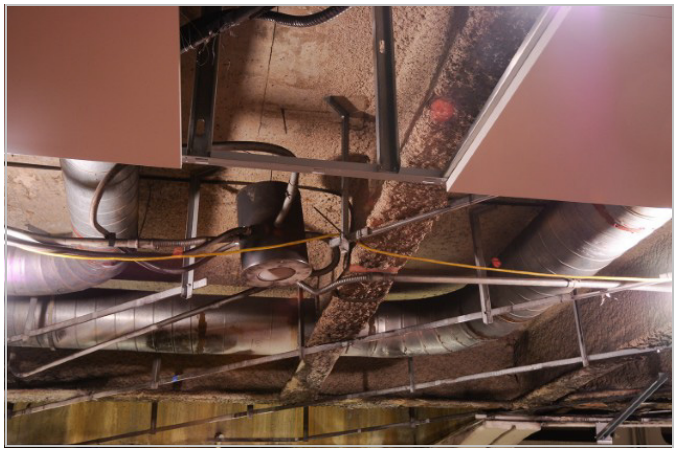
64 elevators are planned for rehabilitation, 118 escalators will undergo rehabilitation, and 100 escalators will be replaced over the six year period.



Program: Station Systems **Category:** Stations & Passenger Facilities Investments

Program Description

The Station Systems program maintains and improves the safety, accessibility, and efficient operation of stations and their support systems. Assets that fall within his program include fire warning and protection systems, drainage systems, vents and cooling systems, lighting, and fare collection systems. Metro advances the safety, comfort and convenience of stations through the ongoing repair and improvement of the infrastructure, hardware, software, and mechanics that allow these systems to properly function.



Approved Budget (in 000s)	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	Total
Safety & State of Good Repair	$16,193	$15,423	$17,056	$18,698	$17,800	$17,800	$102,971
Major Active Capital Projects	59,688	100,897	110,573	92,109	64,550	58,550	486,367
Development & Evaluation	1,000	3,565	10,700	1,000	13,150	13,500	42,915
Budget Total	**$76,881**	**$119,885**	**$138,329**	**$111,807**	**$95,500**	**$89,850**	**$632,253**

Safety, State of Good Repair & Minor Projects		
Element (FY2019 - 2024)	**Quantity**	**Cost (in 000s)**
Cooling System (chiller plants, chillers, Freon detectors, Cooling tower and duct work)	31	$48,069
System Server Upgrades	Various	2,275
Station Dry Standpipe Installation	18	24,852
Facility Fire Alarm System Upgrades	5	27,775
	Total	**$102,971**

Sprinklers, standpipes, and alarm systems at prioritized maintenance yard and station locations will be upgraded as part of the Fire Systems state of good repair effort, and station cooling systems will undergo rehabilitation based on condition and priority.



Major Active Capital Projects		
Project (FY2019 - 2024)	**Objectives**	**Cost (in 000s)**
Station Lighting Improvements	Replace and enhance lighting at underground stations	$136,000
Fare Collection Modernization	Replace and upgrade system wide fare collection software and hard-ware	239,940
Fire Alarm System Upgrade	Upgrade station fire alarms to NFPA72 and NFPA130 standards	80,894
Vent Shaft Elevation	Elevate vent shafts in low lying areas	9,984
Drainage Improvements	Replace and improve drainage pumping stations	19,549
	Total	**$486,367**

In FY2019, Major Active Capital Projects in this program will include the following:

Station Lighting Improvements

This project will be a complete system upgrade, and improve the lighting and illumination levels at Mezzanines, lower level platforms and track beds at all underground Metrorail stations. A new project work plan was developed in FY2018 to accelerate completion of these upgrades in the system.

In FY2019, this project will complete pylon light upgrades at 28 locations, parapet lighting upgrades at 13 locations, and trackbed lighting upgrades at 22 locations.



Project Schedule	Start: FY2014 - End: FY2021
Total Project Cost	$159,869
Expense thru FY 2017	$11,869
Projection for FY 2018	$12,000
Remaining Cost (FY2019 thru Completion)	$136,000

Fare Collection Modernization

Metro will upgrade and replace the current Fare Collection System to provide a more efficient fare collection process and enhance the customer experience. The modernization project will be done in three phases.

The first phase is currently underway and will upgrade existing fareboxes, faregates and fare vending machines to support mobile payments and extend their useful life until they can be replaced.

The second phase is to be completed by 2020 and will install new faregates at more than 900 entry/exit lanes at all 91 stations to replace In addition, new fareboxes will be installed on buses to replace the existing 15-year old equipment.

The final phase of the fare modernization will include new fare vending machines that will have large touch-screens, better accessibility for customers with disabilities, multi-language support, and a smaller physical footprint.



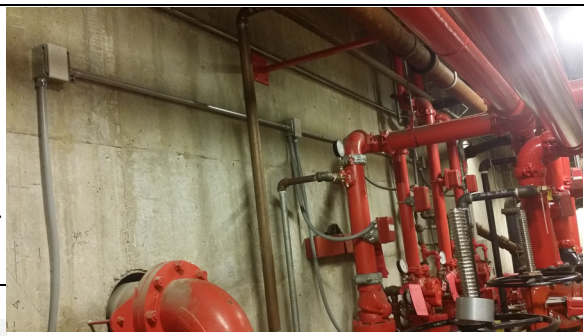
Project Schedule	Start: FY2017 - End: FY2023
Total Project Cost	$244,518
Expense thru FY 2017	$968
Projection for FY 2018	$3,610
Remaining Cost (FY2019 thru Completion)	$239,940

Major Active Capital Projects (cont.)

Fire Alarm System Upgrade

This system-wide fire alarm upgrade will address NTSB recommendations that require stations to be compliant with the latest version of National Fire Protection Association standards. The replacement and upgrade of the fire alarm system throughout the rail system will improve overall safety and responsiveness to fire hazards.

In FY2019, the project will begin procurement efforts for a fire system upgrade contract and continue design efforts for the next bundle of stations.



Project Schedule	Start: FY2014 - End: FY2027
Total Project Cost	$138,359
Expense thru FY 2017	$298
Projection for FY 2018	$850
Remaining Cost (FY2019 thru Completion)	$137,211

Raising Vent Shafts

This project will elevate vent shafts in low lying areas to protect stations from flood waters entering into the rail system. This project receives funding from a Federal Resiliency Grant.



Project Schedule	Start: FY2017 - End: FY2023
Total Project Cost	$15,331
Expense thru FY 2017	$3,347
Projection for FY 2018	$2,000
Remaining Cost (FY2019 thru Completion)	$9,984

Improving Drainage

Metro will replace and improve drainage pumping stations to support flood resiliency improvements. This project will also replace and improve drainage pumping stations and sewage ejector systems, which have exceeded their lifecycle, throughout the Metrorail system. This project is funded by a Federal Resiliency grant.



Project Schedule	Start: FY2016 - End: FY2023
Total Project Cost	$26,672
Expense thru FY 2017	$3,123
Projection for FY 2018	$4,000
Remaining Cost (FY2019 thru Completion)	$19,549

Development & Evaluation

Metro has included $42.9 million for the analysis of systems in tunnels and stations and evaluation to determine the areas to be addressed and the proper approach for safety improvements or system upgrades in order to avoid component obsolescence.

Program: Bus & Paratransit Acquisition **Category:** Bus & Paratransit Investments

Program Description



The Bus & Paratransit Acquisition program provides for the replacement of buses and paratransit vehicles at the end of their useful life. Annual bus acquisitions are timed to maintain an average fleet life of about 7.5 years for the fleet of approximately 1,600 buses.

Maintaining the fleet age at 7.5 years maximizes safety, service reliability and on-time performance. Additionally, a modern fleet improves the rider experience and customer satisfaction. The new, low-emission fleet also reduces Metro's environmental footprint.

Metro maintains a fleet of approximately 725 paratransit vehicles with an average fleet age of four years.

Approved Budget (in 000s)	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	Total
Safety & State of Good Repair	$110,051	$122,158	$136,514	$104,970	$106,920	$109,720	$690,333
Budget Total	**$110,051**	**$122,158**	**$136,514**	**$104,970**	**$106,920**	**$109,720**	**$690,333**

Safety, State of Good Repair & Minor Projects		
Element (FY2019 - 2024)	**Quantity**	**Cost (in 000s)**
CNG Buses	Procure 281 buses	$196,242
Hybrid Buses	Procure 250 buses	200,418
Clean Diesel Buses	Procure 128 buses	82,008
Articulated Buses	Procure 40 buses	55,200
Spare Parts	Procure spare parts for all fleets	42,515
Paratransit Vehicles	1,190 vans	113,950
	Total	**$690,333**

Metro will continue to invest in the replacement of older, higher emission buses with modern, low emission vehicles including: CNGs, Hybrids and Clean Diesels.



The six year bus acquisition plan will replace 281 Compressed Natural Gas 40 foot coaches, 250 Hybrid Diesel 40 foot coaches, 128 Clean Diesel 40 foot coaches, and 40 Articulated 60 foot coaches.

Metro will acquire approximately 1,190 paratransit vans during the six-year period, including approximately 100 expansion vans to address future demand for paratransit services.

Program: Bus Maintenance & Overhaul **Category:** Bus & Paratransit Investments

Program Description

The Bus Maintenance/Overhaul program supports a comprehensive, mid-life rehabilitation schedule for Metro's bus fleet, performed at approximately 7.5 years of age. Each year, about 100 buses out of Metro's approximately 1,600 vehicle fleet are overhauled. This program repairs, updates, maintains and rehabilitates mechanical, electrical and structural systems.

Annual investment in bus rehabilitation and overhaul maximizes the useful life of the assets, ensures the bus fleet remains in good condition, meets safety standards, and provides optimal performance, comfort, and reliability for Metro customers.



Approved Budget (in 000s)	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	Total
Safety & State of Good Repair	$58,483	$61,744	$63,207	$65,023	$66,893	$68,819	$384,169
Development & Evaluation	0	2,000	500	3,000	10,000	10,000	25,500
Future Major Projects	0	950	700	1,000	0	0	2,650
Budget Total	**$58,483**	**$64,694**	**$64,407**	**$69,023**	**$76,893**	**$78,819**	**$412,319**

Safety, State of Good Repair & Minor Projects

Element (FY2019 - 2024)	Quantity	Cost (in 000s)
Rehab Buses	100 buses annually	$285,988
Replace Repair Equipment	Replacement of various equipment	14,961
Replace Bus Lifts	Replace 25 lifts annually	600
CCTV Replacement	Replace Bus Cameras	12,741
Rebuild Engine Assembly	Annually 100 Engines	17,612
Rebuild Trans. Assembly	Annually 150 Trans. Assy	17,386
Replace DPIM Assembly	10 DPIMs annually	2,942
Replace ESS Assembly	100 ESS annually	31,941
	Total	**$384,169**

Annual investment supports the overhaul of about 100 buses at their mid-life (approximately 7.5 years). The replacement of engines, transmissions, axles, suspension and braking systems, is included in state of good repair investments.

These investments also sustain bus maintenance repair equipment and keep equipment up-to-date and ready to maintain the bus fleet.

This program also supports the replacement of components that can no longer be rebuilt, including but not limited to compressors, engines, and cooling systems.

The replacement of hybrid components – such as the dual power invertor module (DPIM) and the electronic storage system (ESS) – is also supported through this program.



Development & Evaluation

Metro has included $25.5 million in this program for the Development & Evaluation of new maintenance and overhaul technologies or initiatives.

Future Major Projects

Provisional funding of $2.7 million is also included for the future installation of CCTV cameras in MetroAccess vans.

Program: Bus Maintenance Facilities **Category:** Bus & Paratransit Investments

Program Description

The Bus Maintenance Facilities program ensures that Metro operates bus facilities in a safe, reliable and cost efficient manner. This includes investments in bus maintenance equipment and new bus garages. Metro operates nine bus garages that have a useful life between 50-60 years – before substantial reinvestment or replacement becomes necessary. Metro is making substantial investments to ensure all nine garages remain in a state of good repair either through replacement or major rehabilitation. Maintenance equipment must be regularly rehabilitated or replaced so that all buses are safely, efficiently, and effectively maintained and overhauled.



Approved Budget (in 000s)	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	Total
Safety & State of Good Repair	$4,000	$22,845	$29,507	$38,635	$9,335	$11,313	$115,635
Major Active Capital Projects	25,000	9,000	0	0	0	0	34,000
Development & Evaluation	1,000	4,000	3,000	1,000	30,000	1,000	40,000
Future Major Projects	0	57,750	32,750	60,000	36,000	35,000	221,500
Budget Total	**$30,000**	**$93,595**	**$65,257**	**$99,635**	**$75,335**	**$47,313**	**$411,135**

Safety, State of Good Repair & Minor Projects		
Element (FY2019 - 2024)	**Quantity**	**Cost (in 000s)**
Switchgear, Transformer, Switchboard, etc.	8 locations	$18,128
Grinder, Lathe, Saw, Lift, etc.	6 locations	24,138
Sprinkler, Standpipe, Panel, etc.	7 locations	2,155
Air Handler, Condensing Unit, Heater, etc.	8 locations	27,476
Pavement Paintings, Riding Surfaces, etc.	8 locations	7,716
Roofing System	6 locations	9,534
Elevators	2 locations	365
Shephard Parkway Bus Division- CNG Refueling	1	16,124
Shephard Parkway CNG Facility	1	10,000
	Total	**$115,635**

Key elements of various bus facilities will be rehabilitated to ensure safety, functionality and reliability. From FY2019 to FY2024, this work will include the replacement, rehabilitation and monitoring of storage tank systems to ensure the safe storage of hazardous fluids; the installation of new fueling equipment; and the repair or replacement of other maintenance and overhaul equipment.



Major Active Capital Projects		
Project (FY2019 - 2024)	**Objectives**	**Cost (in 000s)**
Andrews Federal	175 bus Capacity Garage and Major Overhaul Maintenance facility	$34,000
	Total	**$34,000**

In FY2019, Major Active Capital Projects in the Bus Maintenance Facilities program will include the following:

Andrews Federal Center Bus Garage

Metro is constructing a new facility at Andrews Federal Center in Prince George's County, along with a heavy overhaul and maintenance facility. This facility will replace the Southern Avenue Bus Garage with a fully modern Leadership in Energy and Environmental Design (LEED) Silver facility that can hold 175 buses.



Project Schedule	Start: FY2010 - End: FY2020
Total Project Cost	$192,460
Expense thru FY 2017	$88,960
Projection for FY 2018	$69,500
Remaining Cost (FY2019 thru Completion)	$34,000

Development & Evaluation

Metro will allocate $40 million for developing and evaluating alternatives for replacement of obsolete bus garages, potentially including Bladensburg, Northern, and Western bus garages.

Future Major Projects

Provisional funding of $221.5 million is also included for the initiation of future projects that progress beyond the Development & Evaluation phase and into design and construction. Total project cost estimates will be developed before final design and site construction begin.

Program: Bus Passenger Facilities & Systems **Category:** Bus & Paratransit Investments

Program Description

The Bus Passenger Facilities & Systems program supports a broad range of customer facility maintenance and improvements, bus investments, and project planning to improve service delivery, efficiency, accessibility, and the overall rider experience. Assets supported through this program include technology for reducing travel time, accessibility features at bus stops and stations, signage, and passenger information displays.



Approved Budget (in 000s)	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	Total
Safety & State of Good Repair	$3,776	$7,900	$6,797	$6,505	$6,700	$6,700	$38,378
Development & Evaluation	300	4,750	4,000	8,000	12,000	7,500	36,550
Future Major Projects	1,000	21,115	15,965	19,900	38,500	38,000	134,480
Budget Total	**$5,076**	**$33,765**	**$26,762**	**$34,405**	**$57,200**	**$52,200**	**$209,407**

Safety, State of Good Repair & Minor Projects

Element (FY2019 - 2024)	Quantity	Cost (in 000s)
Bus Customer Facility Improvement	Annual renovations authority-wide	$34,290
ADA Improvements	Complete 27 Bus stops	565
Bus planning studies	Annual service delivery assessment	3,523
	Total	**$38,378**

Bus customer facilities are replaced or rebuilt, based on condition and priority. Improvements will enhance safety and accessibility and will improve the customer experience.

Metro will improve accessibility for customers with disabilities at 27 bus stops across the region.



Development & Evaluation

Metro has included $36.6 million in this program for the Development & Evaluation of potential new projects related to the improvement of Bus Passenger Facilities & Systems.

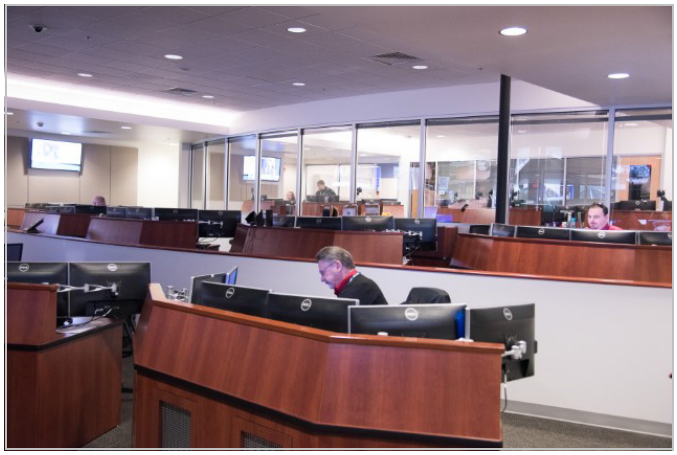
Future Major Projects

Provisional funding of $134.5 million is also included for the initiation of future projects that progress beyond the Development & Evaluation phase and into design and construction. Projects in this category will include the installation of customer information and electronic displays, kiss and ride facilities expansion, traffic signal prioritization, and system-wide bus station safety initiatives. Total project cost estimates will be developed before final design and site construction begin.

Program: Information Technology **Category:** Business Support Investments

Program Description

Metro's Information Technology requirements are addressed through this program. This includes the replacement, integration of, and upgrades to all data network infrastructure, software and hardware – from computers and servers to scheduling, maintenance, time keeping, and financial systems. Metro makes continuous investment in these systems to avoid obsolescence, ensure information security and systems reliability, and improve responsiveness to safety and service issues.



Approved Budget (in 000s)	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	Total
Safety & State of Good Repair	$58,330	$37,523	$34,731	$31,152	$34,386	$39,633	$235,755
Major Active Capital Projects	2,600	0	0	0	0	0	2,600
Development & Evaluation	1,535	2,500	2,500	2,500	5,000	5,000	19,035
Future Major Projects	5,000	13,450	7,000	25,500	16,000	8,000	74,950
Budget Total	**$67,465**	**$53,473**	**$44,231**	**$59,152**	**$55,386**	**$52,633**	**$332,340**

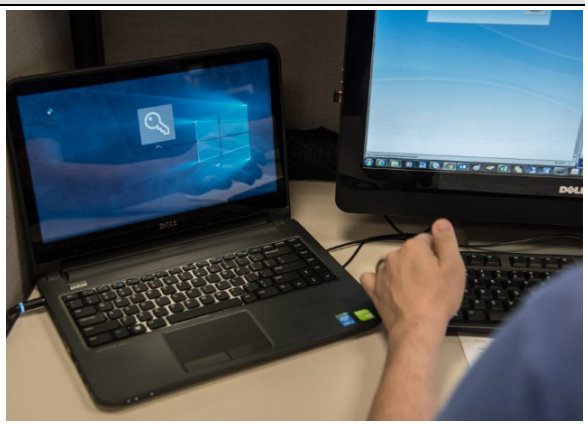
Safety, State of Good Repair & Minor Projects		
Element (FY2019 - 2024)	**Quantity**	**Cost (in 000s)**
Software Development & Maintenance	Various systems	$135,524
Network System Components (Severs, Un-interruptible Power Supply and Routers)	578	88,748
Computers	9,435	8,583
Safety Management System	N/A	2,900
	Total	**$235,755**

Essential IT infrastructure will be sustained through the development of software that supports the following business functions: Asset Management, Bus & Rail operations support, enterprise geographic information systems, sensitive data protection, police dispatch and records management, timekeeping, customer electronic communications and management support.

Computers, hardware assets and infrastructure will be replaced based on condition, age, and obsolescence.

Additionally, Metro will leverage Geographic Information System (GIS) technology to integrate real-time traffic data for bus operations.

The program will also further develop the automated and centralized safety management system to capture incident and safety information across the system and improve operations where there are opportunities or trends.



Major Active Capital Projects		
Project (FY2019 - 2024)	**Objectives**	**Cost (in 000s)**
Time Keeping System	Standardized time management solution	$2,600
	Total	**$2,600**

In FY2019, Major Active Capital Projects in this program will include the following:

Time Keeping System

Metro will configure and deploy a standardized time management solution to improve accuracy and economic efficiency in Metro's time keeping. This system will integrate with Metro's current financial and resource management systems to automate the assignment of business, union, and other rules to their associated time reporting codes.

In FY2019, Metro will complete the testing and deployment of MetroTime Telestaff across the organization, training on MetroTime functionality and consult and begin project close-out activities.



Project Schedule	Start: FY2014 - End: FY2019
Total Project Cost	$15,074
Expense thru FY 2017	$5,655
Projection for FY 2018	$6,819
Remaining Cost (FY2019 thru Completion)	$2,600

Development & Evaluation

Metro has included $19 million in this program for the Development & Evaluation of potential IT investments that will support capital asset and project management solutions.

Future Major Projects

Provisional funding of $75 million is also included for future projects such as the construction and relocation of data centers, fiber optics installation and software upgrades.

Program: Metro Transit Police Department **Category:** Business Support Investments

Program Description

The Metro Transit Police Department (MTPD) supports 462 sworn police officers, 144 security special police, and 88 civilian personnel. MTPD is supported with essential administrative, storage and training facilities, as well as new and replacement public safety and emergency management equipment through this capital program. Metro pursues Federal security grant funding for this program when it is available for these purposes.

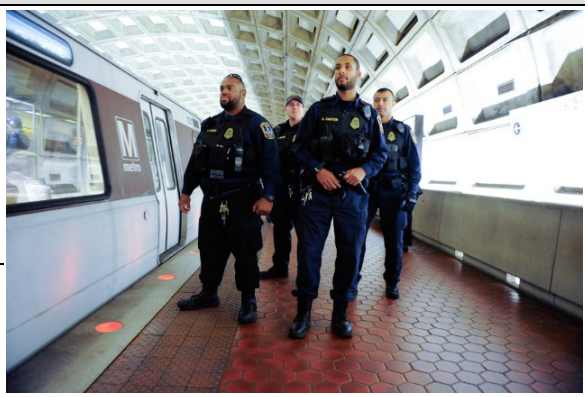


Approved Budget (in 000s)	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	Total
Safety & State of Good Repair	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000	$6,000
Budget Total	**$1,000**	**$1,000**	**$1,000**	**$1,000**	**$1,000**	**$1,000**	**$6,000**

Safety, State of Good Repair & Minor Projects		
Element (FY2019 - 2024)	**Quantity**	**Cost (in 000s)**
Bullet Resistant Safety Vest	1,029	$1,227
Non-Lethal Weapons (tasers, pepper spray, etc.)	2,058	1,040
Chemical Sensor Replacement	13	600
Body Cameras	13	1,086
Training Equipment Update	N/A	1,716
Portable Radio	76	330
	Total	**$6,000**

These investments support the MTPD in their mission to provide protection to Metro patrons, personnel, transit facilities and revenue.

Essential MTPD support equipment is purchased through this program. This includes, but is not limited to, bullet resistant safety vests, biological and chemical sensor devices, body cameras, portable radios, and police training equipment.



Program: Support Equipment & Services **Category:** Business Support Investments

Program Description

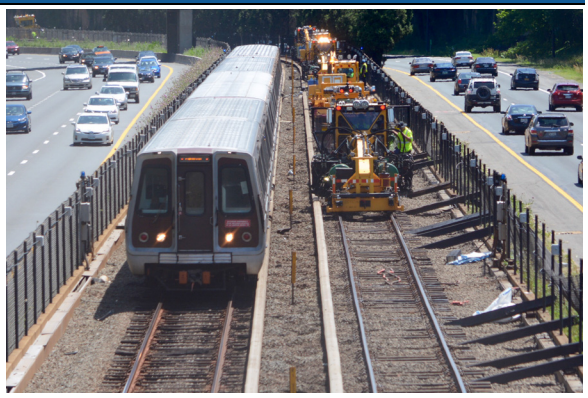
The Support Equipment & Services program sustains Metro's key functions and core operations. Planning studies focused on capacity, enhancement of service delivery, reduction of environmental impacts and optimization of core operations are supported through the program. Additionally, non-revenue vehicles and equipment supporting Metro Transit Police Department, safety, operations and administrative functions are funded through the program, along with administrative facility needs, facility roofs, and system-wide environmental compliance programs.



Approved Budget (in 000s)	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	Total
Safety & State of Good Repair	$30,560	$45,634	$57,080	$58,613	$49,414	$49,845	$291,145
Development & Evaluation	800	500	500	10,500	29,500	26,000	67,800
Future Major Projects	0	11,500	12,000	106,000	53,000	7,000	189,500
Budget Total	**$31,360**	**$57,634**	**$69,580**	**$175,113**	**$131,914**	**$82,845**	**$548,445**

Safety, State of Good Repair & Minor Projects		
Element (FY2019 - 2024)	**Quantity**	**Cost (in 000s)**
Non-Revenue Vehicles	Annual replacement	$31,682
Pollution Prevention	9 yard locations	9,598
Fluid Tank Rehabilitations	8 locations	30,389
Supply Chain Equipment (forklifts, man lifts, material transport equip., components and support infrastructure)	186	5,500
Roof Rehab/Replace	50	27,500
Maintenance of Credit Lines	Annual fees	11,000
Administrative Facility Rehab Program	9	33,839
Stormwater Facility Assessment	Varies by location	8,510
Environmental Compliance Remediation	Varies by location	28,626
Sustainability Investments	N/A	5,800
Transit Asset Management System	N/A	11,700
Jurisdictional Project Planning	N/A	18,000
General Engineering Services, Capital Support	N/A	39,500
Emergency Construction	N/A	12,000
Core & System Capacity Project Development	N/A	5,500
Facilities Reconfiguration/ Repairs	Varies by location	9,000
Storage Facility Sprinkler Systems	Varies by location	3,000
	Total	**$291,145**

Safety, State of Good Repair & Minor Projects



Non-revenue vehicles and equipment used to support Metro's police, safety, operations, and administrative functions will be acquired. Scheduled replacement of administrative, MTPD and service vehicles ensures the fleet is in a state of good repair and that vehicles and equipment are safe and reliable.

Support equipment at facilities throughout the system will be replaced or rehabilitated in order to minimize risk, fines, and environmental compliance issues. This work includes, but is not limited to, transformer tanks, gas dispensers, oil tanks, tank sumps, diesel sumps, heating oil, and anti-freeze tanks.

Supply chain equipment that has reached the end of its useful life will be replaced.

Roofs on all types of Metro facilities will be rehabilitated or replaced. Metro has more than 610 facilities with roofs that require regular maintenance and rehabilitation.

Jurisdictional planning studies related to traffic mitigation, ridership impact and service delivery optimization will be conducted to improve transit operations.

Costs associated with short term borrowing to advance capital projects are also included in this program.

Development & Evaluation

Metro has included $67.8 million for the evaluation and development of potential new initiatives in this program including sprinkler systems at material storage facilities, automated vehicle identification implementation, energy management system upgrades, and facility reconfiguration and repairs.

Future Major Projects

Provisional funding of $189.5 million is also included for the initiation of future projects that progress beyond the Development & Evaluation phase and into design and construction, such as the consolidation of Metro's office facilities.

Appendix B - Sustainability and Energy

Sustainable Transportation

Metro provides a transit network that supports a prosperous and efficient region by contributing to economic growth, enhanced mobility and reduced greenhouse gas emissions. Each year, Metro riders prevent the release of about 375,000 tons of carbon and 20 tons of particulates into the atmosphere, minimize regional storm water run-off by supporting compact development and save approximately40 million gallons of fuel.

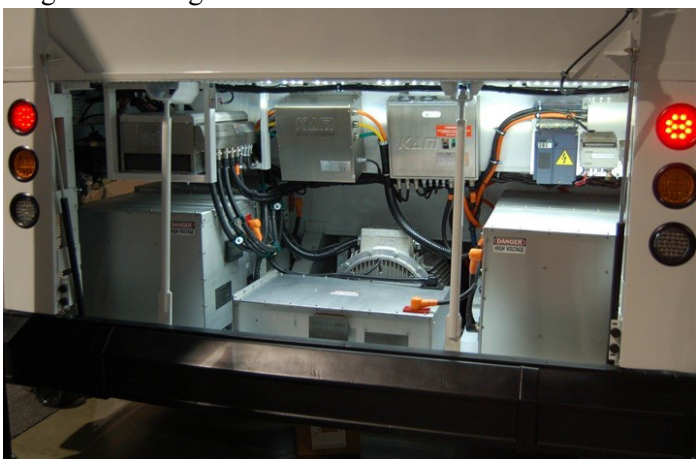
Reinvesting to Meet Fiscal and Environmental Goals

Investments in sustainability provide Metro with key cost savings and advance responsible stewardship of the region's investment in transit.

In FY2019, Metro will continue working to get Back2Good though reinvestment in infrastructure. Metro is seeing tangible improvements in service reliability.

The Back2Good plan also focuses on improving Metro's financial management and stability. The FY2019 Budget for water and energy across all uses (facilities, traction power and fuel) is $126.2 million.

As Metro rebuilds the system, it is critical that these investments are strategic and demonstrate responsible management of the region's dollars. Sustainable projects are vital because they facilitate data driven decisions and long-term savings.



Energy Management

Energy costs, at approximately $107 million in 2017, are Metro's largest non-labor operating expense. If current trends continue, Metro's energy costs are expected to grow to over $150 million annually by 2025.

In an effort to manage and reduce energy expenditures, Metro conducted an authority-wide energy audit in FY2018. The audit identified new technologies and practices that can help meet energy reduction targets while reducing operating and maintenance costs.

By adopting the energy audit recommendations such as station lighting upgrades and modern traction power equipment, Metro is projected to cumulatively save tens of millions of dollars (from 2017 to 2025) in energy costs alone relative to prior practices.

As part of moving forward on the Energy Audit recommendations, in FY2018, Metro launched an Enterprise Energy Monitoring System (EEMS) that allows internal transparency, accountability and asset management of Metro's $126.2 million energy budget. The program will build on these foundational efforts by:

- Translating energy audit recommendations into a Strategic Energy Plan and integrating implementation within the capital planning process
- Tracking and reporting on implementation and performance of energy efficient investments
- Updating and revising recommendations to reflect new technology and practices
- Establishing and leveraging enterprise energy and utility monitoring
- Providing energy use analysis and recommendations to departments

Sustainability Initiative

Investments in sustainability are one of the key ways Metro can promote long term cost savings, increase safety and improve customer experience, all while supporting regional sustainability and livability goals.

Metro's Sustainability Initiative achieves financial and environmental goals while improving safety and reliability by sponsoring cost effective innovation and best practice adoption through:

- Researching and bringing in best practices and matching best practices with areas of opportunity (capital and operational)
- Utilizing innovative financing and leverage external partnerships
- Advocating and implementing adoption of new practices
- Communicating the importance of and progress toward sustainability goals (internally and externally)
- Recognizing, supporting and rewarding existing efforts and staff innovation
- Managing and building staff capacity

- Integrating and highlighting the importance of data driven lifecycle cost analysis and sustainability best practices in the Asset Management and Capital Planning Processes.

The agency will continue to build on successful past sustainability projects like self-funded garage lighting upgrades, remote monitoring of passenger station chillers, railcar recycling and energy efficient switch heaters which are saving Metro millions of dollars each year.

FY2018 Major Accomplishments

- Completion of an Authority-wide energy audit including prioritized energy conservation measures that are being incorporated into capital investment planning.
- Launched an Enterprise Energy Monitoring System (EEMS) that allows internal transparency, accountability and asset management of Metro's $126.2 million energy budget
- Implementation of a full facility lighting retrofit at no cost to Metro in partnership with District of Columbia Sustainable Energy Utility. The value of the Shepherd Parkway facility investment was over $200,000. The project will save about one million kWh annually and will virtually eliminate equipment and maintenance costs for approximately 6 years while providing higher quality and more reliable lighting.
- Adoption of new traction power system technology that supports regenerative braking moving forward based on successful piloting and recommendations from a Sustainability Lab study of the potential financial and operational impacts of the technology. This technology allows for the "reuse" of energy that is currently wasted as heat when trains brake.
- Pilot of railcar wrapping in an effort to more cost effectively support the shift away from hazardous hydrofluoric acid to an enzyme based railcar cleaner. This project reduces both environmental compliance risks and the labor required to resurface and keep railcars clean. One of the biggest impacts of the pilot was the increased availability of railcars in revenue service.
- Successful pilot of solar light tower units that have a simple payback period of approximately five years on diesel costs alone. The new equipment also reduces labor requirements including nightly re-fueling, switching on and off, and routine maintenance while providing clean quiet and reliable lighting solutions for customers and workers alike.
- Implemented high bay lighting pilot at the Metro Storage Facility saving 530,000 kWh of electricity and $37,000 each year. This project also received a one-time $50,000 utility rebate, and provided a test case for the roll out of high-bay lighting retrofits at its eight railcar repair facilities.
- Found new life for retiring legacy railcars through reuse. Reuse included pop-up retail and entertainment space at Grosvenor-Strathmore Metro Station to emergency responder training equipment in Loudoun County. Each railcar that was reused saved Metro in disposal costs.



- Conducted a stormwater infrastructure assessment to identify and evaluate the cost efficacy of future green infrastructure investments. Implemented new discharge detection and elimination program to manage the risk of potential stream or water body contamination. Updated inspection and maintenance protocols also add to improved operations and reduced exposure to financial penalties.

Appendix C - Human Capital Summary

Human capital management defines and categorizes employees' skills and abilities to ensure they are optimized to the objectives of the organization. At Metro, the management of human capital involves workforce planning and investment, and is aligned with Metro's strategic plan and core mission of operating and maintaining a safe, reliable, and effective transit system.

One measure of human capital is the number of positions to be employed and the various costs associated with such employment, referred to as personnel costs. Metro's personnel costs fall into two major categories: labor and fringe benefits.

Labor costs, which include regular wage and overtime pay for operations employees and salary expense for management, professional, and administrative personnel, make up approximately 67.3 percent of total personnel costs. The Authority-wide FY2019 labor budget for operating and capital is $1.1 billion.

Fringe benefit costs are the personnel-related expenses that are above and beyond the direct cost of employee wages and salaries. Metro's fringe benefits are comprised of health insurance and pension plan costs, as well as government mandated expenses including unemployment insurance and payroll taxes. The Authority-wide FY2019 fringe benefit budget for operating and capital is $527.2 million. The FY2019 fringe benefit budget is $33.4 million more than the FY2018 budget, primarily due to the increase of fringe benefit costs for pensions, health care and FICA taxes associated with higher labor costs and an increase of 28 positions to support capital programs and the Office of the Inspector General.

The following tables provide a detailed, four-year comparison of total human capital staffing levels for Metro. The staffing requirement for FY2019 is 12,260, consisting of 10,905 operating positions and 1,355 capital positions.

The table below shows a breakdown, by department, of the staffing levels for FY2016 - FY2019.

Human Capital by Department

Department[1]	FY2016 Actual	FY2017 Actual	FY2018 Approved	FY2019 Approved	Change from FY2018 to FY2019
General Manager / CEO	4	6	4	3	(1)
Inspector General	34	36	35	38	3
Board Secretary	5	4	4	4	—
External Relations	141	139	115	112	(3)
Internal Business Operations	610	583	542	542	—
Chief Financial Officer	295	271	252	243	(9)
Internal Compliance	90	118	60	64	4
General Counsel	48	48	48	48	—
Safety & Environmental Management	67	66	76	74	(2)
Capital Planning and Program Management	89	80	44	80	36
Chief Operating Officer	11,612	11,681	11,052	11,052	0
Chief Operating Officer - Admin	7	6	5	10	5
Rail Services	4,380	4,412	4,068	4,084	16
Bus Services	4,097	4,086	3,937	3,937	0
Access Services	56	53	50	50	—
Metro Transit Police	729	726	694	694	—
Support Services	1,715	1,718	1,714	1,714	—
Design and Construction	384	419	375	352	(23)
Office of Budget, Performance and Planning	244	261	209	211	2
TOTAL	**12,995**	**13,032**	**12,232**	**12,260**	**30**

1 Authorized positions reflect the department's approved headcount based on WMATA's FY2019 organizational structure

A three-year comparison of total human capital costs in the operating and capital budgets is presented below.

Human Capital Summary - All Modes
Fringe Data

	FY2017 Approved	FY2018 Approved	FY2019 Approved	Change
POSITIONS	**13,032**	**12,232**	**12,260**	**28**
LABOR (dollars in thousands)	**$1,102,421**	**$1,040,126**	**$1,083,868**	**$43,742**
Taxes - FICA	$84,011	$78,204	$82,043	$3,838
Pension - Defined Benefit	$155,962	$151,757	$164,314	$12,557
Pension - Defined Contribution	$12,124	$11,661	$12,102	$442
Health Care	$221,127	$213,387	$227,113	$13,725
Life Insurance	$2,024	$2,009	$2,086	$76
Long Term Disability Insurance	$1,238	$1,190	$1,235	$45
Taxes - Unemployment	$1,149	$1,152	$1,196	$44
Workers' Compensation Reserve and Assessment	$25,856	$30,056	$32,561	$2,505
Allowances (Uniform, Clothing, Tools, etc.)	$5,073	$4,414	$4,593	$179
TOTAL FRINGE BENEFITS	**$508,563**	**$493,831**	**$527,242**	**$33,411**

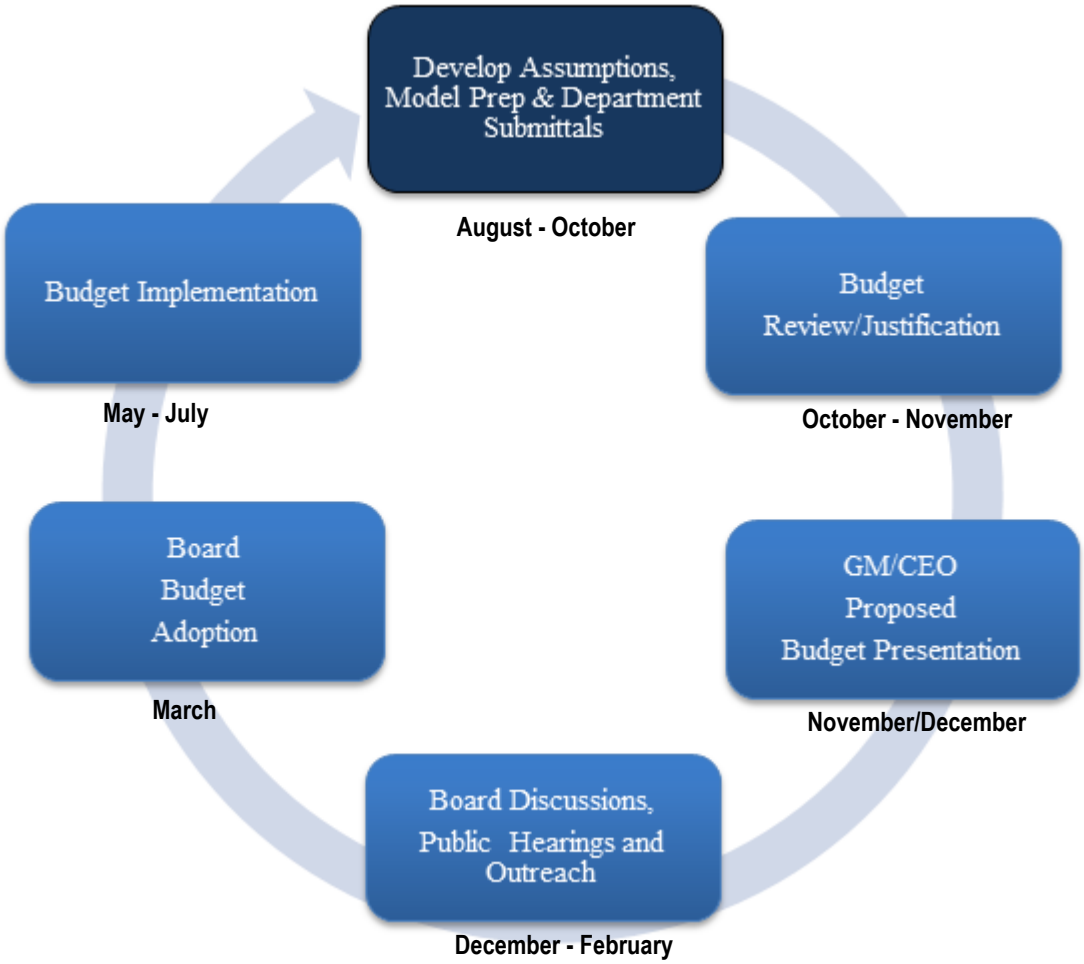
Human Capital Summary
Fringe Benefit Annual Budgeting Rates

	FY2017 Approved	FY2018 Approved	FY2019 Approved	Change
Average Annual Pay	$84,593	$85,033	$88,407	$3,374
Average Full Fringe Cost	$39,024	$40,372	$43,005	$2,633
Full Fringe Rate	46.1%	47.5%	48.6%	1.2%

Appendix D - Budget Process

Metro's annual budget serves as the foundation for its financial planning and control. The General Manager/ Chief Executive Officer (GM/CEO), Chief Financial Officer, and staff prepare and submit the budget to the Board of Directors for consideration and approval. The annual budget consists of two components: operating and capital. It is the responsibility of each department to administer its operations in such a manner to ensure that the use of the funds is consistent with the goals and programs authorized by the Board and that approved spending levels are not exceeded. Metro's budget planning begins in August of the preceding fiscal year with the development of budget priorities and assumptions for the plan year. The budget must be adopted and implemented by June 30 for the fiscal year beginning on July 1. The budget process consists of six major phases:

1. Development of key assumptions/drivers, model preparation, and budget formulation which includes department submissions;
2. Budget review/justification;
3. GM/CEO's presentation of the proposed budget to the Board;
4. Board discussions, public hearings and outreach;
5. Budget adoption by the Board;
6. Budget implementation (see below figure).



Budget Development and Departmental Submissions

Metro began the process of developing the FY2019 Approved budget shortly after the adoption of the FY2018 Approved budget. As part of the budget development process, FY2017 actuals with specific programmatic changes were used as the FY2018 baseline for budgeted non-personnel related costs. The FY2018 Approved Budget and the FY2017 actuals were then analyzed, and

identified assumptions were modified, including fuel prices, contractually obligated union wages and benefits, and revenues. Based on the analysis of the data, Metro assigned targets to each department.

Using the Strategic Plan framework, the GM/CEO's Business Plan further guides both the Operating and Capital budget development processes. It identifies priorities for Metro, provides the foundation for department-specific work plans and keeps the agency focused on the long-term goals as outlined in the Strategic Plan. The GM/CEO's Business Plan outlines necessary actions to achieve priorities; provides measures to monitor success, and provides the Board and public with a transparent and accountable framework. The priorities are reflected in the resulting proposed budget and multi-year operating and capital investment plans.

The Office of Management and Budget Services (OMBS) staff develops guidelines and assumptions in line with the General Manager's priorities and plans that drive the budget process. These guidelines and assumptions are incorporated into the department budgets.

- The initial planning, development of assumptions, and preparation of instructions and training materials are conducted in August.
- The annual budget kickoff meeting is held in September with department leaders and budget preparers. New budget initiative requests are developed.
- The department operating and capital budget requests are developed, reviewed, approved at the department level and submitted to OMBS in mid-October.

Budget Review and Proposal

- The proposed Capital Improvement Program (CIP) is developed concurrently with the proposed operating budget. OMBS meet with each project manager to review and collaboratively develop the capital project forecasts and new requests. Recommendations for updates to the CIP are reviewed with executive management through October.
- Operating and Capital budget requests are reviewed by OMBS and the Executive Management Team (EMT). The proposed budget recommendations are presented to the General Manager/CEO in the second quarter of the fiscal year.
- Once the GM/CEO finalized the annual budget proposal and multi-year plans, they are presented to the Board of Directors and the public through the Finance Committee.

Budget Discussion and Adoption

- The proposed budget is presented and reviewed at the Finance Committee and the Committe and the Board deliberates through early spring.
- Metro undertakes significant outreach efforts regarding the budget, particularly for proposed service and fare changes, prior to adoption. The outreach occurs in three key areas:
  - *Public hearings*: During the budget process, Metro holds at least one public hearing to review any proposed service or fare changes, as well as the proposed use of federal funding in the CIP. The comments and feedback received from residents throughout the region are presented to the Board for consideration.
  - *Public participation*: Metro's Public Participation Plan guides substantial additional outreach efforts beyond the public hearings: open houses, station pop-ups, and community events. The outreach provide specific and convenient opportunities for riders and local organizations to provide input and discuss their views. It ensures full and fair participation for all potentially affected communities, including minority, low-income, and limited English proficient populations.
  - *Rider survey*: Metro also periodically conducts an online surveys to solicit rider input on key questions regarding the budget.
- Metro staff summarizes data collected from these efforts, as well as all public comments/feedback received during the outreach process in a staff report that is delivered to the Board for review.
- Collectively, Metro's outreach efforts meet or exceed the requirements of both the WMATA Compact and the Federal Transit Administration's Title VI guidelines.

Amendments

- When necessary, amendments to the budget are presented to the Finance Committee. The Finance Committee then advances amendments to the Board for review and adoption.

Budget Implementation

- Implementation of the adopted budget occurs between May and June.
- The FY2019 Approved budget will be effective on July 1, 2018.
- Monthly budget variance reports are prepared by OMBS to enable management to monitor and control expenses and revenues.

- Quarterly financial reports are also prepared by OMBS and presented by Metro management to the Board of Directors.
- These reports are used to monitor financial performance and ensure compliance with the approved budget.

The underlying financial statements that inform this budget process have been prepared in accordance with Generally Accepted Accounting Principles (GAAP) per the Governmental Accounting Standards Board Statement No. 34 (Basic Financial Statements – and Management's Discussion and Analysis – For State and Local Governments. All financial information is consolidated into business-type activities that make up Metro's Enterprise Fund. These businesses-type activities include transit operating and capital costs, infrastructure construction and debt activities.

The budget is also based upon the provisions of GAAP, as applicable to government entities in the United States of America. Annual budgets are adopted in accordance with GAAP with the following exceptions:

- Depreciation and amortization are excluded.
- Net actuarial determined post-employment benefit obligation recognized under Government Accounting Standards Board (GASB) Statement No. 45, which was implemented by Metro in FY2008, has been excluded from the budget expenses; such costs are included in operating expenses in the annual financial statements but are not budgeted.

The annual budget is developed on the basis of two budget methodologies – continuation-level and zero-based. Continuation-level budgeting is used to develop the funding and resources necessary to sustain multi-year critical operating, special programs, and previously approved capital projects. The agency utilized a hybrid zero-based budgeting approach for the development of the FY2019 operating budget. The zero-based approach was used to determine resources for on-going general and administrative expenses, new programs and capital projects.

In accordance with the Financial Standards, OMBS monitors revenues and budget expenditures throughout the fiscal year.

Metro's Enterprise Fund

The Enterprise Fund is the sole fund for Metro. Within this Fund, income sources are classified in one of six categories: passenger fares and parking revenues, federal funds, state and local funds, business revenues, other sources and debt. Passenger fares and parking is the largest of the six categories. Federal funds consist of federal grants and funds to support the capital program. State and local funds support the capital program, as well as jurisdictional contributions for debt service and the operating budget subsidy. Business revenues include advertising and joint development, among other funding sources.

Balanced Operating Budget

Metro is required to adopt an operating budget, annually, where operating revenues and subsidies equal expected operating expenses for the fiscal year. In accordance with Article VIII of WMATA's Compact, the Board annually adopts a current expense budget for each fiscal year. Based on the Compact, the budget includes the Board's estimated expenditures for administration, operation, maintenance and repairs, debt service requirements and payments to be made into any funds required to be maintained.

The total expenditures are balanced with estimated revenues and receipts from all sources, excluding funds included in the capital budget or otherwise earmarked for other purposes. Following the end of the fiscal year, if there is an operating deficit, the local jurisdictions are billed for their respective contributions unless other strategies are identified and implemented.

The focus of the operating budget is on the personnel, material/supplies and services necessary to operate Metrobus, Metrorail, and MetroAccess. Budgetary issues for the operating budget center on the cost of continuing operations, expanding services to meet growing demand, and improving efficiency of service.

Capital Budget

In accordance with Article VIII, paragraph 26 of WMATA's Compact, the Board adopts an annual capital budget. This budget specifies all capital projects that are expected to commence or continue during the budget period. The budget also provides the estimated cost of each project and an explanation of its planned funding sources for the program.

The primary focus of the capital budget is safety and the condition of Metro's current assets and infrastructure, and what is needed to maintain them in a state of good repair. The capital budget makes the reliable, continuous and safe operation of each mode (Metrobus, Metrorail and MetroAccess) possible.

Capital Expenditures

Capital expenditures are those that will lead to a future benefit beyond the current fiscal year. Expenditures are classified as capital when an entity spends money either to

procure or construct fixed assets, or to improve and extend the useful life of an existing fixed asset.

The capital programming process assists the Metro's leadership in making decisions regarding the assets and infrastructure required to support and/or grow the bus, rail, and paratransit operations. Metro's assets and infrastructure include, but are not limited to:

- Buses
- Railcars
- Stations and tunnels
- Track and wayside
- Signal and power systems
- Administration and maintenance facilities

FY2019 Budget Development Calendar

August	Initial planning, development of assumptions, preparation of instructions and training materials for the operating and capital budgets are initiated.
September	Budget development kickoff meetings and budget system training classes are held with all departments. A review of prior year-end results are presented to the Board for information.
October	Project managers work collaboratively with OMBS to update project forecasts for current year and future year expenses. The updated forecasts are informed by the current project schedules and cost estimates.
October/November/ December	Departments submit their budget requests to OMBS. The CIP budget is developed concurrently with the annual Operating budget. The CIP recommendations are reviewed with executive management. The proposed budget is presented to the Finance Committee, Board of Directors, and the public.
January/February	Board Discussions and public participation.
February	Findings from public participation are summarized and presented to the board. Updated operating and capital budgets are prepared for Board approval.
March	Approval of the FY2019 Annual Budget.
July 1	Fiscal year 2019 begins.

Appendix E - Financial Standards

Metro's Financial Standards can be grouped into three major areas: general, business planning parameters, and debt policy. The purpose of the general standards is to ensure that Metro prudently manages its financial affairs and establishes appropriate cash reserves. The business directives from the General Manager provide management with a framework of parameters for developing the upcoming year's budget and other longer-term financial plans, as well as establishing future business targets for management to achieve. The purpose of debt policy standards is to limit the level of debt that may be incurred and to ensure that debt assumptions are based on financial parameters similar to or more conservative than those that would be placed on Metro by the financial marketplace. Actual debt covenants may differ from these standards, and in accordance with the debt policy, the actual covenants will be disclosed in any Board report supporting a debt issuance.

This Appendix also provides an explanation of how state and local funding support is allocated to the jurisdictions.

Financial Standards – General

GAAP

- Complete and accurate accounting records are maintained in accordance with accounting principles generally accepted in the United States of America (US GAAP) as applicable to governmental entities. The standard setting body or establishing governmental accounting and financial reporting standards is the Government Accounting Standards Board.

Revenue and Expenditure Recognition

- Revenues are recognized in the period that they are earned and expenses are recognized in the period in which they are incurred. Metro distinguishes between operating and non-operating revenues and expenses in its financial statements.
- The principal source of operating revenues (not including state or local operating subsidy contributions) is passenger fares and parking fees, which make up approximately 90 to 95 percent of such revenues.

Fiscal Year

- The fiscal year-end for financial reporting purposes is June 30. The Board approves the budget for each fiscal year by June 30 of the previous year.

Comprehensive Annual Financial Report (CAFR)

- An independent certified public accounting firm performs an examination of Metro's consolidated financial statements. The goal is for Metro to receive an unmodified ("clean") opinion on its financial statements and to receive the Government Finance Officers Association (GFOA) award for excellence in financial reporting for its CAFR.

Other Financial Policies and Guidelines

- Funds are invested within the guidelines of the Board's approved investment policies and in compliance with the investment guidelines in Metro's Compact.
- In accordance with Board Resolution No. 81-36, designated Metro officials are empowered to open, close or authorize changes to accounts and authorized to appoint individuals as official signatories for financial accounts.
- An annual actuarial analysis is performed on all Metro-administered pension plans. Based on the results of such analysis, Metro makes contributions as required in agreement with the terms of each plan.
- Appropriate insurance coverage is maintained to mitigate the risk of material loss. For self-insured retentions, Metro records the liabilities, including losses incurred but not reported, at 100 percent of the net present value.
- The budget includes the operating and capital components necessary to implement the policy directions contained in previously Board adopted plans. The budget is prepared in a fashion to clearly describe the projects and programs for the period.
- WMATA engages in regional long-range transportation planning for the Washington metropolitan area in conjunction with the National Capital Region Transportation Planning Board (TPB) and other jurisdictional partners. Staff provides transit system inputs to TPB for the Constrained Long-Range Plan (CLRP) and identifies changes affecting the major financial assumptions of the plan and progress toward the implementation of new projects and programs.
- WMATA also engages in short-range transit planning for the Washington metropolitan area. Staff provides inputs to the region's six-year Transportation Improvement Program (TIP) and identifies the capital investment needs to support the existing regional transit system and regional service expansion.

- The Office of Inspector General (OIG) develops an annual work plan each year. The Board's Audits and Investigations Committee provides input and approves the work plan, which covers audits, evaluations, and investigations. Furthermore, completed audit and evaluation reports are submitted to the Board via the Audits and Investigations Committee.
- Recommendations for improvements are based on audits and evaluations performed by the OIG. Audits are performed in accordance with Government Auditing Standards, while evaluations are performed in accordance to the Council of the Inspectors General on Integrity and Efficiency's Quality Standards for Inspection and Evaluation. These recommendations, management's action plans and progress toward implementation are periodically reported directly to the Board. Semi-annual reports to the Board and significant stakeholders provide an overview of work performed by the OIG as related to the annual work plan.

Financial Standards – Business Planning Parameters

- Passenger revenue forecasts are derived from historical ridership and revenue trends as well as forecasts of regional growth in population and employment. Since ridership may be affected by actual or proposed fare policy change, the impacts on ridership and average fare forecasts are based on conservative estimates.
- The Board reviews and updates the fare policy on a regular cycle. Management may propose fare modifications to achieve transit ridership improvements as well as to maintain financial sustainability.
- Service plan assumptions are based on demonstrated needs as defined through short-range planning.
- Capital programs are funded according to the terms of the laws, regulations and/or discretionary procedures approved by the Board. The capital program covers Metro's assets, including major transportation projects, and is included in each annual budget.
- From time to time, Metro applies for and receives discretionary federal and state funding. Discretionary funding is requested for major system expansion projects or extraordinary transit capital needs. Discretionary funding levels are estimated by project, based on federal and appropriate state criteria and the likelihood of obtaining approvals.

Financial Standards – Debt Policy

- Metro may not enter into a debt or financing arrangement unless the transaction is in full compliance with all applicable provisions of WMATA's Compact.
- Pursuant to WMATA's Compact (Article IX paragraph 27), Metro may borrow money in pursuit of its mission. All such bonds and evidences of indebtedness are authorized by resolution of the Board and are payable solely out of the revenues of Metro. The bonds and other debt obligations of Metro, except as may be otherwise provided in the indenture under which they are issued, are direct and general obligations of Metro and the full faith and credit of Metro are pledged for the prompt payment of the debt service.
- There is no borrowing limit set in WMATA's Compact
- Long-term debt may be included in the budget or long range plans; however, no such debt is incurred without the specific approval of the Board.
- The average life of debt instruments is approximately equal to or less than the average of the useful lives of the assets financed.
- Reserve funds that may be required by the financial markets for each debt issuance are maintained. Cash and securities, insurance or surety bonds may fund these reserves. For financial planning purposes, reserve requirements are included in the face value of debt issued.

Allocation of State and Local Support

State and local funds support Metro's annual operating and capital budgets according to the approved subsidy calculations described below.

Operating Budget

The operating budget subsidy is allocated to the jurisdictional funding partners using six subsidy allocation formulas:

1. Regional bus subsidy allocation
2. Non-regional bus subsidy allocation
3. Rail maximum fare subsidy allocation
4. Rail base subsidy allocation
5. Paratransit subsidy allocation
6. Debt service allocation

Formulas 1 and 2: Regional and Non-Regional Bus Subsidy Allocations

The Metrobus subsidy is allocated using two distribution formulas. All bus routes are classified as being either regional or non-regional, based on route characteristics.

Regional bus routes generally provide transportation between jurisdictions. Regional bus routes may also include bus routes that serve major activity centers that operate on major arterial streets, and carry high volumes of riders either in one jurisdiction or in multiple jurisdictions. The following are the specific criteria used by the Regional Mobility Panel to classify bus routes.

- Inter-jurisdictional routes are defined as regional. Defining characteristics of inter-jurisdictional routes:
  - Cross a jurisdictional (independent city, county, state) boundary
  - Penetrate at least two jurisdictions by more than one-half mile in each
  - Operate "open door" (allows boarding and alighting) over at least a portion of the line in two or more jurisdictions
- If a route does not qualify as regional under the inter-jurisdictional definition, then it must meet at least two of the following three criteria to be regional:
  - Arterial Streets: Operates for a considerable distance on an arterial street and a substantial portion (usually a majority) of riders use stops on the arterial street. Routes which operate for a short distance on an arterial incidental to their service area are not included.
  - Regional Activity Center: Serves one or more regional activity centers. A conservative definition of regional activity centers is used, including only those where there is virtually universal agreement as to their regional character. Routes which feed Metrorail stations, but which do not directly serve any regional activity center, are not considered to be regional.
  - Cost Effectiveness: Annual boardings per annual platform hour greater than 30 applied consistently in all jurisdictions.

Routes which do not meet the criteria described above are classified as non-regional. Regional and non-regional bus subsidy is allocated to the jurisdictions using the following formulas.

- **Regional Bus Subsidy Allocation**. The distribution of regional bus subsidy to the jurisdictions is based on a weighted, four-factor formula in the following proportions:

  1. Density weighted population 25%
  2. Revenue hours 25%
  3. Revenue miles 35%
  4. Average weekday ridership 15%

  Density weighted population for each jurisdiction determined by taking the average of
  - the jurisdiction's share of the urbanized population in the compact area
  - the jurisdiction's share of "density weighted" population (i.e. population times density)

  The revenue hours factor is determined by taking the annual revenue hours assigned to each jurisdiction divided by the total regional revenue hours. The revenue miles factor is determined by taking total revenue miles assigned to each jurisdiction divided by the total regional revenue miles. Ridership is determined by taking the average weekday ridership for each jurisdiction for the regional bus survey.
- **Non-Regional Bus Subsidy Allocation**. The distribution of non-regional bus subsidy to the jurisdictions is computed as follows:
  1. Identify the costs of all Metrobus service, regional and non-regional
  2. Identify the costs which would accrue for regional Metrobus service if no non-regional bus service were provided

3. Determine the costs of non-regional service by subtracting the regional Metrobus costs, as calculated in step two, from the costs of all Metrobus service
4. Divide the costs of non-regional service as computed in step three by total platform hours for non-regional service
5. Identify the non-regional platform hours for each jurisdiction
6. Multiply the platform hours for each jurisdiction by the hourly rate
7. Determine the revenue for each jurisdiction
8. Subtract from costs the revenue as determined in step seven

Formulas 3 and 4: Rail Maximum Fare and Base Subsidy Allocations

The rail subsidy consists of two components: the maximum fare component and the base rail component. The total maximum fare subsidy is deducted from the total rail subsidy, and the result is allocated based on the base subsidy formula.

Maximum Fare Subsidy Allocation. The maximum fare portion of the rail subsidy is designed to recognize the "taper" and "cap" features of the Metrorail fare structure. The taper feature is reflected in the diminishing cost per mile for trips greater than six miles, and the cap is reflected in the maximum fare on rail. The subsidy for the maximum fare is calculated as the difference between the regular fare that would have been paid if the taper and cap features were not available, and the actual fare paid with the taper and cap.

Once the maximum fare subsidy is calculated, the benefiting jurisdictions are allocated one-half the calculated amount, based on the percent of riders from the individual jurisdiction who benefit from the taper and cap. These percentages are calculated from the data taken from the Metrorail Passenger Survey. The remaining half of the maximum fare subsidy is incorporated into the rail base subsidy.

Rail Base Subsidy Allocation. The base subsidy allocation for Metrorail service is based on three elements in equal proportions:

1. Density weighted population 33.3%
2. Number of rail stations 33.3%
3. Average weekly ridership 33.3%

Density weighted population is the same for the regional bus subsidy allocation as it is for the rail base subsidy allocation. The rail stations factor is calculated by taking the number of stations, or portions of stations, assigned to each jurisdiction, divided by the total number of stations in the system. Ridership is calculated by taking the average weekday ridership in each jurisdiction as determined by the rail passenger survey. Only persons who reside in the compact area are included in the distribution.

Formula 5: Paratransit Subsidy Allocation

Paratransit subsidy is allocated to the jurisdictions using a two-factor formula with sub-allocations used for the Virginia jurisdictions.

1. Direct Costs - The contract carriers' actual per trip, reservation and eligibility charges will be allocated directly to the jurisdictions
2. Overhead Costs - All other (non-direct) costs of the paratransit program will be allocated in proportion to the direct costs

Virginia sub-allocations of direct costs require that per trip charges be adjusted to reflect the average time of trips provided for each jurisdiction. Overhead costs assigned to Virginia jurisdictions will be sub-allocated based on the direct cost allocation as calculated above.

Formula 6: Debt Service Allocation

Planned debt service charges are allocated to the jurisdictions in the same proportion as each jurisdiction's current-year share of local match and system performance funding in the capital budget. The allocation of local match and system performance funding, in turn, is determined in accordance with the Capital Funding Agreement (CFA). For any planned new debt issuance shown in the CIP, allocated debt service is shown for all jurisdictions; however, if and when new debt is actually issued, jurisdictions are given the opportunity to "opt out" and provide their total principal contribution upfront to Metro rather than participate in the debt issuance.

Appendix F - Debt Service

Debt Policy/Borrowing Powers

WMATA's Compact allows the Authority to borrow money in pursuit of its mission. All such bonds and evidences of indebtedness are payable solely out of Metro's properties and revenues. The bonds and other obligations, except as may be otherwise provided in the indenture under which they were issued, are direct and general obligations of the Authority, and the full faith and credit of Metro are pledged for the prompt payment of the debt service.

Metro is required to make semi-annual payments of principal and interest on each series of bonds. There are certain covenants associated with these outstanding bonds with which the Authority must comply. The most significant are:

- Metro is to punctually pay principal and interest according to provisions in the bond document.
- Except for certain instances, Metro cannot sell, mortgage, lease or otherwise dispose of transit system assets without filing a certification by the General Manager/Chief Executive Officer and Treasurer with the Trustee and Bond Insurers that such action will not impede or restrict the operation of the transit system.
- Metro must at all times maintain certain insurance or self-insurance covering the assets and operations of the transit system.

Existing Gross Revenue Transit Bonds

2009A and B Bonds

In June 2009, Metro issued $243.0 million of Gross Revenue Transit Bonds, Series 2009-A, and $55.0 million of Build America Bonds, Series 2009-B. Bond proceeds net of premiums/discounts totaled $309.9 million. The bonds provide for semi-annual payments of interest and annual payments of principal, with final maturity in July 2034. The annual jurisdictional debt service payment on the bonds is $21.2 million, net of a semi annual credit of $1.3 million for the Series B, Build America Bonds. Five jurisdictions opted out of the bond issuance and provided $115.0 million in funding to bring total proceeds related to the bond issuance to $425.0 million.

2016A Bonds

During fiscal year 2016, Metro issued $220 million of Gross Revenue Transit Bonds, Series 2016A. Metro has planned for federal capital project grant reimbursements to fund the repayment of the principal on the 2016A bonds. All of the interest on the bonds through July 1, 2017 is funded by bond premium. A portion of the January 1, 2018 interest is also paid from this source while the balance will come from the jurisdictions in previously earmarked funding for line of credit interest expense.

2017A Bonds

In July 2017 WMATA issued bonds (2017A-1) as an advance refunding of the series 2009A and advance crossover refunding bonds (2017A-2) for the 2009B series bonds. The 2009A and the 2009B series bonds are eligible for refunding on July 1, 2019. Because the earliest call date for the 2009A series bonds is July 1, 2019, $18.7 million of the 2009A bonds were not included in the advanced refunding and not eligible for defeasance. The series 2017 A-1 series refunding bonds produced $148.5 million which is escrowed and has defeased the eligible 2009A series bond principal amount of $165.5 million.

The 2017A-2 series bonds produced principal in the amount of $48.85 million that has been escrowed and will be used to extinguish $55 million of the 2009B series bonds when those bonds are called on July 1, 2019. WMATA continues to benefit from the Build America Bonds (BAB) tax credit on these bonds until the planned call date of July 1, 2019. Because WMATA benefits from the BAB tax credit, these bonds will not be refunded until their call date; this is the nature of the crossover refunding.

2017B Bonds

On August 17, 2017 Metro issued new money Gross Revenue Transit Bonds, series 2017-B bonds in the principal amount of $496.5 million. Net bond proceeds with premiums totaled $588.9 million. The bonds provide for semi-annual payments of interest and annual payments of principal, with final maturity in July 2042. $21.7 million was placed in a capitalized interest fund to service interest on the debt through July 2018. The annual jurisdictional debt service payment on the bonds is $35.8 million. One jurisdiction opted fully out of the bond issuance and two jurisdictions opted partially out of the bond issuance. In all, the three jurisdictions provided $78.7 million in funding to bring total principal related to the bond issuance to $575.2 million

Gross Revenue Transit Bonds

	Principal	Interest	Total Due
FY2019 Debt Service Payments Funded by Current Year Jurisdictional Contributions			
Series 2009A - Due Bondholders 1/1/19	—	$239,500	$239,500
Series 2009A - Due Bondholders 7/1/19	$9,580,000	$239,500	$9,819,500
Series 2009B - Due Bondholders 1/1/19[1]	—	$1,297,739	$1,297,739
Series 2009B - Due Bondholders 7/1/192[2]	—	$1,297,739	$1,297,739
Series 2017A - Due Bondholders 1/1/19	—	$3,712,875	$3,712,875
Series 2017A - Due Bondholders 7/1/19	—	$3,712,875	$3,712,875
Series 2017B - Due Bondholders 1/1/19	—	$12,412,500	$12,412,500
Series 2017B - Due Bondholders 7/1/19	$10,970,000	$12,412,500	$23,382,500
Subtotal FY2019 Debt Service Payments Funded by Current Year Jurisdictional Contributions	**$20,550,000**	**$35,325,228**	**$55,875,228**
FY2019 Debt Service Payments Funded by Prior Year Grant Receipts			
Series 2016A - Due Bondholders 1/1/19	—	$1,700,000	$1,700,000
Series 2016A - Due Bondholders 7/1/19	$85,000,000	$1,700,000	$86,700,000
Subtotal FY2019 Debt Service Payments Funded by Prior Year Grant Receipts	**$85,000,000**	**$3,400,000**	**$88,400,000**
Total FY2019 Debt Service Payments Not Funded By Escrow	**$105,550,000**	**$38,725,228**	**$144,275,228**
FY2019 Debt Service Payments Funded by Escrowed Funds			
Series 2009A - Refunding: Due Bondholders 1/1/19 from Escrowed Funds	—	$4,307,597	$4,307,597
Series 2009A - Refunding: Due Bondholders 7/1/19 from Escrowed Funds	$165,515,000	$4,307,597	$169,822,597
Series 2009B - Refunding: Due Bondholders 7/1/19 from Escrowed Funds[1]	$55,000,000	—	$55,000,000
Series 2017A-2 -Refunding: Due Bondholders 1/1/19 from Escrowed Funds	—	$1,221,375	$1,221,375
Series 2017A-2 - Refunding: Due Bondholders 7/1/19 from Escrowed Funds	—	$1,221,375	$1,221,375
Subtotal FY2019 Debt Service Payments Funded by Escrowed Funds	**$220,515,000**	**$11,057,944**	**$231,572,944**
Grand FY2019 Debt Service Payments	**$326,065,000**	**$49,783,172**	**$375,848,172**

1 Net of Build America Bond (BAB) credit
2 2009B Series B bonds will be refunded by escrowed proceeds from 2017A-2 Series bonds

Metro also has access to short-term lines of credit. The lines of credit support Metro's capital program and are also available to manage operating cash flow needs. The total capacity on the lines of credit is $350 million as of September 30, 2017. The lines of credit have a one-year maturity and are scheduled to be renewed in April 2018.

Gross Revenue Transit Bonds (Detail)

Date	Interest	Principal	Total	FY Total
1/1/2018	9,076,341	-	9,076,341	
7/1/2018	9,303,239	94,125,000	103,428,239	112,504,580
1/1/2019	19,362,614	-	19,362,614	
7/1/2019	19,362,614	105,550,000	124,912,614	144,275,228
1/1/2020	17,072,500	-	17,072,500	
7/1/2020	17,072,500	20,700,000	37,772,500	54,845,000
1/1/2021	16,555,000	-	16,555,000	
7/1/2021	16,555,000	21,740,000	38,295,000	54,850,000
1/1/2022	16,011,500	-	16,011,500	
7/1/2022	16,011,500	22,835,000	38,846,500	54,858,000
1/1/2023	15,440,625	-	15,440,625	
7/1/2023	15,440,625	23,995,000	39,435,625	54,876,250
1/1/2024	14,840,750	-	14,840,750	
7/1/2024	14,840,750	25,205,000	40,045,750	54,886,500
1/1/2025	14,210,625	-	14,210,625	
7/1/2025	14,210,625	26,485,000	40,695,625	54,906,250
1/1/2026	13,548,500	-	13,548,500	
7/1/2026	13,548,500	27,825,000	41,373,500	54,922,000
1/1/2027	12,852,875	-	12,852,875	
7/1/2027	12,852,875	29,235,000	42,087,875	54,940,750
1/1/2028	12,122,000	-	12,122,000	
7/1/2028	12,122,000	30,710,000	42,832,000	54,954,000
1/1/2029	11,354,250	-	11,354,250	
7/1/2029	11,354,250	32,270,000	43,624,250	54,978,500
1/1/2030	10,547,500	-	10,547,500	
7/1/2030	10,547,500	33,910,000	44,457,500	55,005,000
1/1/2031	9,699,750	-	9,699,750	
7/1/2031	9,699,750	35,630,000	45,329,750	55,029,500
1/1/2032	8,809,000	-	8,809,000	
7/1/2032	8,809,000	37,460,000	46,269,000	55,078,000
1/1/2033	7,872,500	-	7,872,500	
7/1/2033	7,872,500	39,345,000	47,217,500	55,090,000
1/1/2034	6,888,875	-	6,888,875	
7/1/2034	6,888,875	41,305,000	48,193,875	55,082,750
1/1/2035	5,856,250	-	5,856,250	
7/1/2035	5,856,250	24,420,000	30,276,250	36,132,500
1/1/2036	5,245,750	-	5,245,750	
7/1/2036	5,245,750	25,670,000	30,915,750	36,161,500
1/1/2037	4,604,000	-	4,604,000	
7/1/2037	4,604,000	26,990,000	31,594,000	36,198,000
1/1/2038	3,929,250	-	3,929,250	
7/1/2038	3,929,250	28,370,000	32,299,250	36,228,500
1/1/2039	3,220,000	-	3,220,000	
7/1/2039	3,220,000	29,825,000	33,045,000	36,265,000
1/1/2040	2,474,375	-	2,474,375	
7/1/2040	2,474,375	31,355,000	33,829,375	36,303,750
1/1/2041	1,690,500	-	1,690,500	
7/1/2041	1,690,500	32,965,000	34,655,500	36,346,000
1/1/2042	866,375	-	866,375	
7/1/2042	866,375	34,655,000	35,521,375	36,387,750
Total	**488,530,307**	**882,575,000**	**1,371,105,307**	

Debt Service by Jurisdiction by Fiscal Year

Fiscal Year	District of Columbia	Montgomery County	Prince George's County	City of Alexandria	Arlington County	City of Fairfax	Fairfax County	City of Falls Church	Total Jurisdictional Debt Service	Non Jurisdictional Debt Service	Total Debt Service
FY2018	$10,003,333	$4,646,369	$5,153,256	—	—	—	—	$51,622	$19,854,580	$92,650,000	$112,504,580
FY2019	$23,793,682	$11,912,512	$12,497,108	$1,773,356	—	$111,358	$5,608,396	$178,816	$55,875,228	$88,400,000	$144,275,228
FY2020	$23,272,614	$11,670,882	$12,228,788	$1,774,173	—	$111,410	$5,610,982	$176,152	$54,845,000	—	$54,845,000
FY2021	$23,273,520	$11,671,621	$12,229,343	$1,774,830	—	$111,451	$5,613,058	$176,178	$54,850,000	—	$54,850,000
FY2022	$23,275,876	—	$12,230,649	$1,775,511	—	$111,494	$5,615,212	$176,211	$54,858,000	—	$54,858,000
FY2023	$23,282,910	$11,676,740	$12,234,392	$1,776,390	—	$111,549	$5,617,993	$176,276	$54,876,250	—	$54,876,250
FY2024	$23,286,248	$11,678,651	$12,236,212	$1,777,133	—	$111,595	$5,620,343	$176,316	$54,886,500	—	$54,886,500
FY2025	$23,293,673	$11,682,599	$12,240,176	$1,778,161	—	$111,660	$5,623,594	$176,387	$54,906,250	—	$54,906,250
FY2026	$23,299,234	$11,685,651	$12,243,171	$1,779,128	—	$111,721	$5,626,650	$176,446	$54,922,000	—	$54,922,000
FY2027	$23,306,063	$11,689,340	$12,246,833	$1,780,193	—	$111,788	$5,630,018	$176,515	$54,940,750	—	$54,940,750
FY2028	$23,310,730	$11,691,904	$12,249,348	$1,781,010	—	$111,839	$5,632,604	$176,565	$54,954,000	—	$54,954,000
FY2029	$23,320,061	$11,696,833	$12,254,320	$1,782,236	—	$111,916	$5,636,481	$176,652	$54,978,500	—	$54,978,500
FY2030	$23,330,916	$11,702,369	$12,260,050	$1,783,252	—	$111,980	$5,639,693	$176,740	$55,005,000	—	$55,005,000
FY2031	$23,340,308	$11,707,314	$12,265,050	$1,784,453	—	$112,055	$5,643,493	$176,827	$55,029,500	—	$55,029,500
FY2032	$23,361,639	$11,717,835	$12,276,210	$1,785,717	—	$112,134	$5,647,488	$176,976	$55,078,000	—	$55,078,000
FY2033	$23,364,124	$11,719,693	$12,277,686	$1,787,166	—	$112,225	$5,652,071	$177,035	$55,090,000	—	$55,090,000
FY2034	$23,356,788	$11,717,013	$12,274,109	$1,788,664	—	$112,320	$5,656,811	$177,045	$55,082,750	—	$55,082,750
FY2035	$13,805,614	$7,281,349	$7,353,975	$1,790,076	—	$112,408	$5,661,276	$127,801	$36,132,500	—	$36,132,500
FY2036	$13,816,694	$7,287,193	$7,359,878	$1,791,513	—	$112,498	$5,665,820	$127,903	$36,161,500	—	$36,161,500
FY2037	$13,830,640	$7,294,549	$7,367,307	$1,793,321	—	$112,612	$5,671,539	$128,032	$36,198,000	—	$36,198,000
FY2038	$13,842,294	$7,300,695	$7,373,514	$1,794,832	—	$112,707	$5,676,318	$128,140	$36,228,500	—	$36,228,500
FY2039	$13,856,240	$7,308,050	$7,380,943	$1,796,641	—	$112,820	$5,682,036	$128,269	$36,265,000	—	$36,265,000
FY2040	$13,871,046	$7,315,859	$7,388,830	$1,798,560	—	$112,941	$5,688,108	$128,406	$36,303,750	—	$36,303,750
FY2041	$13,887,189	$7,324,373	$7,397,429	$1,800,654	—	$113,072	$5,694,728	$128,556	$36,346,000	—	$36,346,000
FY2042	$13,903,141	$7,332,787	$7,405,926	$1,802,722	—	$113,202	$5,701,269	$128,703	$36,387,750	—	$36,387,750
Total	**$494,284,576**	**$250,385,227**	**$260,424,503**	**$42,849,693**	**$0**	**$2,690,755**	**$135,515,982**	**$3,904,571**	**$1,190,055,307**	**$181,050,000**	**$1,371,105,307**

Appendix G - Operating Statistics

Metrobus Revenue Vehicle Fleet Management Plan

The Metrobus Revenue Vehicle Fleet Management Plan is a statement of the processes and practices by which Metro establishes its current and projected Metrobus revenue vehicle fleet and facilities requirements. It includes a description of revenue service planned to accommodate Metorbus ridership demand, service adjustments, as well as an assessment and projection of needs for Metrobus maintenance programs and facilities.

Metrobus Statistics

	FY2016 Actual	FY2017 Actual	FY2018 Approved	FY2019 Approved
STATISTICS:				
Total Bus Miles (000s) *	51,424	50,594	48,661	48,326
Revenue Bus Miles (000s) *	38,877	38,407	37,675	36,958
Total Passenger Trips (000s)	127,432	121,732	116,968	110,917
Bus Fleet Size (Year End)	1,537	1,583	1,583	1,583
Total Passenger Revenue ($000s)	$150,044	$137,257	$160,659	$137,066
Total Operating Revenue ($000s)	$166,066	$162,777	$182,378	$151,375
Total Operating Expenses ($000s)	$584,986	$600,466	$689,799	$651,666
Net Subsidy ($000s)	$418,920	$437,689	$507,421	$500,291
RATIOS:				
Cost Per Total Bus Mile	$11.38	$11.87	$14.18	$13.48
Passengers Per Bus	82.91	76.90	73.89	70.07
Passengers Per Revenue Bus Mile	3.28	3.17	3.10	3.00
Cost Per Passenger Trip	$4.59	$4.93	$5.90	$5.88
Subsidy Per Passenger Trip	$3.29	$3.60	$4.34	$4.51
Average Passenger Fare**	$1.18	$1.13	$1.37	$1.24
Percentage of Operating Cost Recovered from Passenger Revenues	25.6%	22.9%	23.3%	21.0%
Percentage of Operating Cost Recovered from all Operating Revenues	28.4%	27.1%	26.4%	23.2%

* Total Bus Miles and Revenue Bus Miles are scheduled miles and not actual miles.
** Average is lower than base fare due to the impact of the transfer discount, senior and student discounts, passes, and fare evasion.

Active Fleet

	Maximum Scheduled Fleet	Total Active Fleet
Fiscal 2016 End of Year *	1305	1537
Fiscal 2017 End of Year *	1281	1583
Fiscal 2018 End of Year *	1289	1583
Fiscal 2019 End of Year *	1289	1583

* Includes 35 strategic buses in accordance with fleet plan

Age of Fleet

Manufacturer	Fiscal Year Entered Service	Number of Buses	Average Age
ORION V	2000	50	18
ORION VII - CNG	2005	150	13
HYBRID ELECTRIC	2006	50	12
CLEAN DIESEL	2006	116	12
NEW FLYER - CNG	2007	25	11
NEW FLYER - HYBRID	2008	22	10
NEW FLYER - HYBRID	2008	102	10
NEW FLYER - HYBRID	2009	100	9
NEW FLYER - XCELSIOR	2010	147	8
NEW FLYER - XCELSIOR	2011	100	7
NEW FLYER - XCELSIOR	2012	67	6
ORION VII - HYBRID	2012	25	6
ORION VII - CLEAN DIESEL	2012	27	6
NEW FLYER - XCELSIOR	2013	104	5
NABI - BRT	2014	104	4
NEW FLYER XCELSIOR HYBRID	2015	21	3
NEW FLYER XCELSIOR HYBRID	2015	56	3
NEW FLYER XCELSIOR CNG	2015	163	3
NEW FLYER XCELSIOR HYBRID	2016	54	2
NEW FLYER XCELSIOR CNG	2018	90	0
NEW FLYER XCELSIOR HYBRID	2018	10	0
TOTAL		**1,583**	**6.3**

Bus Fleet Size by Garage

Garage	Fiscal 2019 Maximum Scheduled Fleet*	Total Fleet	Space Ratio
Bladensburg	223	264	18.4%
Shepherd Parkway	192	249	29.7%
Northern	129	173	34.1%
Western	100	116	16.0%
Southern Avenue	66	77	16.7%
Four Mile Run	183	217	18.6%
Landover	145	183	26.2%
Montgomery	168	199	18.5%
West Ox	83	105	26.5%
SYSTEM TOTAL	**1,289**	**1,583**	**22.8%**

* Maximum scheduled fleet Includes 40 strategic buses

Comparison of Bus Miles

	FY2016 Approved	FY2017 Approved	FY2018 Approved	FY2019 Approved
Total Scheduled*	**50,080,598**	**49,278,234**	**47,360,806**	**47,026,674**
Bus Bridges	600,000	600,000	592,801	592,801
Special Service	100,000	100,000	98,800	98,800
Change-Offs	281,025	268,829	265,604	265,604
Yard Work	472,245	451,419	446,003	446,003
Missed Trips	(109,499)	(104,669)	(103,413)	(103,413)
Total Unscheduled	**1,343,772**	**1,315,579**	**1,299,795**	**1,299,795**
TOTAL MILES	**51,424,370**	**50,593,813**	**48,660,601**	**48,326,469**
* Estimated miles of articulated bus included in above miles	1,900,948	1,900,948	1,628,570	1,628,570

Bus Operator Payhours

Category	FY2019 Bus Operator Wages		
	Payhours	Average Hourly Rate	Budget
Scheduled (straight + OT)*	5,270,776	$26.99	$142,242,096
Subtotal:	**5,270,776**		**$142,242,096**
Non-Scheduled OT/Special Event**	249,948	$26.99	$6,745,331
Standing Extra	47,555	$26.99	$1,283,364
Utility	61,812	$26.99	$1,668,117
Training	311,485	$18.35	$5,715,749
Miscellaneous	206,958	$26.99	$5,585,163
Guarantees	54,940	$26.99	$1,482,662
Funeral Leave	5,746	$26.99	$155,067
Jury Duty	5,190	$26.99	$140,062
Vacation	359,123	$26.99	$9,691,630
Sick	307,511	$26.99	$8,298,780
Holiday	227,960	$26.99	$6,151,942
Subtotal:	**1,838,228**		**$46,917,866**
Grand Total:	**7,109,004**	**$26.61**	**$189,159,962**

* Pay hours for strategic buses are included in the FY2019 Scheduled Pay Hours.
** Non-scheduled OT includes funding for special events and bus bridges to support Rail shutdowns, and elevator shuttles.

Regional and Non-Regional Metrobus Routes

Metrobus routes are designated as either regional or non-regional. The cost of providing Metrobus service on regional routes is allocated between all of the Metro's jurisdictions. Direct costs associated with non-regional are allocated to the jurisdiction receiving the benefit of the non-regional route.

The Metro Board of Directors approves the designation of regional or non-regional Metrobus routes. The factors used in making the determination of regional and non-regional routes are:

- alignment of inter-jurisdictional routes
- routes operating on arterial streets
- routes that serve specific regional activity centers and
- route cost effectiveness

Metrobus operating costs can be expressed in terms of cost per platform hour. Platform hours include both revenue and non-revenue (sometimes called "deadhead") service, which measures the total time between a bus leaving its storage and maintenance facility and its return at the end of the day. For the FY2019 budget, the average cost per platform hour for all routes is $150.40. For the allocation of the FY2019 operating subsidy, the budgeted cost per platform hour for non-regional routes (which has certain overhead and administrative expenses removed) is $115.37.

Metro Regional and Non Regional Summary of Platform Hours

	Total Service FY2012	Total Service FY2013	Total Service FY2014	Total Service FY2015	Total Service FY2016	Total Service FY2017	Total Service FY2018	Total Service FY2019
Regional Routes								
District of Columbia	1,637,513	1,701,790	1,691,338	1,755,539	1,783,989	1,756,066	1,768,469	1,759,288
Maryland	822,385	874,355	868,570	886,898	893,716	892,750	912,623	908,861
Virginia	743,905	798,923	800,416	823,206	830,318	837,830	827,814	806,153
Totals for Regional:	3,203,803	3,375,068	3,360,324	3,465,643	3,508,023	3,486,645	3,508,905	3,474,302
Non-Regional Routes								
District of Columbia	396,675	394,654	380,811	381,898	368,793	368,025	346,502	381,414
Maryland	387,451	391,759	379,565	379,118	387,432	387,121	388,031	357,137
Virginia	103,320	117,305	111,991	129,831	132,187	132,237	135,056	120,168
Totals for Non-Regional:	887,446	903,718	872,367	890,847	888,413	887,383	869,590	858,720
TOTAL PLATFORM HOURS	**4,091,249**	**4,278,786**	**4,232,691**	**4,356,490**	**4,396,435**	**4,374,028**	**4,378,495**	**4,333,021**

DC Regional Routes
FY2019 Miles and Hours

Line	Line Name	Routes	Revenue Miles	Revenue Hours	Platform Miles	Platform Hours
11	Benning Road-H St Exp	X9	82,469	9,689	119,406	12,174
14	Benning Road-H Street	X2	408,841	66,762	479,023	72,565
18	East Capitol Street-Cardozo	8	496,022	54,895	675,585	65,981
22	Glover Park-Federal Triangle	D1	21,434	3,624	43,945	5,414
32	Connecticut Avenue	L1,2	244,035	35,979	289,698	39,997
35	Crosstown	H2,3,4	397,329	49,961	463,856	55,049
37	Mac Blvd-Geotown	D5	26,709	3,005	47,269	4,578
42	Pennsylvania Avenue Limited	39	52,334	6,689	117,122	11,031
43	Fort Totten-Petworth	60,64	277,768	38,966	306,636	41,708
52	14th Street	52,54	604,185	94,403	658,097	99,909
55	Sibley Hosp. - Stad. Armory	D6	386,509	48,836	499,243	57,829
57	Fairfax Village-L'Enfant Plaza	V5	25,720	2,928	46,530	4,519
59	Takoma-Petworth	62,63	206,473	28,394	241,374	32,155
62	Brookland-Potomac Park	H1	24,001	3,974	44,477	5,590
75	Massachusetts Avenue	N2,4,6	283,025	35,500	349,893	40,726
77	Military Road-Crosstown	E4	299,262	35,759	319,490	37,546
79	Ivy City - Fort Totten	E2	105,140	13,474	115,651	14,185
81	Mount Pleasant	42,43	280,357	52,660	396,693	61,623
86	North Capitol Street	80	417,835	59,746	473,070	64,024
89	P Street-Ledroit Park	G2	134,108	23,233	163,808	26,563
93	Pennsylvania Avenue	32,34,36	550,010	70,028	786,911	85,038
95	Deanwood-Alabama Avenue	W4	497,422	50,088	561,276	54,729
99	Wisconsin Avenue	31,33	337,193	53,421	393,020	58,939
100	Wisconsin Avenue Limited	37	36,553	5,074	79,140	8,831
101	Rhode Island Avenue	G8	271,832	35,569	327,399	39,945
107	Georgia Avenue Metro Extra	79	378,438	44,449	420,044	48,281
108	16Th Street	S2,4	630,130	77,727	708,928	85,453
109	16Th Street-Potomac Park	S1	46,161	6,860	103,285	13,758
111	Ml King Jr Avenue Limited	A9	59,206	6,894	107,990	10,069
112	16Th Street Exp	S9	362,302	43,133	437,734	50,589
113	Friendship Heights - Southeast	30N, 30S	444,843	52,881	472,924	55,144
118	Georgia Avenue-7th Street	70	531,908	74,632	669,470	81,958
119	Convention Center- SW Waterfront Line	74	112,719	17,176	140,085	20,093
130	U Street-Garfield	90,92	671,901	105,238	839,790	118,524
132	Benning Heights-M Street	V1	43,815	5,501	81,419	7,973
133	Capitol Heights- Minn Ave	V2,4	446,990	51,526	515,513	56,503
134	Deanwood- Minnesota Ave.	U7	68,737	8,888	86,363	10,055
141	Stanton Road	94	71,688	10,288	85,609	11,312
150	Bladensburg Road-Anacostia	B2	467,568	56,521	518,732	60,177
151	Benning Road	X1,3	47,205	6,733	112,718	11,553
581	Anacostia-Congress Heights	A2,6,7,8	637,212	68,496	757,728	77,203
582	Anacostia-Fort Drum	A4,W5	335,071	34,657	356,397	36,393
587	South Capital St Limited	W9	20,037	2,355	35,783	3,602
	SUBTOTAL Regional DC		**11,842,495**	**1,556,612**	**14,449,124**	**1,759,288**

DC Non Regional Routes
FY2019 Miles & Hours

Line	Line Name	Routes	Revenue Miles	Revenue Hours	Platform Miles	Platform Hours
15	Garfield-Anacostia Loop	W6,8	218,540	25,919	254,201	28,555
25	Maryland Avenue	X8	59,478	8,216	66,545	8,869
34	Brookland-Fort Lincoln	H6	194,702	19,181	203,691	19,973
44	Capitol Hts-Benning Hts	U8	135,913	18,380	146,758	19,406
45	Hospital Center	D8	260,797	35,560	322,917	41,519
46	Fairfax Village	M6	127,663	13,006	155,525	14,894
49	Fort Lincoln Shuttle	B8,9	54,459	5,330	56,377	5,535
51	Glover Park-Dupont Circle	D2	136,956	16,611	157,177	18,109
56	Ivy City-Franklin Square	D4	125,465	18,287	150,599	20,241
71	Chevy Chase	E6	63,674	5,790	64,141	5,928
78	Sheriff Road-River Terrace	U4	107,071	10,573	127,748	12,344
82	Shipley Terrace-Ft. Drum	W1	102,640	10,762	119,287	12,214
84	Nebraska Avenue	M4	102,137	9,981	107,880	10,515
91	Park Road-Brookland	H8,9	224,066	30,019	252,915	32,656
135	Mayfair-Marshall Heights	U5,6	248,814	26,681	281,059	29,435
158	United Medical Ctr.-Anacostia	W2,3	330,248	34,509	373,620	37,630
159	14th Street Limited	59 NEW SVC	0	0	0	0
174	Rhode Island Avenue Limited	G9 PILOT	0	0	0	0
504	Anacostia High School	A31,32,33	1,656	302	4,536	624
517	Deal Junior High School	D31,32,33,34	10,926	1,235	25,761	2,624
519	Eastern High School	E32	1,559	205	4,838	416
539	Sousa Middle School	S35	1,589	142	5,122	369
540	Phelps High School	S41	1,261	142	2,977	324
544	Anacostia-Eckington	P6	328,508	47,864	427,235	53,252
545	Mckinley High School	M31	0	0	0	0
549	Duke Ellington School Of The Arts	D51	2,196	208	4,196	340
550	Wilson High School	W45,47	2,438	387	6,585	797
583	Takoma-Fort Totten	K2	28,562	3,723	43,781	4,846
	SUBTOTAL Non-Regional DC		**2,871,318**	**343,012**	**3,365,470**	**381,414**

Maryland Regional Routes
FY2019 Miles & Hours

Line	Line Name	Routes	Revenue Miles	Revenue Hours	Platform Miles	Platform Hours
9	Annapolis Road	T18	282,201	25,998	303,805	27,861
13	Greenbelt-Twinbrook	C2,4	896,781	84,504	1,121,394	96,418
16	Bethesda-Silver Spring	J1,2,3	551,004	53,586	698,183	60,749
17	National Harbor-Alexandria Line	NH2	284,806	21,767	324,631	23,726
28	Chillum Road	F1,2	215,057	17,620	283,809	20,489
29	Clinton	C11,13	42,851	2,774	58,428	3,619
41	Eastover-Addison Road	P12	472,565	41,978	588,103	47,262
47	Forestville	K12,13	177,557	16,120	309,344	20,965
53	Georgia Avenue-Maryland	Y2,7,8	682,566	65,632	894,323	74,910
63	Hillcrest Heights	C12,14	96,102	9,103	118,438	10,600
73	Marlow Heights-Temple Hills	H11,12,13	143,032	13,595	271,362	17,744
74	College Park	83,83X,86	527,253	44,972	632,380	50,296
83	New Hampshire Avenue Limited	K9	95,740	9,817	166,622	12,983
85	New Hampshire Avenue-Md	K6	378,603	39,309	550,634	47,145
88	Oxon Hill-Fort Washington	P18,19	223,184	15,613	308,294	20,224
90	Martin Luther King Jr. Highway	A12	424,358	31,594	484,517	35,296
97	New Carrollton-Silver Spring	F4	459,555	45,653	518,410	49,567
98	New Carrollton-Fort Totten	F6	199,396	15,833	225,890	17,900
103	College Park-White Flint	C8	354,036	26,609	378,289	28,285
123	Veirs Mill Road	Q1,2,4,5,6	649,887	60,467	735,997	65,173
147	Fairland	Z8	359,845	30,326	496,408	36,301
274	College Park-Suppl Service	83X	0	0	0	0
542	RI Ave. - New Carrollton	T14	183,908	15,653	205,514	17,151
580	Bock Road	W14	105,677	8,107	169,629	11,494
584	Oxon Hill-Suitland	D12,13,14	604,869	46,255	730,098	54,476
629	College Park-Bethesda	J4	93,206	9,149	161,571	12,153
790	District Heights-Suitland	V12	193,588	16,435	245,907	19,296
800	Riggs Road	R1,2	273,004	22,944	344,029	26,779
	SUBTOTAL Regional MD		**8,970,629**	**791,409**	**11,326,009**	**908,861**

Maryland Non Regional Routes
FY2019 Miles & Hours

Line	Line Name	Routes	Revenue Miles	Revenue Hours	Platform Miles	Platform Hours
6	I-270 Exp	J7,9	0	0	0	0
7	National Harbor-Southern Avenue Line	NH1	200,725	15,191	246,761	18,285
10	Ardwick Industrial Park Shuttle	F12	81,666	6,264	94,496	6,947
19	Bowie-Belair	B24	155,861	9,948	173,266	10,904
20	Bowie State University	B21,22	173,556	6,818	199,364	7,790
26	Pointer Ridge	C28	121,967	5,236	147,436	6,273
30	Colesville-Ashton	Z2	137,864	9,103	178,865	11,019
33	Connecticut Avenue-Md	L8	227,151	18,552	259,734	20,519
36	Kenilworth Avenue	R12	193,163	14,991	242,346	17,100
38	District Heights-Seat Pleasant	V14	203,518	15,322	275,001	18,855
65	Bowie-New Carrollton	B27	58,546	3,121	62,896	3,460
67	Twinbrook-Silver Spring	J5	0	0	0	0
72	Marlboro Pike	J12	152,005	11,000	196,424	12,581
96	Langley Park -Cheverly Line	F8	183,567	15,070	254,938	18,059
102	River Road	T2	258,777	15,824	275,716	17,058
104	Laurel-Burtonsville Exp	Z7	78,530	5,111	160,416	7,695
105	Sheriff Road-Capitol Heights	F14	235,656	18,851	259,386	20,050
146	Calverton-Westfarm	Z6	275,362	22,980	372,239	27,392
149	Cheverly-Wash Business Park	F13	116,594	8,636	125,785	9,150
152	Central Avenue	C21,22,26,29	397,197	24,189	484,359	28,269
252	Central Avenue Suppl Service	C27	26,293	1,257	50,851	2,267
525	Laurel	89,89M	142,489	9,098	190,780	10,753
526	Laurel Exp	87	133,776	7,214	188,520	9,087
527	Greenbelt-New Carrollton	G12,14	422,710	34,176	472,435	36,807
531	Greencastle-Briggs Chaney Exp.	Z11	123,351	8,760	222,305	12,892
634	Crofton-New Carrollton	B29	64,176	2,560	79,883	3,104
645	Indian Head Exp		0	0	0	0
647	Greenbelt-Bwi Airport Exp	B30	192,999	7,659	210,299	8,270
802	Queens Chapel Road	R4	107,373	11,234	126,462	12,555
	SUBTOTAL Non- Regional MD		**4,464,869**	**308,165**	**5,550,963**	**357,137**

Virginia Regional Routes
FY2019 Miles & Hours

Line	Line Name	Routes	Revenue Miles	Revenue Hours	Platform Miles	Platform Hours
2	Hunting Point-Pentagon/Alexandri - Pentagon	10A,E,N	314,227	32,523	574,350	37,037
3	Landmark-Ballston	25B	235,145	25,638	292,420	28,718
4	Alexandria-Fairfax	29K,N	379,317	30,418	472,602	35,335
5	Leesburg Pike	28A	608,576	56,851	709,013	65,062
8	Annandale	29C,G	143,097	8,599	284,032	13,610
12	Ballston-Farragut Square	38B	224,301	34,426	422,067	43,719
23	Leesburg Pike Limited		0	0	0	0
27	Chain Bridge Road	15K,L	41,925	3,179	79,951	4,271
39	Arlington-Union Station	13Y	0	0	0	0
54	Mclean-Crystal City	23A,B,T	516,673	49,121	609,835	54,056
58	Braeburn Drive - Pentagon Express	29W	84,321	3,296	116,065	4,543
69	Annandale Road	3A	109,268	10,587	165,347	12,866
70	Lincolnia-North Fairlington	7A,F,Y	342,623	28,101	500,242	36,544
76	Lincolnia-Park Center-Pentagon/ Linccolnia-Pentagon	7W	41,428	3,522	80,985	5,325
94	Pershing Drive-Arlington Blvd	4A,B	212,612	22,664	279,509	26,934
106	Foxchase-Seminary Valley	8S,W,Z	140,769	9,313	165,868	10,745
110	Skyline City	28F,G	71,641	5,109	85,980	5,893
121	Pimmit Hills-Falls Church	3T	151,439	9,203	195,990	10,965
126	Washington Boulevard-Dunn Loring	2A	281,494	22,257	427,592	35,276
127	Tysons Corner-Dunn Loring	2T	0	0	0	0
128	Fair Oaks-Jermantown Road	2B	188,809	15,482	220,388	16,642
129	DC-Dulles	5A	575,996	20,629	607,617	23,207
131	Richmond Highway Exp	REX (R99)	491,413	37,355	655,724	45,658
137	Wilson Boulevard-Vienna	1A,B	455,723	42,769	645,650	50,784
138	Lee Highway-Farragut Square	3Y	30,740	3,698	68,089	5,903
139	Fair Oaks-Fairfax Boulevard	1C	252,289	20,250	295,274	21,911
142	Columbia Pike	16A,B,E,J,P	483,744	48,143	581,882	54,519
143	Columbia Hts West-Pent City	16G,H,K	270,181	31,271	350,382	35,676
144	Columbia Pike-Federal Triangle	16X	79,203	7,385	131,674	10,452
156	Hunting Point-Ballston	10B	290,959	31,564	339,080	34,652
157	Mt Vernon Exp	11Y	59,555	3,702	121,268	7,246
176	Lincolnia-Park Center-Pentagon	7C,P	41,537	3,022	48,164	3,485
512	Barcroft-South Fairlington	22A,B,C,F	305,148	26,547	386,185	31,430
521	Annandale-Skyline City-Pent.	16L	44,556	2,988	76,176	4,555
522	Columbia Pike-Farragut Square	16Y	90,920	10,492	188,481	16,758
692	Annandale-East Falls Church	26A	130,013	10,128	186,157	12,374
	SUBTOTAL Regional VA		**7,689,641**	**670,232**	**10,364,040**	**806,153**

Virginia Non Regional Routes
FY2019 Miles & Hours

Line	Line Name	Routes	Revenue Miles	Revenue Hours	Platform Miles	Platform Hours
61	Kings Park Exp	17G,H,K,L	307,275	14,254	624,235	25,910
66	Kings Park	17B,M	64,495	3,227	136,123	5,926
68	Landmark-Pentagon	21A,D	94,383	5,954	179,889	9,813
80	Mark Center-Pentagon	7M	146,491	7,814	168,255	9,459
87	Orange Hunt	18G,H,J	142,801	6,777	274,202	11,270
148	Metroway Potomac Yard	MW1	219,476	31,581	242,469	33,110
541	Burke Centre	18P	134,885	6,049	289,397	11,674
640	Springfield Circulator	S80,91	9,450	11,344	56,498	13,007
	SUBTOTAL Non-Regional VA		**1,119,256**	**87,000**	**1,971,067**	**120,168**

Metrorail Revenue Railcar Fleet Management Plan

The Metrorail Revenue Vehicle Fleet Management Plan is a statement of the processes and practices by which Metro establishes its current and projected Metrorail revenue vehicle fleet size requirements and operating spare ratio. It documents how service goals are applied to existing and forecast levels of ridership to establish fleet requirements for Metrorail service, as well as how these requirements are affected by vehicle maintenance needs, expansions of the Metrorail system, and other factors affecting the operation of the system. Additionally, it documents the key challenges Metro faces in meeting its service and maintenance goals.

Metrorail Statistics

	FY2016 Actual*	FY2017 Actual*	FY2018 Approved	FY2019 Approved
STATISTICS:				
Total Railcar Miles (000s)	99,366	98,489	88,380	90,015
Total Revenue Service Miles (000s)	97,766	96,889	86,780	88,415
Total Passenger Trips (000s)	191,348	176,972	178,505	173,433
Total Passenger Revenue ($000s)	$584,776	$531,476	$542,800	$542,040
Total Operating Revenue ($000s)	$695,953	$626,499	$622,123	$635,429
Total Operating Expense ($000s)	$1,013,054	$919,266	$983,447	$1,022,902
Net Subsidy ($000s)	$317,101	$292,767	$361,323	$387,473
RATIOS:				
Passengers Per Revenue Service Mile	1.96	1.83	2.06	1.96
Cost Per Total Railcar Mile	$10.20	$9.33	$11.13	$11.36
Cost Per Passenger Trip	$5.29	$5.19	$5.51	$5.90
Net Subsidy Per Passenger Trip	$1.66	$1.74	$2.02	$2.29
Average Passenger Fare	$3.06	$3.00	$3.04	$3.13
Percentage of Operating Cost Recovered from Passenger Revenues	57.7%	57.8%	55.2%	53.0%
Percentage of Operating Cost Recovered from all Operating Revenues	68.7%	68.2%	63.3%	62.1%

* Total Railcar Miles and Revenue Service Miles are schedule and not actual.

Railcar Miles

	Total Service FY2016	Total Service FY2017	Total Service FY2018	Total Service FY2019
Red Line	28,011,000	27,886,100	24,343,000	24,509,200
Blue Line	13,858,400	12,953,100	15,158,000	15,153,900
Orange Line	14,368,900	14,421,400	13,192,900	13,265,300
Yellow Line	10,390,300	10,332,800	5,712,400	6,033,600
Green Line	12,132,400	12,101,000	11,429,300	12,176,600
Silver Line	16,447,300	16,637,300	14,387,600	14,719,400
Scheduled Revenue Service Miles[1]	**95,208,300**	**94,331,700**	**84,223,200**	**85,858,000**
Capital One Arena	1,711,283	1,711,283	1,711,283	1,711,283
Gap Trains	360,000	360,000	360,000	360,000
Washington National Baseball	486,000	486,000	486,000	486,000
Sub-Total Revenue Service Miles	**97,765,583**	**96,888,983**	**86,780,483**	**88,415,283**
Start-Up/Car Testing	200,000	200,000	200,000	200,000
Revenue Collection	700,000	700,000	700,000	700,000
Other	700,000	700,000	700,000	700,000
Total Car Miles	**99,365,583**	**98,488,983**	**88,380,483**	**90,015,283**

1 Based on the FY18 Service Plan - Monday - Thursday from 5:00 a.m. - 11:30p.m.; Friday from 5:00 a.m. - 1:00 a.m.; Saturday from 7:00 a.m. - 1:00 a.m.; and Sunday from 8:00 a.m. - 11:00 p.m.

Payhours for Rail Operators

Category	FY2019 Train Operator Wages		
	Payhours	Average Hourly Rate	Budget
Scheduled F/T	1,074,938	$32.08	$34,484,011
Scheduled P/T [1]	44,790	$34.89	$1,562,723
Car Testing/Start Up	24,960	$31.52	$786,739
Interlocking Pay Hours	71,519	$36.46	$2,607,583
Subtotal	**1,216,207**		**$39,441,056**
NonScheduled Overtime/Special Event	181,325	$48.12	$8,725,341
Standing Extra	7,592	$32.08	$243,551
Utility	22,633	$37.36	$845,572
Training	32,413	$32.08	$1,039,809
Retraining	19,155	$32.08	$614,495
Miscellaneous	18,771	$32.08	$602,186
Funeral/Other	1,152	$32.08	$36,947
Vacation	41,154	$32.08	$1,320,215
Sick	31,935	$32.08	$1,024,462
Holiday	21,611	$32.08	$693,292
Subtotal	**377,741**		**$15,145,867**
Total	**1,593,948**		**$54,586,923**

Payhours for Station Managers

Category	FY2019 Station Manager Wages		
	Payhours	Average Hourly Rate	Budget
Scheduled F/T	978,352	$33.14	$32,422,585
Subtotal	**978,352**		**$32,422,585**
NonScheduled Overtime/Special Event	100,466	$49.71	$4,994,154
Standing Extra	10,012	$33.14	$331,806
Utility	26,627	$33.14	$882,435
Training	23,350	$33.14	$773,809
Retraining	27,871	$33.14	$923,629
Miscellaneous	24,348	$33.14	$806,880
Funeral/Other	1,531	$33.14	$50,730
Vacation	28,250	$33.14	$936,202
Sick	31,607	$33.14	$1,047,459
Holiday	27,197	$33.14	$901,321
Subtotal	**301,259**		**$11,648,425**
Total	**1,279,611**		**$44,071,010**
GRAND TOTAL			**$98,657,934**

1 Maximum 30-hour work week.

Rail Peak Period Service Levels

	Total Service FY2016	Total Service FY2017	Total Service FY2018	Total Service FY2019
Red Line	Glenmont/Shady Grove	Glenmont/Shady Grove	Glenmont/Shady Grove	Glenmont/Shady Grove
	Silver Spring/Grosvenor	Silver Spring/Grosvenor	Silver Spring/Grosvenor	Silver Spring/Grosvenor
Blue Line	Largo/Franconia-Springfield	Largo/Franconia-Springfield	Largo/Franconia-Springfield	Largo/Franconia-Springfield
Orange Line	New Carrollton/Vienna	New Carrollton/Vienna	New Carrollton/Vienna	New Carrollton/Vienna
Yellow Line	Huntington/Mt.Vernon Square	Huntington/Mt.Vernon Square	Huntington/Mt.Vernon Square	Huntington/Mt.Vernon Square
	Franconia-Springfield/ Greenbelt	Franconia-Springfield/ Greenbelt		
Green Line	Greenbelt/Branch Ave.	Greenbelt/Branch Ave.	Greenbelt/Branch Ave.	Greenbelt/Branch Ave.
Silver Line	Weihle-Reston East/Largo	Weihle-Reston East/Largo	Weihle-Reston East/Largo	Weihle-Reston East/Largo
RUSH HOURS TRAINS				
Red Line	41	41	34	34
Blue Line	12	12	19	19
Orange Line	22	22	20	20
Yellow Line	21	21	9	9
Green Line	18	18	17	17
Silver Line	26	26	20	20
Gap	3	3	6	6
TOTAL	**143**	**143**	**125**	**125**

Rail Service Levels

		Total Service FY2016	Total Service FY2017	Total Service FY2018	Total Service FY2019
RUSH HOUR HEADWAYS (MINUTES BETWEEN TRAINS) BY LINE					
Red Line	Glenmont-Shady Grove	6	6	8	8
	Silver Spring-Grosvenor	6	6	8	8
Orange Line *	Vienna - New Carrollton	6	6	8	8
	Vienna - Largo				
Blue Line	Largo/Franconia-Springfield	12	12	8	8
	Huntington - Mt. Vernon				
Yellow Line	Square	6	6	8	8
	Greenbelt - Franconia				
	Springfield	12	12	8	8
Green Line *	Greenbelt/Branch Ave.	6	6	8	8
Silver Line	Weihle-Reston East/Largo	6	6	8	8
NON-RUSH HOUR HEADWAYS BY LINE (MIDDAY-WEEKDAY/SAT/SUN/LATE NIGHT)					
Red Line	Glenmont-Shady Grove	12/12/15/15	12/12/15/15	12/12/15/15	12/12/15/15
	Silver Spring-Shady Grove	12/12/15	12/12/15	12/12/15	12/12/15
Orange Line	New Carrollton/Vienna	12/12/15/20	12/12/15/20	12/12/15/20	12/12/15/20
Blue Line	Largo/Franconia-Springfield	12/12/15/20	12/12/15/20	12/12/15/20	12/12/15/20
Yellow Line	Huntington-Fort Totten	12/12/15/20	12/12/15/20	12/12/15/20	12/12/15/20
Green Line	Greenbelt/Branch Ave.	12/12/15/20	12/12/15/20	12/12/15/20	12/12/15/20
Silver Line	Weihle-Reston East/Largo	12/12/15/20	12/12/15/20	12/12/15/20	12/12/15/20
AVERAGE COMBINED HEADWAYS FOR KEY SEGMENTS FOR FY2019					
Minutes Between Midday Trains			Weekdays	Saturday	Sunday
Red	Silver Spring to Grosvenor		6	6	7.5
Orange/Blue/Silver	Rosslyn to Stadium Armory		4	4	5
	L'Enfant Plaza to Mount				
Yellow/Green	Vernon		6	6	7.5
Yellow/Blue	King Street to Pentagon		6	6	7.5

* During times of observed peaking in ridership, additional trains ("trippers") are operated to reduce crowding.

Rail Service Levels

	Total Service FY2016	Total Service FY2017	Total Service FY2018	Total Service FY2019
PEAK SCHEDULED RAILCARS				
Red Line	288	288	240	240
Blue Line	84	84	138	138
Orange Line	154	154	144	144
Yellow Line	126	126	54	58
Green Line	128	128	122	128
Silver Line	156	156	120	124
Gap	18	18	36	36
Total Scheduled Car	**954**	**954**	**854**	**868**
Spares[1]	146	146	129	131
Revenue Collection	4	4	4	4
Total Car Requirement	**1,104**	**1,104**	**987**	**1,003**
HOURS OF OPERATION				
Weekday (Mon-Thur)	19	19	19	19
Friday	22	22	20	20
Saturday	20	20	18	18
Sunday	17	17	15	15
DAYS OF OPERATION				
Weekday	252	251	250	250
Saturday	57	57	58	57
Sunday	57	57	57	58

1 Spares are 15% of scheduled railcars for FY2016 - FY2019

Rail Service Levels

	Total Service FY2016	Total Service FY2017	Total Service FY2018	Total Service FY2019
CARS PER TRAIN RUSH HOUR				
Red Line	20-6's/21-8's	20-6's/21-8's	16-6's/18-8's	16-6's/18-8's
Blue Line	6-6's/6-8's	6-6's/6-8's	7-6's/12-8's	8-6's/11-8's
Orange Line	11-6's/11-8's	11-6's/11-8's	8-6's/12-8's	8-6's/12-8's
Yellow Line	21-6's	21-6's	9-6's	7-6's/2-8's
Green Line	8-6's/10-8's	8-6's/10-8's	7-6's/10-8's	3-6's/14-8's
Silver Line	26-6's	26-6's	20-6's	18-6's/2-8's
Gap	3-6's	3-6's	6-6's	6-6's
CARS PER TRAIN WEEKDAY BASE/NIGHT (AFTER 8 P.M.)				
Red Line	6/6	6/6	6.75/6	6.75/6
Blue Line	6/6	6/6	6.75/6	6.75/6
Orange Line	6/6	6/6	6.75/6	6.75/6
Yellow Line	6/6	6/6	6/6	6.25/6
Green Line	6/6	6/6	6.75/6	6.75/6
Silver Line	6/6	6/6	6/6	6/6

Railcar Fleet Storage Capacity

Location	Existing Storage Capacity	Current Fleet Need	Net Storage Capacity
Alexandria	194	140	54
Branch Ave	90	82	8
Brentwood	94	70	24
Glenmont	86	86	-
Greenbelt	246	190	56
Largo	42	42	-
New Carrollton	180	152	28
Shady Grove	216	196	20
West Falls Church	230	192	38
Total Railcars	**1,378**	**1,150**	**228**

Railcar Fleet Profile

Manufacturer	Series	Years Purchased	Originally Purchased	Currently Owned	Number for Services*
Rohr Industries	1,000	1974-1978	300	6	—
Breda Construzioni Ferroviarie	2,000	1983-1984	76	76	74
Breda Construzioni Ferroviarie	3,000	1984-1988	288	284	282
Breda Construzioni Ferroviarie	4,000	1992-1994	100	2	—
Construcciones y Auxiliar de Ferrocarriles, S.A. (CAF)	5,000	2001-2004	192	192	—
Alstom	6,000	2006-2008	184	184	182
Kawasaki	7,000	2014-Present	748	748	748
Total			**1,888**	**1,492**	**1,286**

The 'Number for Service' reflects the number of vehicles available for service at June 30, 2019. There are four (4) 1000 series cars dedicated for revenue collection. There are two (2) 1000 series cars and two (2) 4000 series cars used for long term storage and fifty (50) 5000 series cars dedicated for deicing. As of April 16, 2018, (548) 7000 series cars have been delivered, 532 vehicles have been accepted, and 528 vehicles are in service. The 7000 series railcars will replace the 1000, 4000 and 5000 series railcars.

MetroAccess Revenue Vehicle Fleet Management Plan

The MetroAccess Revenue Vehicle Fleet Management Plan is a tool that provides information, analysis, and recommendations about the anticipated growth in paratransit ridership, and the current and projected revenue vehicle requirements for MetroAccess to meet the demand as well as an assessment and projection of needs for paratransit vehicle maintenance.

MetroAccess Statistics

	FY2016 Actual	FY2017 Actual*	FY2018 Approved	FY2019 Approved
STATISTICS:				
MetroAccess - Dedicated Fleet:	675	700	725	750
Total Van Miles (000s)	26,410	27,018	28,100	29,250
Revenue Miles/Van (000s)	39.1	38.6	38.8	39.0
Total Passenger Trips	2,280,730	2,367,878	2,400,000	2,413,000
Passenger Trips per Van	3,379	3,383	3,310	3,217
Total Passenger Revenue ($000s)	$9,156	$9,660	$9,732	$9,940
Total Revenue ($000s)	$9,156	$9,661	$9,732	$9,940
Total Operating Expense ($000s)	$117,910	$124,527	$120,533	$131,107
Net Subsidy ($000s)	$108,753	$114,866	$110,801	$121,167
RATIOS:				
Cost Per Passenger	$51.70	$52.59	$50.22	$54.33
Subsidy Per Passenger*	$47.68	$48.51	$46.17	$50.21
Percentage of Operating Cost Recovered from Passenger Revenues	7.8%	7.8%	8.1%	7.6%

* MetroAccess policy provides two complimentary one-way trip credits, with a value of $3 each, in each instance where the scheduled pick-up window is not met. Eligibility assessment trips are complimentary and Personal Care Attendants (PCAs) ride free in accordance with the ADA. These trips are included in passenger trip count.

MetroAccess Statistics - Fleet

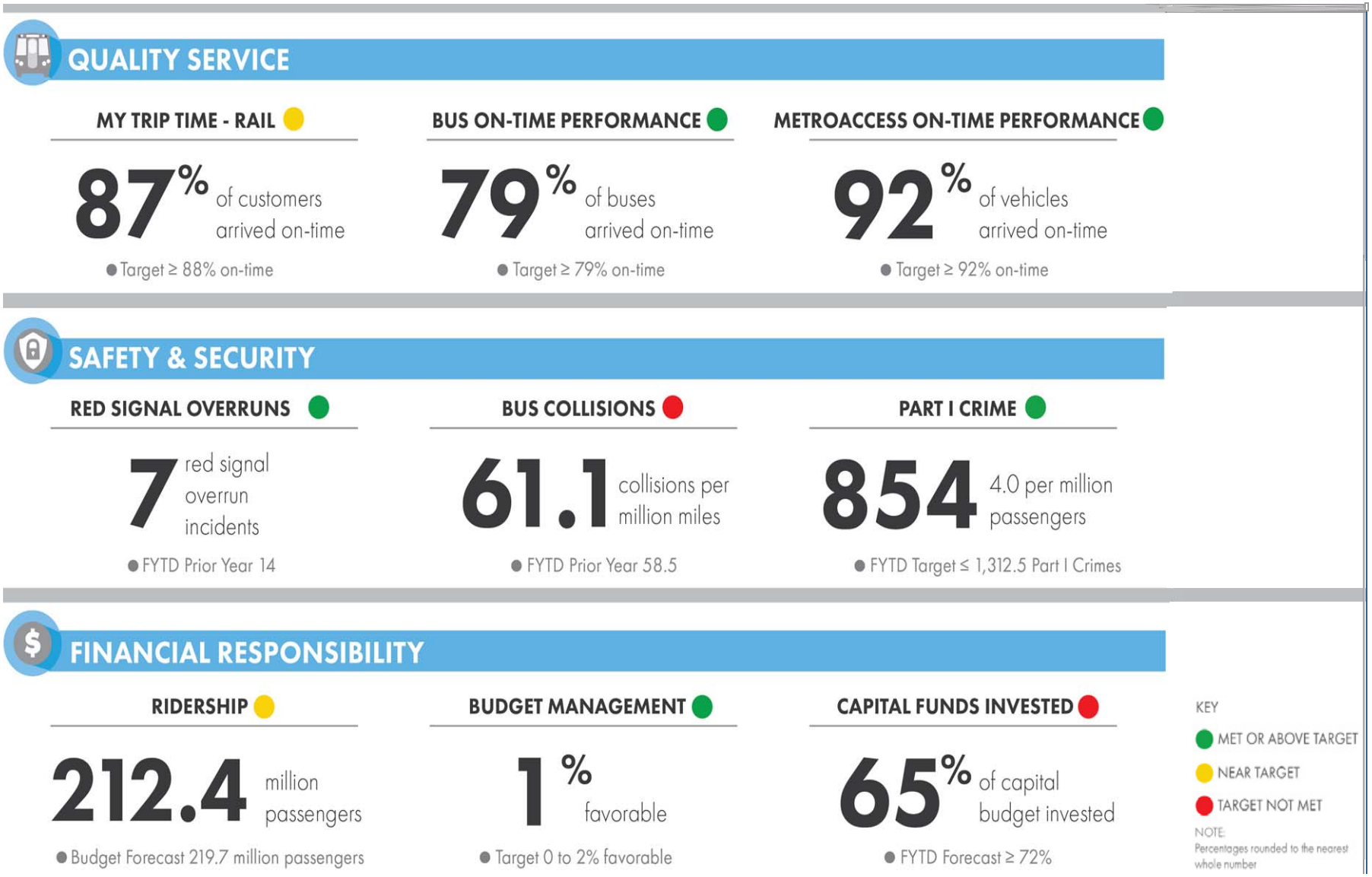
	FY2016 Actual	FY2017 Actual	FY2018 Approved	FY2019 Approved
Total # of Vans in Fleet	659	684	725	750
Total # of Low Floor Vans in Fleet	16	16	0	0
Total # of Shuttles in Fleet	0	0	0	0
Total Fleet	**675**	**700**	**725**	**750**
Spare Ratio	15.0%	15.0%	15.0%	15.0%

MetroAccess Statistics

Manufacturer	Fiscal Year Entered Service	Number of Vans	Type
FORD	2019	250	High Roof Vans
FORD	2018	225	High Roof Vans
FORD	2017	227	High Roof Vans
FORD	2016	—	
FORD	2015	48	Raised Roof Vans
FORD	2014	—	
Total Fleet Vehicles at End of FY2019		**750**	

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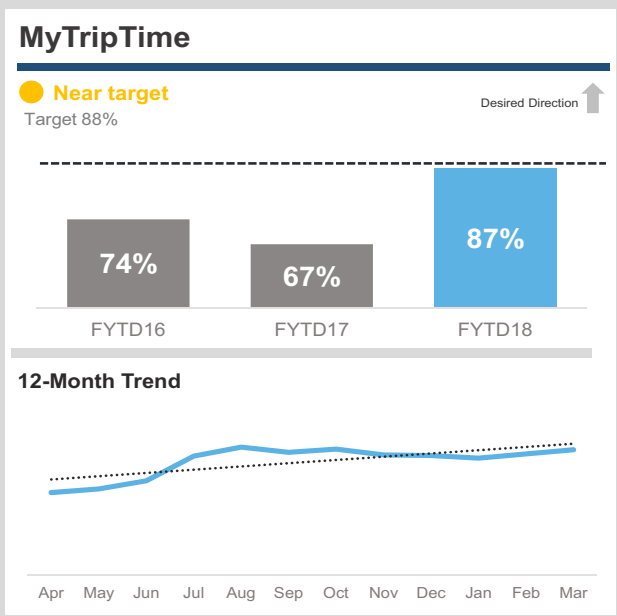
Appendix H - Vital Signs Report



View the entire Vital Signs Performance Report, along with updates each quarter by visiting
www.wmata.com/about/records/scorecard upload/Q2FY18_Metro_Performance_Report.pdf

MyTripTime

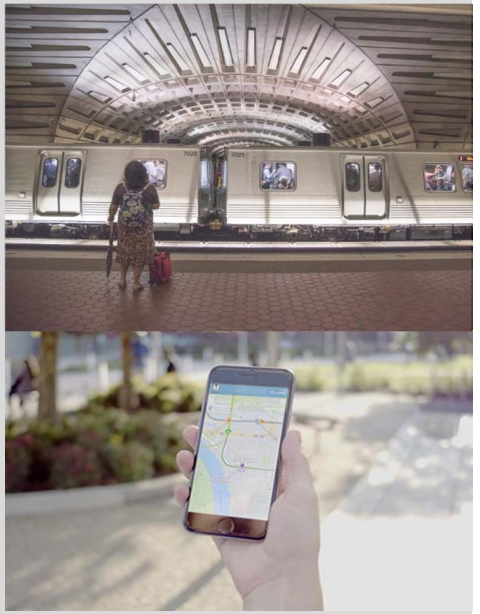
Rail Customer On-Time Performance



OTP improved thanks to fewer railcar delays and fewer extended maintenance disruptions

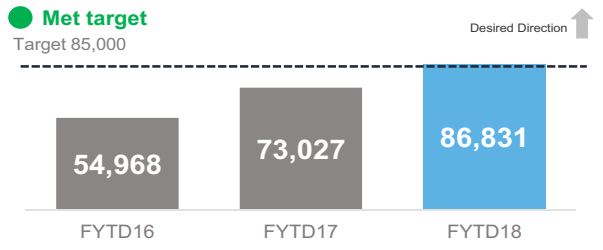
Key Actions:

- Implement aggressive rail infrastructure renewal, inspection and preventive maintenance program
- Accept 7K trains
- Begin retirement of 5000 series fleet
- Repair escalators, elevators and fare gates

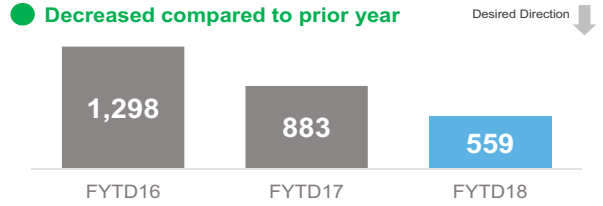


Rail Fleet Reliability

Rail Fleet Reliability [mean distance between delay]



Offloads [due to railcar problems]



Reliability surpassed target, reaching eight-year high with offloads down 57% from FYTD16

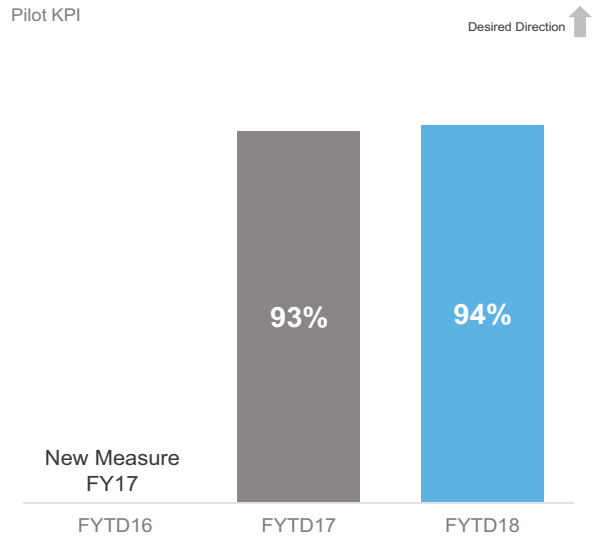
Key Actions:

- Accept 7K trains
- Continue to adjust inspection schedules and procedures for legacy fleet
- Identify and address root causes of delays and offloads
- Begin retirement of 5000 series fleet



Rail Infrastructure

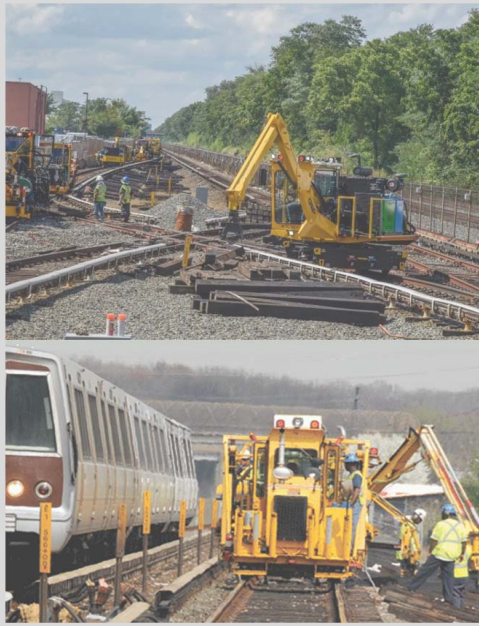
Infrastructure Availability



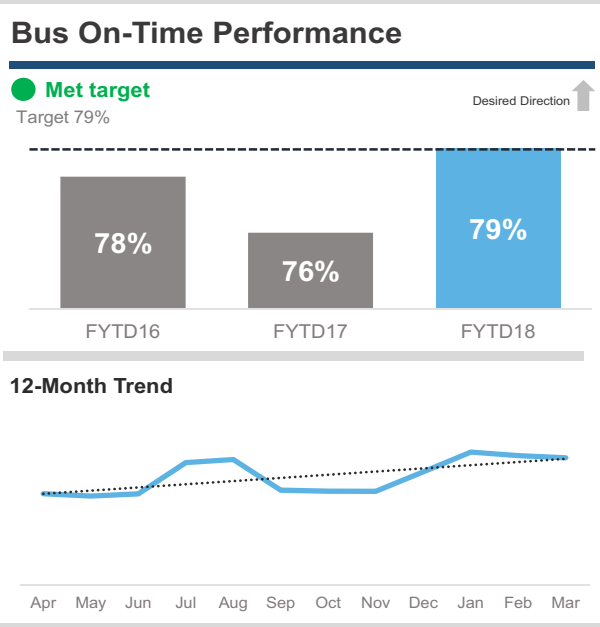
While limited impact on OTP, speed restrictions in downtown core reduced metric

Key Actions:

- Complete assessment of power draw in downtown core, aiming to lift speed restriction in Summer 2018
- Continue preventive maintenance and capital programs
- Expand pilot waterproofing technique in Red Line tunnels
- Track inspections to identify and fix degraded conditions



Bus On-Time Performance



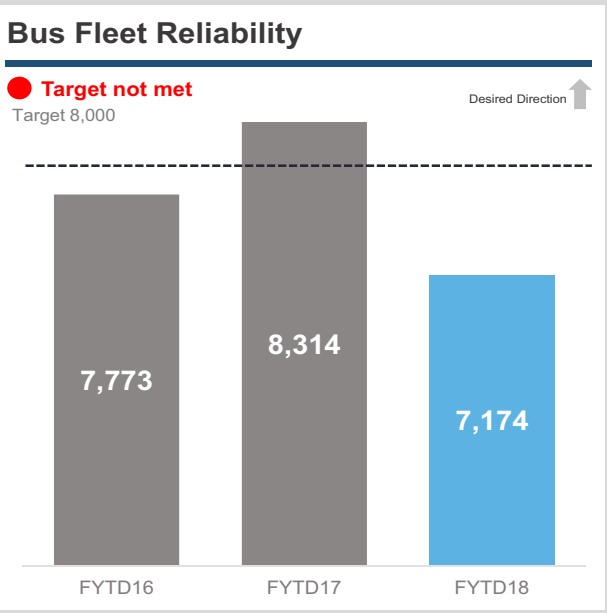
Met target with best third quarter result since report began in 2010

Key Actions:

- Actively manage headway routes through dedicated field supervisors and control center specialists
- Implement technology upgrades for real-time tracking of buses
- Utilize articulated and strategic buses on high-frequency routes to reduce crowding and improve reliability
- Continue to implement schedule adjustments on low-performing routes



Bus Fleet Reliability



Impacted by increased use of older, less reliable buses due to out of service buses

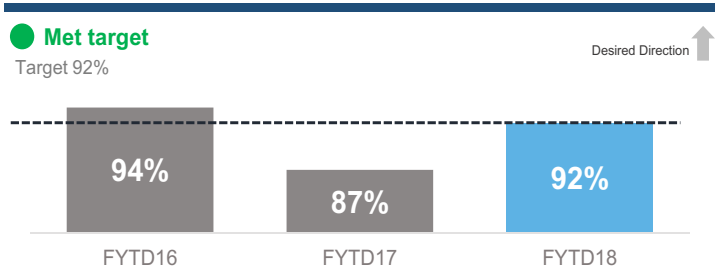
Key Actions:

- Complete safety checks and return to service 164 New Flyer buses
- Retrofit buses with alternative coolant level sensor
- Continue evaluation of new products and adjust preventive maintenance cycles
- Midlife overhaul and preventive maintenance programs
- Sustain bus procurements



MetroAccess On-Time Performance

MetroAccess On-Time Performance





OTP is meeting target and improved by 5% compared to the same time last year

Key Actions:

- Implement new system tools to provide real-time traffic data
- Enhance MetroAccess street-level monitoring of service
- Continue to facilitate and promote the use of subsidized alternatives to MetroAccess

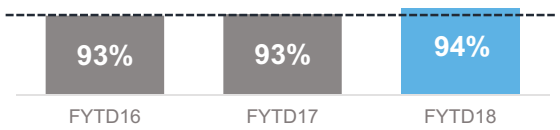
Escalator & Elevator Availability

Escalator Availability

Met target

Target 93%

Desired Direction

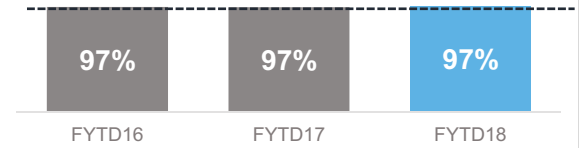


Elevator Availability

Met target

Target 97%

Desired Direction



Both met target with escalator availability surpassing target

Key Actions:

- Continue aggressive replacement and rehab efforts, and survey additional escalator units for replacement
- Establish contract with manufacturer for escalator step mold to ensure steady supply





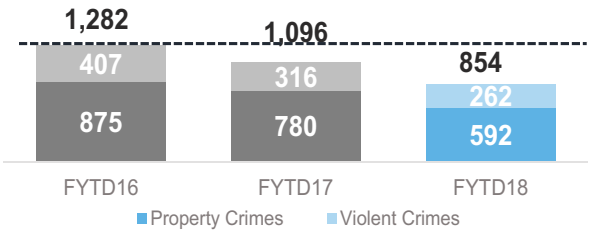
Crime

Part I Crime

Met target

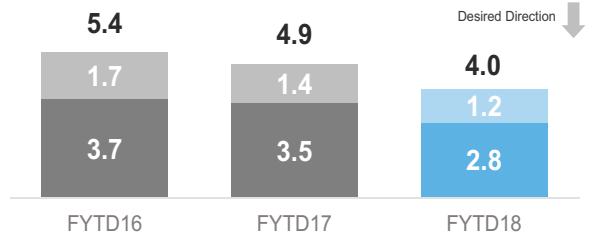
FYTD18 Target 1,312.5

Desired Direction



Part I Crime, per million passengers

Desired Direction



The Part I crime rate decreased 18% compared to last year, best in years

Key Actions:

- Continue investment in closed circuit television (CCTV) and real-time monitoring
- Adjust tactics and officer deployments based on crime data analysis
- Sustain fare evasion initiative

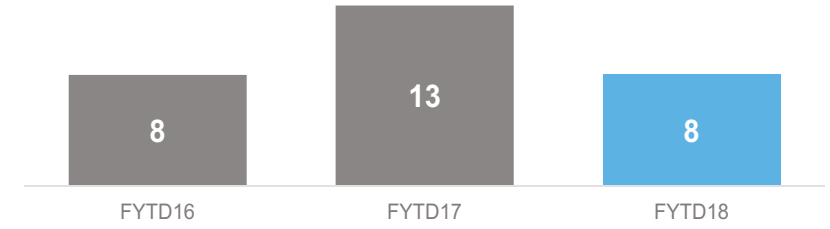


Rail Collisions

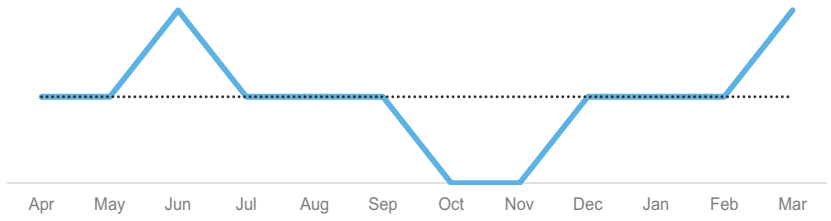
Rail Collisions

Desired Direction

Decreased compared to prior year



12-Month Trend



38% decrease compared to FYTD17

Key Actions:

- Operator training on safe train movement in yards
- Efficiency testing
  - — Speed compliance
  - — Yard safety stops
  - — Shop/yard moves
- Improved roadway maintenance machine communication procedures
- Revitalized Line familiarization training for train and equipment operators
- Deployed new training program for flagman and any personnel who may perform this task (e.g. equipment operators, track repairers)

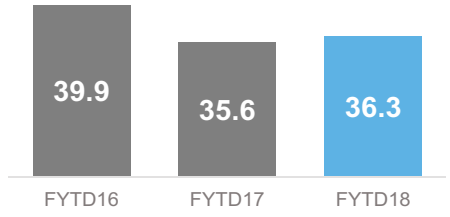
Bus Collisions

Bus Collisions, per million miles

Non-Preventable

Desired Direction

Increased compared to prior year

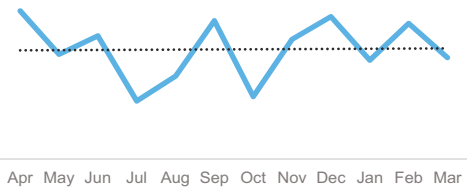


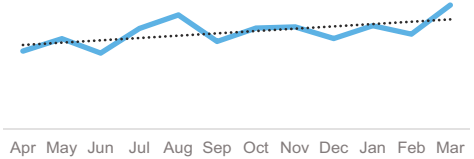
Preventable

Increased compared to prior year



12-Month Trend





Overall collision rate increase of 4.5%; driven by preventable rate increase of 8%

Key Actions:

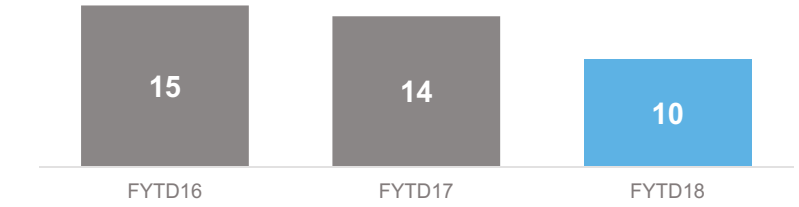
- Fixed object collision reduction committee
- Deceleration light and strobe installation
- Mirror adjustments/lowering

Bus Pedestrian Strikes

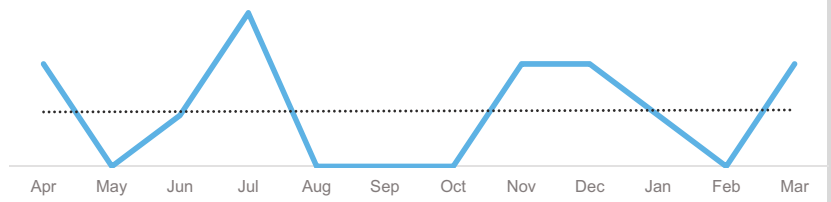
Bus Pedestrian Strikes

Desired Direction

Decreased compared to prior year



12-Month Trend



29% decrease compared to FYTD 2017

Key Actions:

- Front strobe/marker light installation
- Line observations by BTRA and SAFE personnel
- Ride-alongs by supervisory staff
- Review of DriveCam Incidents
- Mirror lowering/adjustment
- Electronic messaging at the divisions to reinforce safe operations

Rail Customer Injuries

Rail Customer Injuries, per million passengers

Non-Preventable

Preventable

Desired Direction

Met target

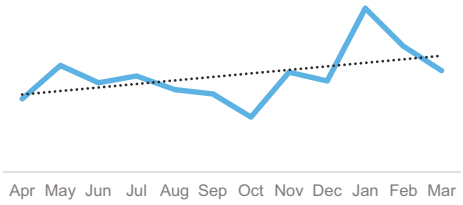
Target 1.75



12-Month Trend

All Rail Customer Injuries were preventable





1% decrease compared to FYTD 2017

Key Actions:

- Automated escalator announcements program expansion
- Replaced and installed new optimal boarding location signage for ADA
- Installation of platform cameras at Train Operator's position at Silver Spring and Brookland-CUA stations to assist with platform observations

Bus Customer Injuries

Bus Customer Injuries, per million passengers

Non-Preventable | **Preventable**

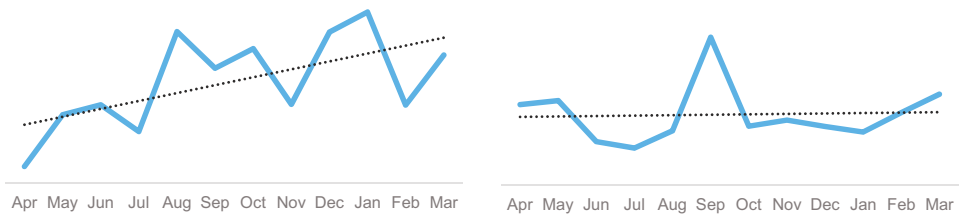
Desired Direction

Target not met

Target 2.45



12-Month Trend



Non-Preventable vehicle collisions leading cause of 24% increase

Key Actions:

- Line observations by BTRA and SAFE personnel
- Deceleration light installation
- Emphasis on proper approach angle and berthing position at bus stops
- Installation of on-board video monitors on all new buses

MetroAccess Customer Injuries

MetroAccess Customer Injuries, per 100,000 passengers

Desired Direction

Non-Preventable



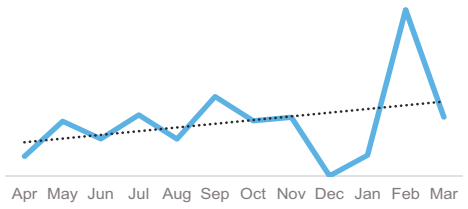
Preventable

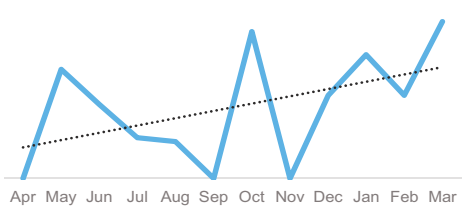


Met target

Target 3.00

12-Month Trend





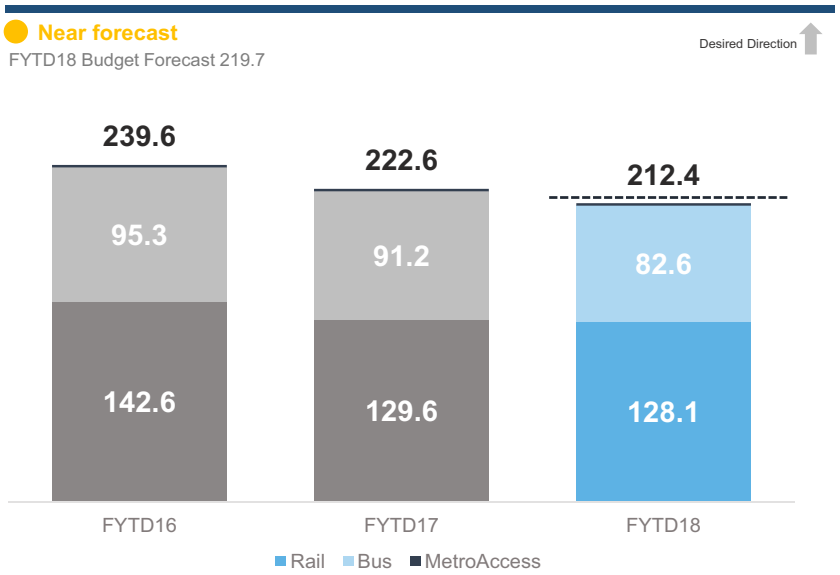
2.5% decrease in overall customer injuries compared to FYTD 2017

Key Actions:

- Operator training
- Occupational therapist
- Acquisition of new vehicles with improved design

Ridership

Ridership by Mode, millions



Rail ridership levels are similar to last year; Bus ridership has continued to decline, in part driven by the fare increase

Key Actions:

- Sustain improvements in rail and bus on-time performance
- Promote monthly SelectPass and weekly bus passes and encourage more customers to register SmarTrip cards and use online offerings such as auto-reload
- Continue Rush Hour Promise, crediting riders experiencing delays of 15 minutes or more during rush hour periods
- Strengthen SmartBenefits and regional employer relationships

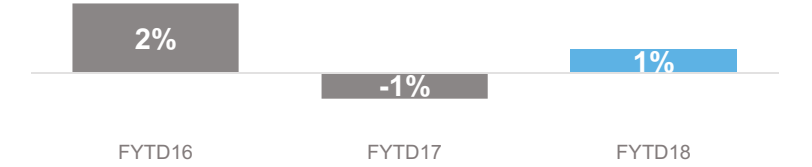
Operating Budget Management

Operating Budget Management

Met target

Target 0 to 2% favorable

Desired Direction

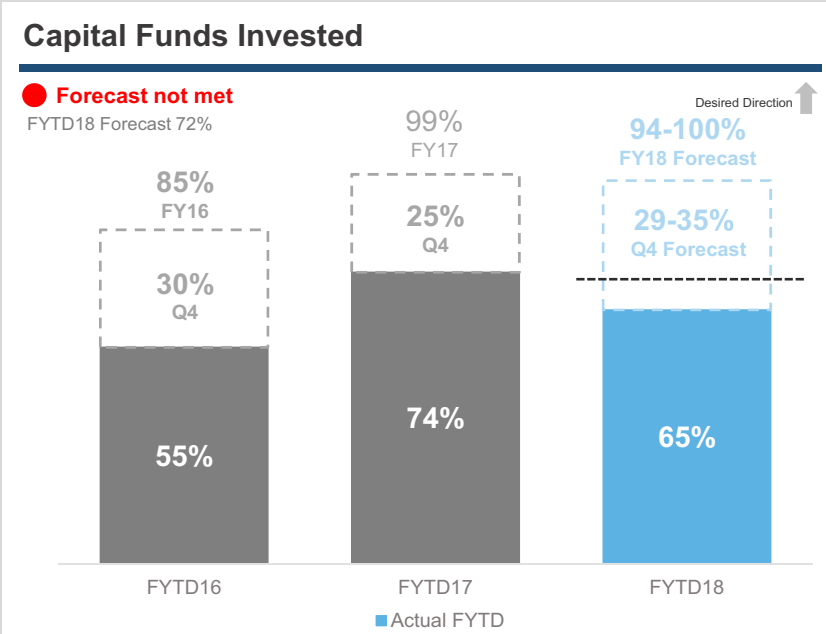


FYTD18 ($ in millions)	Budget	Actual	Favorable (Unfavorable)
Expenses	1,370	1,332	38
Revenue	620	601	(20)
Subsidy	750	-	-
Net Position			**18**

Below budget expenses exceeded revenue shortfalls, resulting in projected balanced budget

- Expenses were under budget by $38 million, primarily due to vacant positions and lower spending on services
- Revenue was below budget by $20 million, primarily due to ridership below budgeted levels
- The net operating position is $18 million favorable year-to-date; the year-end forecast projects a balanced budget

Capital Funds Invested



65% of capital funds were invested FYTD; forecasted pace of investment to increase in Q4

Railcar

- Continued delivery of 7000 series railcars

Rail Systems

- Radio and cell service projects

Track & Structure

- Red Line Water Mitigation Pilot

Station & Passenger Facilities

- Station Lighting program
- Replaced escalators and rehabilitated elevators

Bus & Paratransit

- Rehabilitated buses; delayed delivery of new buses
- Building new Andrews Federal Center bus garage

Appendix I - Board Budget Resolutions

SUBJECT: APPROVAL OF FISCAL YEAR 2019 OPERATING AND CAPITAL BUDGETS AND PUBLIC PARTICIPATION REPORT

2018-08

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

WHEREAS, The Washington Metropolitan Area Transit Authority (WMATA) Compact Sections 23 and 24 require the Board of Directors to adopt a capital budget and an operating budget each year; and

WHEREAS, The Board of Directors received and considered the General Manager/Chief Executive Officer's (GM/CEO) proposed Fiscal Year (FY) 2019 Operating Budget and FY2019-2024 Capital Improvement Program (CIP); and

WHEREAS, The Board of Directors conducted (1) a public hearing on January 31, 2018, preceded by an open forum on the proposed Operating Budget and CIP and Federal FY2018 Grant Applications; and (2) notified the public and collected public comments at certain locations in the Metro system, online, and from community-based organizations all pursuant to the Board-approved Public Participation Plan, the results of which are summarized in the Public Participation Report (Attachment A); and

WHEREAS, WMATA's Grants Policy Section 201(a) requires Board of Directors' approval for certain grant opportunities; however, there are grant opportunities which require a prompt turnaround and for which the Board's approval cannot be scheduled in advance; and

WHEREAS, It is in WMATA's and the region's interests to support innovative ways to reduce the cost of paratransit while providing eligible MetroAccess customers with additional service options; and

WHEREAS, WMATA received a premium on the sale of the Series 2017B bonds and wishes to use these bond premium funds to credit the capital contributions for the jurisdictions who have committed to the payment of the debt service on these bonds; NOW, THEREFORE, be it

RESOLVED, That the Board of Directors approves the Public Participation Report concerning the proposed FY2019 Operating Budget and FY2019-2024 CIP; *and be it* further

RESOLVED, That the Board of Directors approves and adopts the FY2019 Operating Budget (inclusive of all Operating Reimbursable and Operating Reimbursable Safety and Security projects) of $1.837 billion, with revenues, expenses, and subsidies detailed in Attachments B and C; and be it further

RESOLVED, That $55.9 million of debt service expenditures resulting from the issuance of Series 2009B, 2017A, and 2017B bonds are due from and allocated to the participating jurisdictions as detailed in Attachment C; and be it further

RESOLVED, That the Board of Directors approves and adopts the FY2019 Capital Budget of $1.28 billion (inclusive of all Capital Reimbursable projects) and the six-year CIP for FY2019-2024 of $8.53 billion as summarized by investment category and funding source in Attachments D, E, F, and G; and be it further

RESOLVED, That the Board of Directors approves the use of Federal Transit Administration (FTA) grant and local matching funds in the amount of $60 million for eligible preventive maintenance expenditures through the FY2019 Capital Budget; and be it further

RESOLVED, That, subject to any requesting jurisdiction's paratransit expenses being favorable to such jurisdiction's budgeted paratransit amount and WMATA's net expenses on Metrorail, Metrobus, and MetroAccess being favorable to WMATA's FY2019 Operating Budget, the GM/CEO and Chief Financial Officer (CFO) are authorized to provide credits to any jurisdiction sponsoring innovative paratransit programs not to exceed the actual savings from such jurisdiction's budgeted paratransit amount in the succeeding quarter where credits are based on the per trip rate used by the innovative paratransit program; and be it further

RESOLVED, That, subject to a net favorable FY2019 Operating Budget position, the Board of Directors authorizes the GM/CEO to fund the OPEB trust in an amount not to exceed $10 million during FY2019; and be it further

RESOLVED, That the Board of Directors authorizes the GM/CEO to accept grant funding, above the amounts listed in the FY2019 Operating Budget and FY2019-2024 CIP, without further Board action so long as there is no increase in the total annual expense budget authorization; and be it further

RESOLVED, That the GM/CEO shall report to the Board of Directors all unbudgeted grant funds received on a quarterly basis; and be it further

RESOLVED, That the CFO is authorized to credit the capital assistance billing in FY2019 and prior years for all jurisdictions entitled to a share of the bond premium in the amounts of their respective shares of the bond premium; and be it further

RESOLVED, That, in order to implement the elements of the FY2019 Capital Budget or the FY2019 Operating Budget, the GM/CEO, the CFO, or their designees are authorized to: (1) file and execute grant applications and accept grants on behalf of WMATA for funds from the federal government and any other public or private entity regardless of whether a local match is required without further Board of Directors' action, so long as that the acceptance of such grant does not result in the increase in expenditures above the approved FY2019-2024 CIP or the approved FY2019 Operating Budget; (2) conduct public hearings at any time during FY2019 in furtherance of the implementation of the FY2019-2024 CIP; and (3) execute and file the annual FTA Certifications and Assurances as a prerequisite to the submission of federal grant applications; and be it further

RESOLVED, That the Board of Directors acknowledges that, in accordance with the terms of the Capital Funding Agreement (CFA), if any projects are started during the term of the CFA or any bonds or other financial instruments are issued pursuant to the CFA, the Contributing Jurisdictions have agreed to continue to make their Allocated Contributions for those projects or debt service until the conclusion of the projects or the final maturity of the bonds or other financial instruments; and be it finally

RESOLVED, That, to allow staff to timely apply for the coming FY's grants, this Resolution shall be effective immediately.

Reviewed as to form and legal sufficiency,

Patricia Y. Lee
General Counsel

WMATA File Structure Nos.:
2.7 Delegation of Authority
4.2.2 Fiscal Year Budgets

ATTACHMENT A:

Washington Metropolitan Area Transit Authority
Public Communication & Outreach Report

Docket B18-01: Proposed FY2019 Operating Budget and
Docket B18-02: Proposed FY2019 Capital Improvement Program and
Federal FY2018 Grant Applications

Introduction



To balance Metro's budget for the coming fiscal year, Metro is seeking additional funding from District of Columbia, Maryland and Virginia governments while continuing to take actions to cut costs and increase business revenues. As part of the budget, Metro's Capital Improvement Program invests $1.3 billion in funding safety improvements, rebuilding the Metro system and improving reliability of the current rail and bus networks. It also funds the deployment of new trains and buses, station upgrades and other important improvements.

As required by WMATA's Compact, the public was provided with the opportunity to comment on the proposal. Following the guidelines established by WMATA's Board-approved Public Participation Plan, the following report is a summary of the public communications and outreach, and the resulting comments on the budget proposal.

Communications & Outreach to the Public

In order to encourage customers to provide feedback on the project, as well as to fulfill Metro's Public Participation Plan, Metro designed a communications and outreach plan that focused on customers and local stakeholders.

Below is an overview of all the communications and outreach efforts that were conducted during the comment period from Saturday, January 13 through 5:00 p.m. Monday, February 5, 2018.

- Targeted marketing & media
- Stakeholder communication
- Open house & Public Hearing

Feedback was collected through the following sources:

- Online comment form in English and Spanish
- Paper comment form in English and Spanish from the Open House/Public Hearing
- Verbal public testimony at the Public Hearing

Targeted Marketing & Media

Metro used targeted marketing and media strategies to increase awareness and encourage feedback on the proposals.

- Legal notices were placed in the *Washington Post* on Saturday, January 13, 2018 and Saturday, January 20, 2018 notifying the public of the opportunity to provide public comment.

- Advertisements were placed in newspapers throughout the region, including media in multiple languages:
    - *The Express* (English)
    - *The Afro* (English)
    - *El Tiempo Latino* (Spanish)
    - *Washington Hispanic* (Spanish)
    - *Korean Times* (Korean)
    - *Epoch Times* (Chinese)
    - *Atref* (Amharic)
    - *Doi Nay* (Vietnamese)

- The creation of the webpages *wmata.com/budget* and *wmata.com/budget_espanol* informed customers about the budget proposal, included the comment form link and public hearing information and contained pdf fliers in Amharic, Chinese, French, Korean, and Vietnamese. The page *wmata.com/budget_espanol* was professionally translated into Spanish and included a link to the docket in Spanish. The webpage in English generated over 1,475 unique page views, and the webpage in Spanish generated over 20 unique page views between January 13 and February 1, 2018.

- English and Spanish signs posted in Metrorail stations, Bus Information Centers on Metrobus, and MetroAccess vehicles.

- Copies of the English/Spanish flier and dockets were sent to all jurisdictional libraries.

- A press release was published on Friday, January 19, 2018, and there was media coverage on radio and television.

- Social media (Facebook, Twitter) was used to post information about the budget proposal.
    - Total Facebook views: over 1,650 people reached across two posts
    - Total Twitter impressions: over 65,200 reached across 3 @wmata tweets
    - Total Twitter engagements: over 330 across 3 @wmata tweets







Stakeholder Communication

Local stakeholders helped spread the word and encouraged feedback from their constituents about the proposals.

- The Office of Government Relations provided information about the FY19 budget proposals to local, state jurisdictional and Congressional staff. Staff addressed follow up questions to the plan to ensure elected officials and their staff had a thorough understanding.

- The Office of External Relations notified its 2,900+ stakeholders, which includes places of worship, event venues, business improvement districts, residences and apartments, schools, shopping areas and more around WMATA Metrorail stations. The list also includes more than 300 Community Based Organizations (CBOs).

- The Office of Equal Employment Opportunity (OEEO) sent email messages to all Community Based Organizations (CBOs). The communication included a link to the online comment form, information in languages other than English, and an invitation to register to attend the open house and public hearing. OEEO also followed up with 24 CBOs via phone, and visited nine CBOs in person, dropping off posters about the budget proposal:
    - Bread for the City
    - Catholic Charities
    - D.C. Center for the LGBT Community
    - D.C. Office on Latino Affairs
    - D.C. Office on African Affairs
    - D.C. Office on Asian Pacific Islander Affairs
    - Entre Amigas Women's Comprehensive Health
    - La Clínica del Pueblo
    - Many Languages One Voice (Language Access Coalition)

- Employees were notified of the proposals through the General Manager's weekly email message and encouraged to provide comments online and attend the open house and public hearing.

- Members of Metro's Accessibility Advisory Committee (AAC) received a briefing on Federal funding from the Managing Director of Government Relations. Members also held online discussions to identify budgetary priorities of the AAC.

Open House & Public Hearing



Metro hosted an open house and public hearing on Wednesday, January 31, 2018 at WMATA Headquarters, 600 5th St NW, Washington DC. The open house began at 5:30 p.m. and the public hearing began at 6:00 p.m.

The open house provided the opportunity for attendees to speak one-on-one with staff members about the budget proposal, and comprised of "topic" tables: Operating Budget, Capital Improvement Program & Grants, and Customer Service. There was also a table for attendees to complete the survey. Sixteen people attended the open house.

The public hearing followed WMATA's standard public hearing procedures. At the beginning of the hearing, Board Chair Jack Evans read a prepared statement outlining the public hearing process and Dennis Anosike, Chief Financial Officer, presented an overview of the budget. Copies of the presentation were available in English and Spanish. An option to record oral testimony separate than the formal public hearing was also provided.

WMATA headquarters is ADA accessible and conveniently located next to Gallery Place and Judiciary Sq Metrorail stations and multiple bus lines.

Signage throughout the open house and public hearing was in English and Spanish, and Spanish-speaking staff was available throughout both events.

Nineteen people provided oral testimony at the public hearing, accounting for 5% of all feedback collected during the public comment period.



Public Input Results

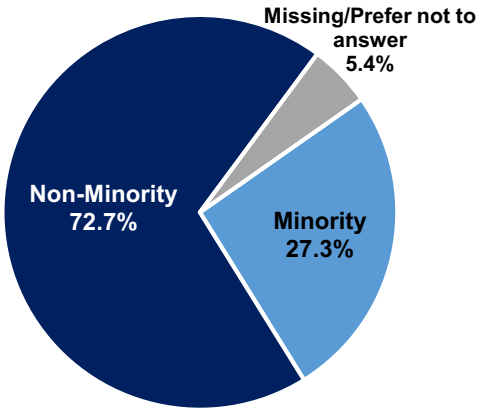
Metro collected public input through written comments online or letters sent to the Board Secretary's Office, and oral testimony at the public hearing. Metro received 320 responses about the FY19 budget proposals during the public comment period.

Of the written comments collected online respondents were able to self-select from topics that best described to what their comments referred. The table below lists the different categories that the comments focused on.

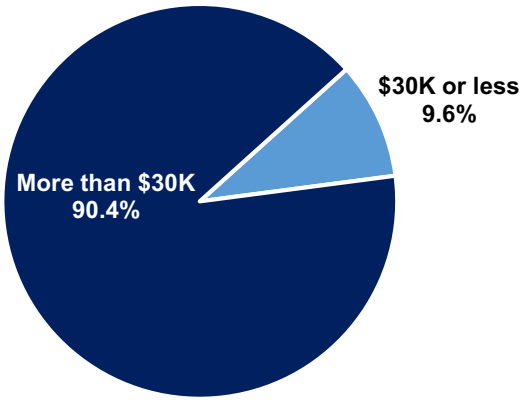
Comment Category	# received in Category	% of Comments Received
Operating Budget	210	70.7%
Capital Budget	86	29.0%
Other	61	20.5%

Online respondents were also asked to provide additional demographic information. The charts below lists these results:

Minority vs Non-Minority



Low Income vs Non-Low Income



All written comments, including the comments collected online and the letters received can be read in Public Input Report Appendix A. All oral testimony from the public hearing can be read in Public Input Report Appendix B. Since comments could be received in multiple ways, some may be duplicative.

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Appendix J - Glossary of Terms

AAC (*Accessibility Advisory Committee*)	A Metro committee created to address the needs of senior citizens and customers with disabilities; efforts have resulted in numerous service upgrades including gap reducers, to make it easier for customers using wheelchairs to board Metrorail trains.
Accounting Basis	The accounting principles and methods appropriate for a government enterprise fund. Financial statements are prepared on the accrual basis of accounting under which revenues and expenses are recognized when earned or incurred.
Accrual Basis	Basis of Accounting where revenues are recognized when they are measurable and earned. Expenses are recorded when incurred.
ADA *(Americans with Disabilities Act)*	Refers to federal civil rights legislation passed in 1990 that requires public transportation services to be accessible to, and usable by, persons with disabilities. In compliance, Washington Metropolitan Area Transit Authority (Metro) operates Metrobus with a bus fleet equipped with passenger lifts and wheelchair tie downs, Metrorail with elevators and platforms that are ADA compliant and MetroAccess with a fleet of over 600 vans and sedans also equipped with lifts and tie downs.
Approved Budget	The revenue and expenditure plan approved by the WMATA Board of Directors for a specific one year period starting on July 1.
ART (*Arlington Transit*)	Refers to the bus service that operates within Arlington County, Virginia, providing access to Metrorail and supplementing Metrobus with smaller, neighborhood-friendly vehicles.
Articulated Bus *Also see "Slinky" bus*	Refers to buses that have an "accordion" section in the middle that allows the bus to bend and flex (articulate). Articulated buses have more passenger capacity than standard 40-foot buses.
AGM (*Assistant General Manager*)	An executive who reports directly to the General Manager/CEO or a Deputy General Manager of Metro.
Assets	Property owned by Metro which has monetary value with a future benefit.
Balanced Budget	Refers to a budget where estimated revenues are equal to or greater than estimated expenses.
Board of Directors	The Board of Directors is a 16-member body composed of eight voting and eight alternate members responsible for corporate governance of WMATA.
Bond	A written promise to pay a specified sum of money (face value) at a specified future date and the proposed means of financing them.
Bond Proceeds	Refers to additional local capital funds raised, when necessary, by issuance of revenue bonds in the municipal markets.

Budget	Refers to a financial operation embodying an estimate of revenues and expenditures for a fiscal period of 12 months or longer. This can be an operating or capital budget.
Budget Calendar	Refers to a schedule of key dates for specific milestones in the preparation and approval of a budget.
Budget Document	Refers to the official written statement and the supporting numbers prepared by the Financial staff for presentation for approval by the Board.
Budget Message	Refers to the general discussion of the budget document presented in writing as an overview, usually by the head of the organization.
Bus Shelter	A shelter for riders to wait for the bus, a canopy area with or without bench seating. In addition, the shelter includes a display case with bus information for Metrobus riders and is equipped with a trash receptacle.
Bus Stop	Refers to a stop indicated by a sign for riders to wait for the bus.
CAFR *(Comprehensive Annual Financial Report)*	A report containing financial statements and statistical data that provides full disclosure of all material financial operations of Metro in conformity with generally accepted accounting principles.
Capital Assets	Assets of a material value and having a useful life of more than one year. Also called fixed assets.
Capital Budget	The portion of the budget that provides for the funding of improvements, projects and major equipment purchases.
Capital Improvement Program	The six-year plan of capital projects to be completed by Metro.
Cash Basis	Basis of Accounting whereby revenue and expense are recorded on the books of account when received and paid, respectively, without regard to the period to which they are incurred.
CNG (*Compressed Natural Gas*)	A natural gas fuel used in a clean engine technology.
COLA (*Cost of Living Adjustment*)	Cost of Living Adjustment (COLA) for inflation for employees.
Compact	Refers to interstate compact creating WMATA; this is a special type of contract or agreement between the three jurisdictions within which the organization operates.
Contingency Funds	Operating and capital funds reserved for unexpected expenditures during the fiscal year which were not addressed in the annual budget.

Cost Allocation	Refers to a process by which indirect or common costs are distributed to multiple cost objects (a job, task, business unit) based on a prescribed basis or methodology. For example, overhead costs such as IT support are allocated to the transportation modes on a percentage basis.
DC Circulator	Refers to a bus route funded by the DC Government with support from Metro to take persons to Washington, DC's premier cultural, shopping, dining, and business destinations.
Development and Evaluation	An initial investment into the planning, development and evaluation of potential or proposed capital projects to determine whether a project is viable and should be pursued.
Deadhead	Refers to non-revenue time when a bus or train is not carrying revenue passengers, usually a trip from, to, or between lines, yards or garages. Usually this refers to bus or rail travel to or from the garage or yard to a terminus or station where revenue service begins or ends.
Deficit	Refers to an excess of Liabilities over Assets or Expenses over Revenue.
Department	A major organizational unit that has overall responsibility for an operation or a group of operations within a functional area.
DGM (*Deputy General Manager*)	An executive who reports directly to the General Manager.
Diesel Fuel	Fuel composed of petroleum distillates that have a boiling point and specific gravity higher than gasoline.
Division	Refers to a garage and yard facility where buses are stored, maintained, and dispatched into service.
Fairfax Connector	The bus system that runs seven days a week with service throughout Fairfax County, Virginia and to Metrorail stations on the Orange, Blue and Yellow lines, including the Pentagon.
Fare box recovery ratio	Refers to the ratio of passenger fares (including inter-agency agreements related to fares) to total operating costs.
Farecard	Refers to a paper pass used to ride Metrorail or Metrobus. Paper farecards are no longer accepted, by bus or at rail faregates (as of March 2016).
Four-point Securement System	Refers to an onboard securement system for wheelchairs, three-wheel and four-wheel scooters. The system incorporates four seatbelt type straps that attach to the frame of a mobility device as a way to keep it from moving or rolling while on the bus.

FTA *(Federal Transit Administration)*	A federal administration within the U.S. Department of Transportation. The FTA provides stewardship of combined formula and discretionary programs to support a variety of locally planned, constructed, and operated public transportation systems throughout the United States.
GAAP (*Generally Accepted Accounting Principles)*	Accounting standards, revised periodically, to which both private and public organizations within the United States are expected to conform.
GM/CEO (*General Manager/Chief Executive Officer*)	The General Manager and Chief Executive Officer of Metro who reports directly to the Board.
Head Sign	Refers to the sign above the front windshield of a bus describing the line number or letter, its line name, and destination.
Headway *(Frequency)*	Refers to time intervals between vehicles moving in the same direction on a particular route. Headway can change on a line during the day as rider demand changes.
JCC (*Jurisdictional Coordinating Committee*)	The staff members from the jurisdictions supporting Metro. The JCC was established by the Board of Directors to facilitate the exchange of information between jurisdictions and WMATA.
Kiss and Ride	Refers to an area within a station where commuters are driven by private car and dropped off to board Metrobus or Metrorail.
Kneeling Bus *Also see Passenger lift*	Refers to a feature on buses that lowers the floor to the curb or to near-curb level to make it easier for passengers to board, especially for seniors and persons with disabilities.
KPI (*Key Performance Indicator*)	KPI's are Key Performance Indicators that measure long term progress in the strategic areas of safety, security, service reliability and customer satisfaction.
Layover Time *Also known as Spot time*	Refers to time built into a schedule between arrival and departure for bus drivers to rest; minimum times are set by union contract. Layovers normally occur at each end of a route to allow for a driver's break and schedule recovery, but they may be scheduled at other points to allow for timed transfer connections.
Liability	A debt or legal obligation arising from transactions in the past which must be liquidated, renewed or refunded at a future date.
Linked/Unlinked trip	An unlinked trip is a passenger trip taken on a single vehicle, such as a single bus ride. Metrorail reports ridership as linked trips. A linked trip is counted every time a customer enters through a fare gate. For example, where a customer transfers between two trains to complete their travel one trip is counted.

Loop	Refers to a portion of a bus line where the driver operates a segment in one direction only. Passengers may only board on one side of the loop. Loops are sometimes required due to lack of pavement accessibility, or when no off street turn-around is available.
Loudoun County Transit	The weekday bus service from Loudoun County, Virginia to Washington D.C., the Pentagon and Rosslyn from stops in Purcellville, Hamilton, Leesburg and Sterling. A reverse commute bus service is provided from West Falls Church to Loudoun County.
MAP-21	Moving ahead for Progress in the 21st Century Act, enacted in July 2012, governs federal surface transportation spending.
MARC *(Maryland Area Regional Commuter*)	A commuter rail system whose service areas include Harford County, Maryland; Baltimore City; Washington D.C.; Brunswick, Maryland; Frederick, Maryland and Martinsburg, West Virginia.
Metro	The Washington Metropolitan Area Transit Authority.
MetroAccess	The operating unit of Metro that offers service for eligible people with disabilities who are unable to use regular accessible Metrorail, Metrobus and local bus service (fixed route). Federal civil rights legislation passed in 1990 that requires public transportation services to be accessible to, and usable by, persons with disabilities.
Metrobus	The operating unit of Metro that provides regional and non-regional bus services.
Metrorail	The operating unit of Metro that provides heavy rail service (subway, aerial and surface) and 91 passenger stations.
Modified Accrual Basis	An accounting method that combines accrual-basis accounting with cash-basis accounting. Modified accrual accounting recognizes revenues when they become available and measurable and, with a few exceptions, recognizes expenditures when liabilities are incurred.
MTA (*Maryland Transit Administration*)	Refers to the bus, light rail, and subway services in Maryland. MTA also operates the MARC train service.
Multimodal	Refers to the availability of multiple transportation options, especially within a system or corridor. A multimodal approach to transportation planning focuses on the most efficient way of getting people or goods from place to place by means other than privately owned vehicles; by bus, trolley, light rail, streetcar, cable car, and/or ferry systems.
NextBus	Refers to the application that uses satellite technology for Metrobus locations to track the arrival times for bus operators and customers.

NTSB (*National Transportation Safety Board*)	NTSB is an independent federal agency charged with determining the probable cause of transportation accidents, promoting transportation safety, and assisting victims of transportation accidents and their families.
OCC (*Operations Control Center*)	The operations center that facilitates monitoring and communications for Metrorail operations.
Office	An organizational until that falls under the structure of a department.
Paratransit	Refers to scheduled service for people who cannot use regular fixed-route bus service. MetroAccess uses vans and sedans to provide this service in the Washington Metropolitan area.
Park and Ride	Refers to the parking facility available for riders at Metrorail stations.
Passenger Lift *Also see Kneeling bus*	A mechanical device, either a lift or ramp, that allows wheelchair or scooter users, as well as other mobility-impaired passengers, to board a bus without climbing the steps.
Peak Service	Refers to weekday a.m. and p.m. service during commute hours that carries a maximum number of passengers. For Metrorail, peak hours are defined as the time between opening and 9:30 AM in the morning, and between 3 PM and 7 PM at night.
Personnel Expenses	Refers to expenditure in the operating budget for salaries and wages paid for services performed by Metro employees as well as fringe benefits costs associated with their employment.
PIDS (*Passenger Information Display System*)	Refers to signs located on each platform and mezzanine of every rail station to provide information to customers including next train's scheduled time of arrival, service delays, elevator outages, and free shuttle arrangements when elevators are out of service.
Platform Hours	The total scheduled time a bus spends from pull-out to pull-in at the division. Platform hours are used as a benchmark to calculate the efficiency of service by comparing "pay to platform" hours.
Programmed Reader	A machine that is attached to the fare gate/fare box where magnetic fare media can be read on Metrorail and Metrobus.
Approved Budget	Refers to the budget prepared with preliminary estimates by the GM/CEO for the consideration of the WMATA Board.
RAC (*Riders' Advisory Council*)	A committee established by the WMATA Board. The council allows Metro customers an unprecedented level of input on bus, rail and paratransit service. The 21-member council includes six representatives from Maryland, Virginia, and the District of Columbia, two at-large members, and the chair of Metro's Accessibility Advisory Committee.
Revenue	An increase in fund assets from operational activity such as passenger fares, parking and advertising.

Revenue Bonds	A bond on which debt service is payable solely from a restricted revenue source.
Revenue Hours *Also known as Revenue Service*	Refers to all scheduled time bus/rail spends serving passengers, which can also be defined as platform hours minus deadhead and layover time.
Revenue Passengers	Refers to passengers who enter the system through the payment of a fare.
Revenue trip *Also see Linked/Unlinked trip*	Refers to any linked or unlinked trip that generates revenue by cash payment, use of a pass, and/or any other means of payment.
Ride-On	Refers to Montgomery County regional bus transit system in Maryland.
Round Trip *(Also known as a cycle)*	Refers to one inbound, plus one outbound trip (unless a loop route), equals one round trip or cycle.
Slinky bus *(Also see Articulated bus)*	Refers to a nickname used by passengers for an articulated bus.
SmartStudent Pass	A monthly pass for unlimited travel on Metrobus and Metrorail for students under 19 years of age who live and attend school in the District of Columbia.
SmartTrip®	Refers to a technology built and designed by Cubic Transportation Systems, Inc., a subsidiary of San Diego-based Cubic Corporation to add and deduct value from an electronically encoded card when a rider passes the card near a programmed reader on Metrobus and at fare gates on Metrorail.
Strategic Buses	Refers to spare buses available for service in the event that a bus in route is taken out of service.
Subsidy	Refers to funding received from jurisdictional funding partners in the Washington Metropolitan area consisting of Washington, D.C., suburban Maryland (Montgomery County and Prince George's County) and Northern Virginia counties of Arlington and Fairfax and the Cities of Alexandria, Fairfax and Falls Church.
TheBus	Prince George's County, Maryland local bus service.
TOC (*Tristate Oversight Committee*)	The Tri-State Oversight Committee is a partnership between state-level agencies in Maryland, Virginia and the District of Columbia to jointly oversee safety and security at the Washington, DC Metrorail system. FTA assumed Metrorail system oversight from the TOC in October 2015.
Transit Advertising	Refers to ads posted on the exterior and interior of buses and rail cars.
Tripper	A short piece of work (usually on a bus, but sometimes on a train) not long enough to qualify as complete run or full day's work. May involve vehicles from one line or route being re-routed to serve another.

Trunk Line	A route operating along a major corridor that carries a large number of passengers and operates at headway frequencies of 15 minutes or less.
TSI (Transportation Safety Institute)	A Federal Transit Administration-sponsored institute that conducts a full range of training programs in rail and bus safety and accident investigation.
VRE (*Virginia Railway Express*)	The commuter rail service that connects the Northern Virginia suburbs to Union Station in Washington, D. C., via two lines: the Fredericksburg Line from Spotsylvania, Virginia, and the Manassas Line from Broad Run/ Airport station in Bristow, Virginia.
WMATA (*Washington Metropolitan Area Transit Authority*)	The acronym used for Washington Metropolitan Area Transit Authority serving the Washington Metropolitan area which consists of Washington, D.C., suburban Maryland (Montgomery County and Prince Georges County) and Northern Virginia counties of Arlington and Fairfax and the cities of Alexandria, Fairfax and Falls Church. Also known as Metro.

Appendix K - Glossary of Acronyms and Abbreviations

A

A&E	architecture and engineering
AA	alternatives analysis
AAI-CAF	(Spanish acronym) manufacturer of the 5000 Series rail cars
AC	alternating current
ACI	automatic car identification system
ADA	Americans with Disabilities Act
AFC	automatic fare collection
AGT	automated guide-way transit
AIM	advanced information management
AIT	Arts in Transit
AP	Accounts Payable
APS	auxiliary power supply
APTA	American Public Transportation Association
ARS	adopted regional system
AST	above-ground storage tank
ATC	automatic train control
ATO	automated train operation
ATD	advanced technology diesel
ATS	automatic transfer switch
AVL	automatic vehicle locator
AVR	automatic voltage regulator
AWP	Annual Work Plan

B

B2G	Back2Good
BAFO	best and final offer
BDA	bi-directional amplifiers
BEAC	budget estimate at completion
BOCC	bus operations control center
BRT	bus rapid transit

C

CAD	computer-aided dispatch
CADD	computer-aided design and drafting
CAFE	computer authorization for expenditure workflow system
CAFR	Comprehensive Annual Financial Report
CAP	Certified Apprenticeship Program
CCP	communications control panel
CCTV	closed-circuit television

CD	calendar days
CDR	conceptual design review
CFA	Capital Funding Agreement
CIP	Capital Improvement Program
CIWS	customer information web services
CM	construction manager
CMAA	Construction Management Association of America
CMAQ	Congestion Mitigation and Air Quality
CMC	construction management consultant
CMU	concrete masonry unit
CNG	compressed natural gas
COG	(Metropolitan Washington) Council of Governments
COLA	cost of living adjustment
COTS	commercial off the shelf
CPOS	compact point of sale
CRCS	Comprehensive Radio Communications System
CSP	Construction Safety Program
CTB	(Virginia) Commonwealth Transportation Board
CTF	Carmen Turner Facility

D

D/B	design/build
D/B/B	design/bid/build
DBE	disadvantaged business enterprise
DBFM	dynamic brake feedback module
DCU	door control unit
D&E	development and evaluation
DEIS	draft environmental impact statement
DPS	drainage pumping station
DRB	Dispute Review Board
DRPT	(Virginia) Department of Rail and Public Transportation
DTP	Dulles Transit Partners, LLC

E

E&O	errors and omissions
EA	environmental assessment
EDADS	enhanced data acquisition and display system
EIS	environmental impact statement
EMI	engineering modification instructions or electro-magnetic interference
EPA	Environmental Protection Agency
EPM	Enterprise Performance Management
ERRP	Emergency Rail Rehabilitation Program

ETEC	emergency tunnel evacuation carts
ETC	estimate to complete
EV	earned value

F

FAI	first article inspection
FAST	Fixing America's Surface Transportation Act
FCCI	first car configuration inspection
FDR	final design review
FEIS	final environmental impact statement
FFGA	full funding grant agreement
FFP	firm-fixed price
FHWA	Federal Highway Administration
FIA	fire and intrusion alarm
FMO	financial management oversight
F/O	fiber optic
FRA	Federal Railroad Administration
FTE	full time equivalent
FTA	Federal Transit Administration
FUA	first unit accepted

G

GAAP	generally accepted accounting principles
GEC	general engineering consultant
GFOA	Government Finance Officers Association
GIS	Geographic Information System
GMP	guaranteed maximum price
GOTRS	General Order Track Rights System
GPS	Global Positioning System

H

HCM	human capital management
HEDS	hybrid enterprise document management system
HEOP	Heavy Equipment Overhaul Program
HVAC	heating, ventilation, and air conditioning

I

IAM	identity and access management
IAWP	Integrated Annual Work Plan
ICCA	Interim Capital Contributions Agreement
IFC	issued for construction
IFO	Integrated Finance Organization-Finance Project

IFP	Integrated Financial Plan
IGF	internally generated funds
IRP	Infrastructure Renewal Program
ITS	intelligent transportation systems

K

KMSRA	Keeping Metro safe, Reliable and Affordable

J

JARC	Job Access/Reverse Commute
JCC	Jurisdictional Coordinating Committee
JGB	Jackson Graham Building
JOC	Job Order Contracting Program
JV	joint venture

L

LBT	large bore tunnel
LD	liquidated damages
LNTP	limited notice to proceed
LPA	locally preferred alternative
LRT	light rail transit
LRV	light rail vehicle
LUA	last unit accepted

M

MAP-21	Moving Ahead for Progress in the 21st Century Act
MARC	Maryland Area Regional Commuter
MCC	motor control center
MDBD	mean distance between delays
MDBF	mean distance between failures
MDBS	mean distance between service interruptions
ME	month-end
MEAD	Metro Electronic Action Document
MIS	major investment study
MMFA	Metro Matters Funding Agreement
MMMS	Material Maintenance and Management System
MMP	Metro Matters Program
MMU	mobile maintenance unit
MOD	(contract) modification
MOS	minimum operable segment
MPS	master program schedule
MTA	Maryland Transit Administration

MTTR	mean time to repair
MWAA	Metropolitan Washington Airports Authority
MWCOG	Metropolitan Washington Council of Governments

N

NCPC	National Capital Planning Commission
NEPA	National Environmental Policy Act
NSP	New Starts Project
NTSB	National Transportation Safety Board
NTD	National Transit Database
NTE	not to exceed
NTI	National Transit Institute
NTP	notice to proceed

O

O&M	operating and maintenance (such as O&M costs)
OCC	Operations Control Center
ODC	other direct costs
OFS	order for services
OTP	on-time performance
OWS	oil water system

P

PCI	payment card industry
PCO	pending (or proposed) change order
PDR	preliminary design review
PE	preliminary engineering
P/I	policy instruction
PIDS	Passenger Information Display System
PLE	parking lot equipment
PM	project manager
PMI	Project Management Institute
PMO	project management oversight
PMOC	project management oversight contractor
PMP	project management plan
PPE	personal protective equipment

PQ

QA	quality assurance
QC	quality control

R

RAC	Riders' Advisory Council
RCSC	Regional Customer Service Center
RE	resident engineer
RFP	request for proposal
RFQ	request for qualifications
RMS	Records Management System
ROCS	Rail Operations Computer System
ROW	right of way
RTU	remote terminal unit

S

S&I	service and inspection
SBPO	small business programs office
SCI	substantial completion inspections
SCP	Safety Certification Program
SCWG	safety certification working group
SEP	System Expansion Program
SEIP	System Expansion and Improvement Program
SM	switch machine
SMADS	Station Monitor and Display System
SMS	Safety Measurement System
SOC	station operator's console
SOS	scope of service
SOW	scope of work
SSOA	state safety oversight agency
SSPP	System Safety Program Plan
SSPS	system safety program standards
SSWP	Site Specific Work Plan
STOV	station over-run

T

TBS	tie breaker station
TC	train control
TCR	train control room
TIFIA	Transportation Infrastructure Finance & Innovation Act
TIIF	Transportation Infrastructure Investment Fund
TIP	Transportation Improvement Program
TOC	Tristate Oversight Committee
TOD	transit oriented development
TPSG	traction power switch gear
TPSS	traction power substation

TSI	Transportation Safety Institute
TSP	transit signal priority
TUN	temporary user notice

U

UPS	uninterrupted power supply
UST	under-ground storage tank

V

VE	value engineering
VMS	Vehicle Management/Monitoring System
VRE	Virginia Railway Express

W

WBS	work breakdown structure
Metro	Washington Metropolitan Area Transit Authority
WMS	Warehouse Management System

Y

YE	year end
YOE	year of expenditure
YTD	year to date

How to Contact Metro

By mail or in person:

Washington Metropolitan Area Transit Authority
600 Fifth Street, NW
Washington, DC 20001

To reach Metro headquarters at the Jackson Graham Building, take the Red, Green or Yellow lines to Gallery Pl-Chinatown station. Use the Arena exit. Walk two blocks east on F Street to 5th Street. Or, ride Metrobus routes D1, D3, D6, P6, X2, X9, 42, 70, 71, 74, or 80.

By website:

http://www.wmata.com

By email:

csvc@wmata.com
Customer assistance

By telephone:

Metro General Information
202-962-1234
Administrative offices and general information
Weekdays: 8:30 a.m. to 5:00 p.m.

Customer Relations
202-637-1328
Suggestions, commendations, comments

Customer Information
202-637-7000 (TTY 202-638-3780)
Metrobus and rail schedules, fares, parking, Bike 'N Ride program, and more

MetroAccess
301-562-5360 (TTY 301-588-7535) or
toll free at 800-523-7009
MetroAccess Paratransit Service

Transit Police
202-962-2121