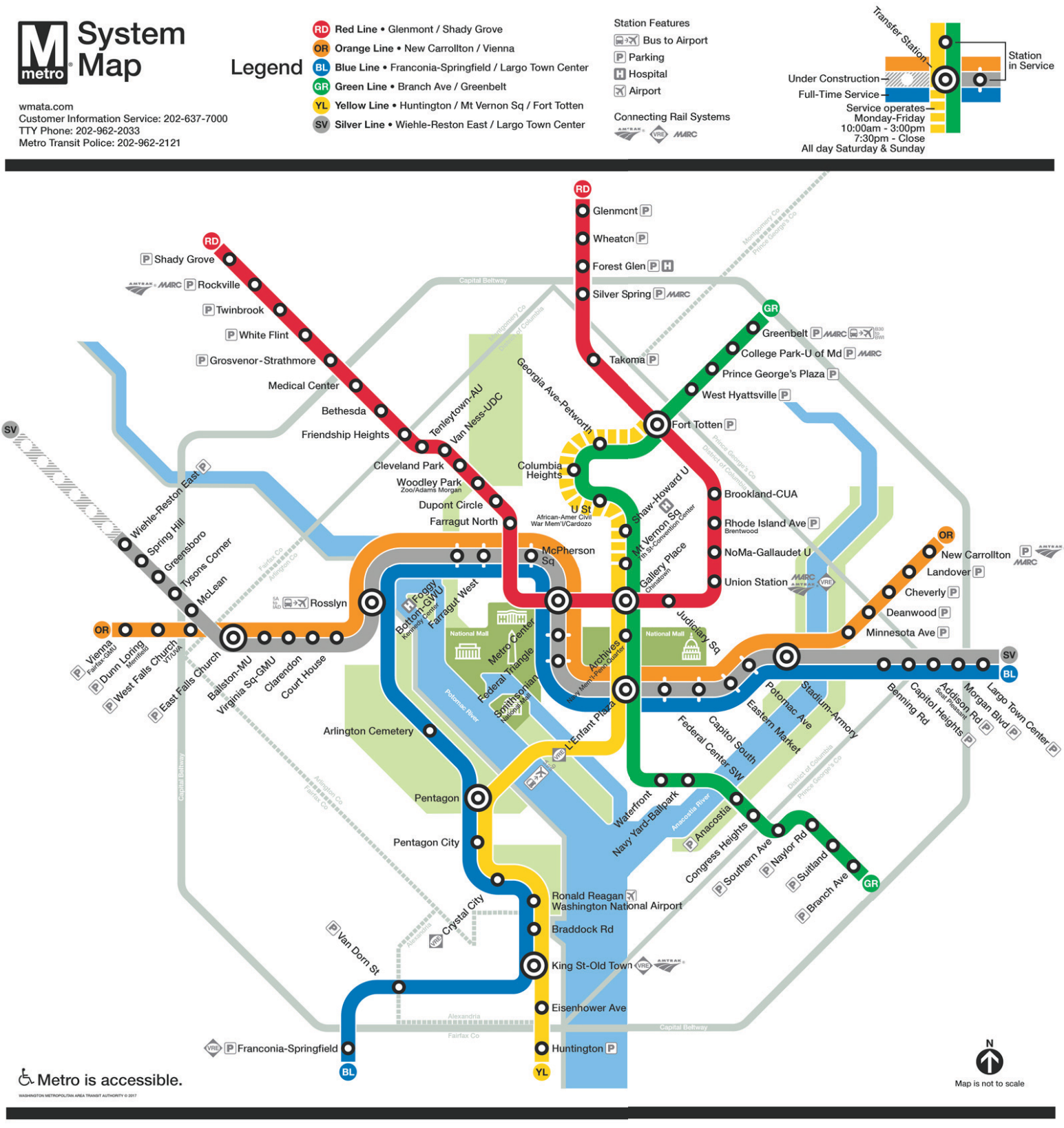
REBUILDING, REFORMING & IMPROVING REGIONAL TRANSIT

FY2019 PROPOSED 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 Proposed Budget

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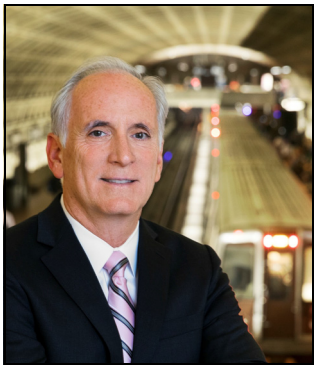
Rebuilding, Reforming, and Improving Regional Transit



Metro's 2019 proposed budget funds a safer, more reliable, and fiscally-responsible transit service for the National Capital Region, while investing in the system's safety and reliability through a robust capital program.

Importantly, the $3.2 billion budget that I have proposed does not raise fares or reduce service. The proposed budget focuses resources on customer recovery and enhanced pass options to attract more riders, capital program investment delivery to renew and preserve the system, and continued compliance and quality assurance enhancements to improve management effectiveness.

The budget proposes $1.3 billion of capital investment in FY2019 and $8.5 billion over six years to strengthen the safety, reliability and state of good repair of Metro's infrastructure. In the coming year, these investments include:

- Continued delivery of 7000-series railcars to replace older, less reliable trains;
- New buses and paratransit vehicles; and
- Additional improvements or maintenance for tracks, stations, rail power, and radio and wireless systems.

To pay for the increased capital investments in system safety and reliability improvements, the proposed budget calls for increased funding from our local government partners. Metro's proposed FY2019 to FY2024 capital program assumes that the federal Passenger Rail Investment and Improvement Act (PRIIA) funding ends after FY2020 and federal formula funding programs remain at current levels. Without PRIIA reauthorization and a dedicated regional revenue source, annual jurisdictional capital contributions to Metro will total $6.3 billion over the next six years - $4 billion more than the $2 billion contributed through the FY2011 to FY2016 Capital Funding Agreement.

Clearly, the region cannot continue on this path, because it is not sustainable. That is why Metro's government partners must find a more reliable and predictable revenue source that will be dedicated to Metro's capital requirements. In April 2017, I announced a plan to Keep Metro Safe, Reliable and Affordable. The plan calls for 10 actions to restore the system to a state of good repair and establish long-term financial sustainability including a multi-year, inflation-adjusted stable revenue source generating $500 million per year to a Capital Trust Fund, which would provide reliable funding for Metro's 10-year, $15.5 billion capital investment need.

While the region has not yet acted on a dedicated revenue source for Metro, this budget proposal is faithful to other elements of the plan to reduce costs through management actions and competitive contracting that limit the growth of jurisdictional operating subsidy for Metro to three percent, or $29 million in FY2019. This is substantially less than the 16 percent subsidy increase in FY2018. Initiatives that are not funded in my proposal include extending all Red Line trains to Shady Grove, additional staffing for Silver Line phase 2 service, new bus service, or wage increases for the workforce, which may later be imposed through arbitration.

The Metro system is a $40 billion asset that continues to enhance mobility, relieve traffic congestion, improve air quality and drive economic development in the region. However, at more than 40 years old, customers are feeling the effects of an aging system and decades of deferred maintenance. Metro is improving, but Metro cannot deliver on this transformation alone. I look forward to working with Metro's employees, our customers, the Board of Directors, and our regional partners to continue rebuilding, reforming and improving transit in this region.

Paul J. Wiedefeld

General Manager and Chief Executive Officer

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.

Keturah D. Harley, First Vice Chair

Appointed to the Board as a Principal Director in April 2015 representing the State of Maryland. Ms. Harley has worked in the Federal Government as an Appellate Litigation Attorney at the U.S. Department of Veterans Affairs and with the District of Columbia Public Employee Relations Board (PERB), where she served as General Counsel and Executive Director (Acting).

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.

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.

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.

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.

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.

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.

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.

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.

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).

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).

Jeff Marootian

Appointed to the Board as a 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.

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.

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.

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.

GOVERNMENT FINANCE OFFICERS ASSOCIATION

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Washington Metropolitan Area Transit Authority

District of Columbia

For the Fiscal Year Beginning

July 1, 2016

Executive Director

Chapter 1 - Introduction

Metro Profile

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 1,100 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.

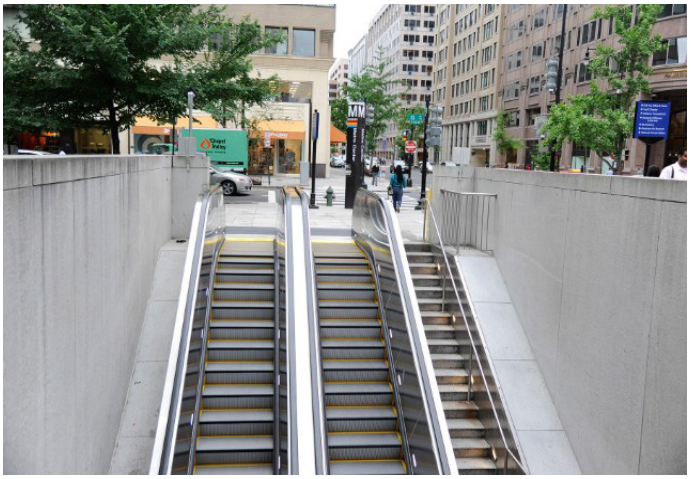
The first Metrorail line opened was the Red Line consisting of 4.6 miles from Farragut North to Rhode Island Avenue. By July 1977, the Blue and Orange Lines were added with service between National Airport and the Stadium-Armory. This added 11.8 miles and 17 new stations to Metro's rail operation. With 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 the 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 proposed 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 proposed 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 proposed FY2019 budget reflects declining ridership and revenue assumptions based on the current ridership realities forecasted for 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, will require 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 proposed operating budget for FY2019 is $1.9 billion. The budget is funded with $828 million of projected operating revenues, primarily from passenger fares, parking fees, and advertising revenues, and $1,009 million of jurisdictional contributions. The budget assumes no fare increases, no service reductions, $38 million of management actions to reduce expenses and increase business revenues, and a $29 million increase in jurisdictional subsidy.

Metro's primary FY2019 budget challenge is declining passenger revenue as ridership continues to decrease. Bus and rail ridership and revenue through the first quarter of FY2018 were below budget, and this trend is projected to continue throughout the fiscal year. Total estimated ridership in FY2019 for rail and bus is four percent below the FY2018 budget, and FY2019 rail and bus revenues are projected to be $25 million below FY2018.

While Metro estimates that some of the riders who reduced their trips on Metro due to SafeTrack will return, 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 ridership, but below the FY2018 budget.

Metrobus is not experiencing the same stabilization. Consistent with regional and national trends, bus ridership in FY2018 is projected to be below both last year's actual performance and the FY2018 budget. Further, Metrobus FY2018 revenue is lower than estimated. Therefore, the FY2019 revenue projection 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 million in base cost reductions, $5 million in overtime cost controls, and an $8 million increase in non-transit revenues.

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 proposed FY2019 budget assumes headcount will remain flat to FY2018, at 12,232 positions.

The budget also 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.

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 by the following factors:

- $11 million increase in paratransit and contract cost inflation
- $7 million increase in energy largely due to the impact of the 7000 series railcars
- $4 million increase in materials and supplies including 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 (and in the absence of a dedicated revenue source for Metro's capital needs and reauthorization of PRIIA funding) $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.

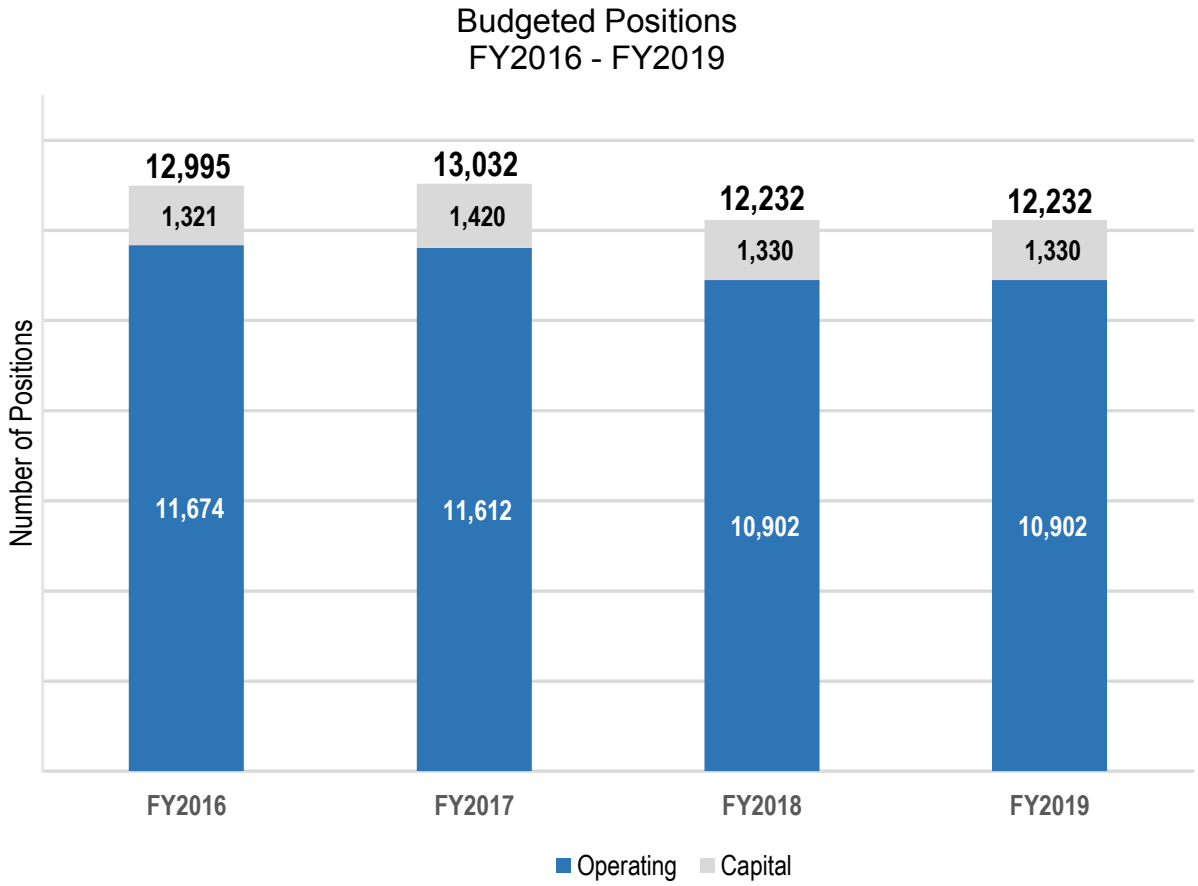
Successful applicants are notified of their status by the following May and are expected to be prepared to commence work on or about July 1 of the new fiscal year. The EOC maintains a dashboard of funded D&E elements and monitors progress such that D&E initiatives may roll into the Capital Improvement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

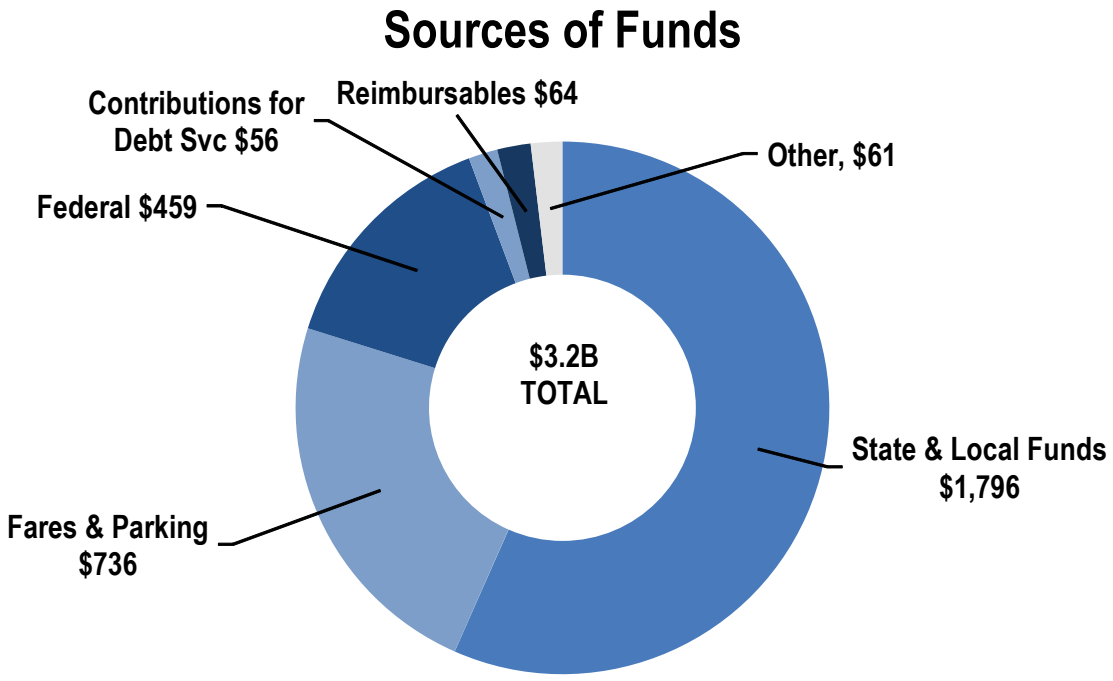
The number of positions for FY2019 is 12,232, consisting of 10,902 operating budget positions and 1,330 capital budget positions.



Summary of Funds by Source

(Dollars in Thousands)	FY2018 Budget	FY2019 Proposed	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%**

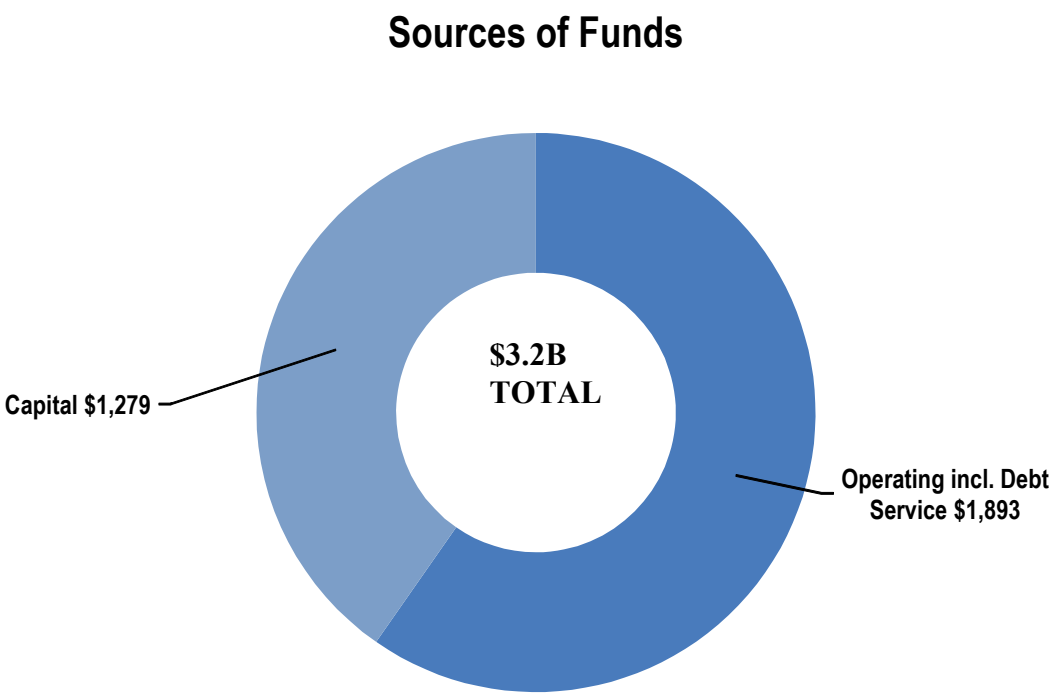
* Metro is required to have a balanced budget, i.e. projected funding equals planned expense. To the extent that prior year funding remains available and is planned to be used in the current fiscal year, it is included therein. Annual operating and capital budget expires at the conclusion of each fiscal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



Summary of Expenditures by Program

(Dollars in Thousands)	FY2018 Budget	FY2019 Proposed	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 Reimbursables Capital Projects



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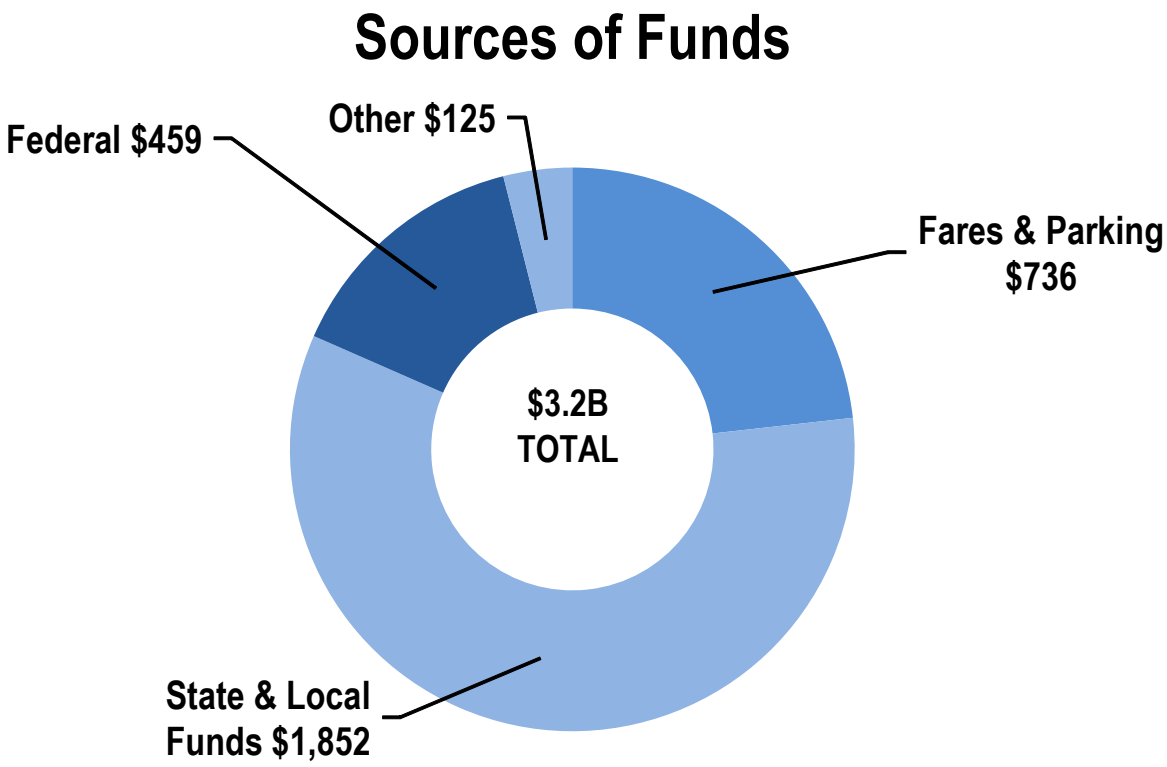
Chapter 2 - Budget Summary

Proposed FY2019 Budget

Metro's proposed 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 funding, including advertising, joint development, fiber optic revenues, and other sources totaling $60.5 million



Operating Revenue

Metro's total proposed 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.

Due to declining ridership primarily on Metrobus, passenger revenue estimates (including transit fares and parking fees) are $19.1 million lower than FY2018 budget. This is partially offset by increased advertising revenue and reimbursable project funds of $2.4 million.

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 proposed budget primarily consisting of the DC Circulator program, which is budgeted at $24.0 million for FY2019.

Operating Revenue

(Dollars in Millions)	Actual 2016	Actual 2017	Budget 2018	Proposed 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, bicycle lockers, 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 proposed budget uses 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 is 110.9 million, a decline of 6.1 million or 5.2 percent million or 13.7 percent compared to FY2018 budget. 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 joint programs with Maryland and the District of Columbia to shift certain trips to less expensive alternative 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.

Ridership by Service

(Trips in Thousands)[1]	Actual 2016	Actual 2017	Budget 2018	Projected 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. Unlinked trips are total boardings, while linked trips are total number of complete trips from origin to destination, including transfers.

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.

Metrorail

Metrorail passenger fare revenue for the proposed FY2019 budget (including fares related to the DC student subsidy program) is projected at $542.0 million, a decrease of $0.8 million or 0.1 percent from FY2018 budget. Through FY2018, ridership on Metrorail is expected to be slightly lower than FY2017. The FY2019 budget reflects a projected leveling out of 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 shut-down 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 have 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 with minimal declines, with small growth in weekday ridership 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 forecasted to increase significantly 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).

Since 2015, the District of Columbia has subsidized student fares on rail and bus. Under the "Kids Ride Free" program, students can take unlimited trips on Metrorail (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, rather than students using unpaid swing-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 proposed 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, and was trending further down in FY2017, ending the year with lower ridership than 2005. Ridership for FY2018 is projected to decrease further, with the decline stabilizing 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, road work and other factors are contributing to this trend.
- Metrobus fares increased in FY2018 from $1.75 to $2.00 per trip, which is well within the range for bus fares at peer transit agencies across the country. Due to the price sensitivity of bus customers, it appears to be having a greater negative impact on 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 riders 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 ¼ 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 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, a portion of these route changes will commence in January FY2018 and the remaining in FY2019.

The Authority will also initiate a study to overhaul its 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 60 percent of MetroAccess trips are provided in Montgomery and Prince George's counties in Maryland, with another 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 alternative 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 alternative on-demand mode of transportation with greater flexibility than MetroAccess.

Parking

Total parking revenue for the proposed 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; accordingly, in FY2017, parking utilization was greatly impacted by SafeTrack. While utilization in FY2018 is forecasted to improve slightly, it is estimated to be below budget at year-end, with a decrease in revenue of $1 million. In FY2019, parking revenue is projected to remain flat with limited growth.

In July 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, would generate an estimated $6 million in additional revenue over the fiscal year. 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 being conducted in FY2018.
- 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.
- Hold a compact public hearing to expand the non-Metro user parking fee program for special events. Special events would 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 have been 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.
- Customers can choose to add unlimited bus trips to their pass for a fee (currently available for limited price points).
- 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. In addition, Metrorail users have 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 for free.
- *University Pass:* Metro is working in cooperation with universities in the region to offer the University Pass (or U-Pass) to students. The University Pass offers unlimited riding privileges at substantially discounted rates to full-time students at accredited colleges.

  University students represent an untapped partnership, with 20 colleges and approximately 225,000 students in the region who can drive additional ridership and revenue for Metro. The University Pass program requires 100 percent student participation, and each student receives a semester or annual pass that offers unlimited rides on Metrobus and Metrorail. The incremental ridership and revenue from the University Pass will vary depending on the particular campuses that choose to participate.

  As of FY2018, the University Pass (U- Pass) was rolled out to American University and the regional campus of Carnegie Mellon University.

Non-Passenger Revenue

Advertising

Total advertising revenue in FY2019 is projected at $26.0 million, an increase of $2.0 million over the FY2018 budget. The inventory of digital advertising is expanding and Metro is working to further enhance advertising opportunities. 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 also 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, cellular telephone agreements, employee parking, bike locker fees, antenna revenue and property disposal. These combined miscellaneous revenue sources are expected to contribute $9.2 million to FY2019 non-passenger 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	Budget FY2018	Proposed 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	17,420	1,340
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**	**$160,635**	**($21,743)**
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	8,580	660
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**	**$626,169**	**$4,045**
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 by Category					
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 Proposed Operating Subsidy and Debt Service Contributions

The FY2019 proposed 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, a limited 163.7% increase over FY2018. This increase is the result of the issuance of the Series 2017B bonds. Additional information about Debt Service is included in Appendix - F of this publication.

Jurisdictional Paid Operating Subsidy

(Dollars in Millions)	Budget 2016	Budget 2017	Budget 2018	Proposed 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%**

FY2019 Proposed 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	$426,559,569	$180,853,856	$61,284,926	$74,846,421	$18,616,811	$32,352,711	$633,604	$56,388,143	$1,583,098
Non-Regional Bus Subsidy	$64,471,513	$26,990,684	$7,503,606	$20,354,789	$3,403,628	$1,722,967	—	$4,495,840	—
Subtotal	**$491,031,083**	**$207,844,540**	**$68,788,532**	**$95,201,210**	**$22,020,440**	**$34,075,678**	**$633,604**	**$60,883,983**	**$1,583,098**
Percent of Total	100.0%	42.3%	14.0%	19.4%	4.5%	6.9%	0.1%	12.4%	0.3%
Metrorail Operating Subsidy									
Base Allocation	$388,756,565	$133,718,077	$70,856,302	$63,795,342	$18,760,658	$37,685,106	$1,220,245	$61,720,073	$1,000,762
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	**$396,732,997**	**$134,570,778**	**$73,970,858**	**$65,230,425**	**$19,085,818**	**$37,908,548**	**$1,284,680**	**$63,650,683**	**$1,031,207**
Percent of Total	100.0%	33.9%	18.6%	16.4%	4.8%	9.6%	0.3%	16.0%	0.3%
MetroAccess Operating Subsidy									
MetroAccess Operating Subsidy	$121,167,266	$27,304,607	$24,979,079	$51,806,156	$993,308	$806,424	$298,943	$14,861,359	$117,390
Subtotal	**$121,167,265**	**$27,304,607**	**$24,979,079**	**$51,806,156**	**$993,308**	**$806,424**	**$298,943**	**$14,861,359**	**$117,390**
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**	**$369,719,924**	**$167,738,469**	**$212,237,790**	**$42,099,566**	**$72,790,649**	**$2,217,227**	**$139,396,025**	**$2,731,695**
Percent of Total	100.0%	36.6%	16.6%	21.0%	4.2%	7.2%	0.2%	13.8%	0.3%
Debt Service									
Metro Matters Debt Service	$20,080,228	$10,117,021	$4,699,175	$5,211,823	—	—	—	—	$52,209
Series 2017B Debt Service	$35,795,000	$13,676,661	$7,213,337	$7,285,285	$1,773,356	—	$111,358	$5,608,396	$126,607
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**	**$393,513,606**	**$179,650,981**	**$224,734,898**	**$43,872,922**	**$72,790,649**	**$2,328,585**	**$145,004,421**	**$2,910,510**

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 $6.3 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 $87.6 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	$304.9	$304.9	$304.9	$304.9	$304.9	$304.9	$1,829.4
Federal PRIIA	148.5	148.5	0.0	0.0	0.0	0.0	297.0
Other Federal Grants	5.9	3.6	4.1	4.4	4.0	4.0	26.1
Subtotal Federal	**459.3**	**457.0**	**309.0**	**309.3**	**308.9**	**308.9**	**2,152.5**
Match to Federal Formula	76.2	76.2	76.2	76.2	76.2	76.2	457.4
System Performance	560.8	608.2	960.7	1,104.1	1,134.3	1,162.1	5,530.2
State and Local PRIIA	148.5	148.5	0.0	0.0	0.0	0.0	297.0
Other State and Local	1.5	0.9	1.0	1.1	0.7	0.0	5.2
Subtotal State and Local	**787.0**	**833.8**	**1,037.9**	**1,181.4**	**1,211.2**	**1,238.3**	**6,289.8**
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**	**$838.8**	**$1,040.9**	**$1,184.4**	**$1,214.2**	**$1,241.3**	**$6,312.0**
MWAA	27.5	4.2	25.2	6.5	1.9	0.0	65.3
Total	**$1,279.1**	**$1,300.0**	**$1,375.2**	**$1,500.3**	**$1,525.0**	**$1,550.2**	**$8,529.8**
Grand Total	**$1,279.1**	**$1,300.0**	**$1,375.2**	**$1,500.3**	**$1,525.0**	**$1,550.2**	**$8,529.8**

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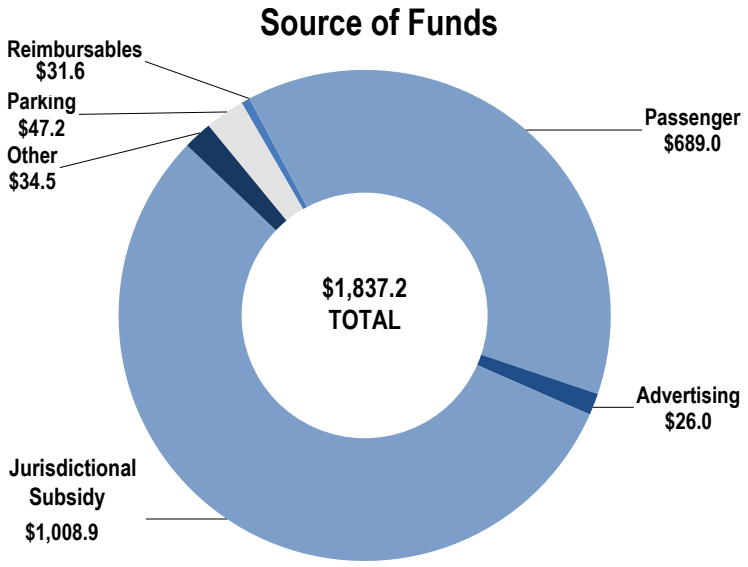
Chapter 3 - Operating Budget

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.

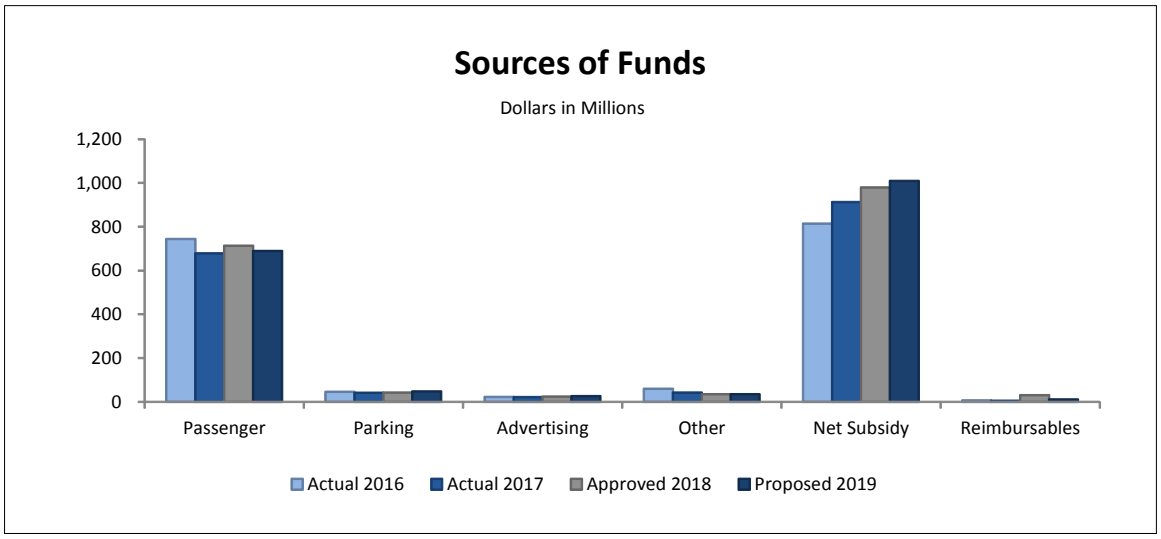
Sources of Funds

- The largest source of funding is jurisdictional 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.



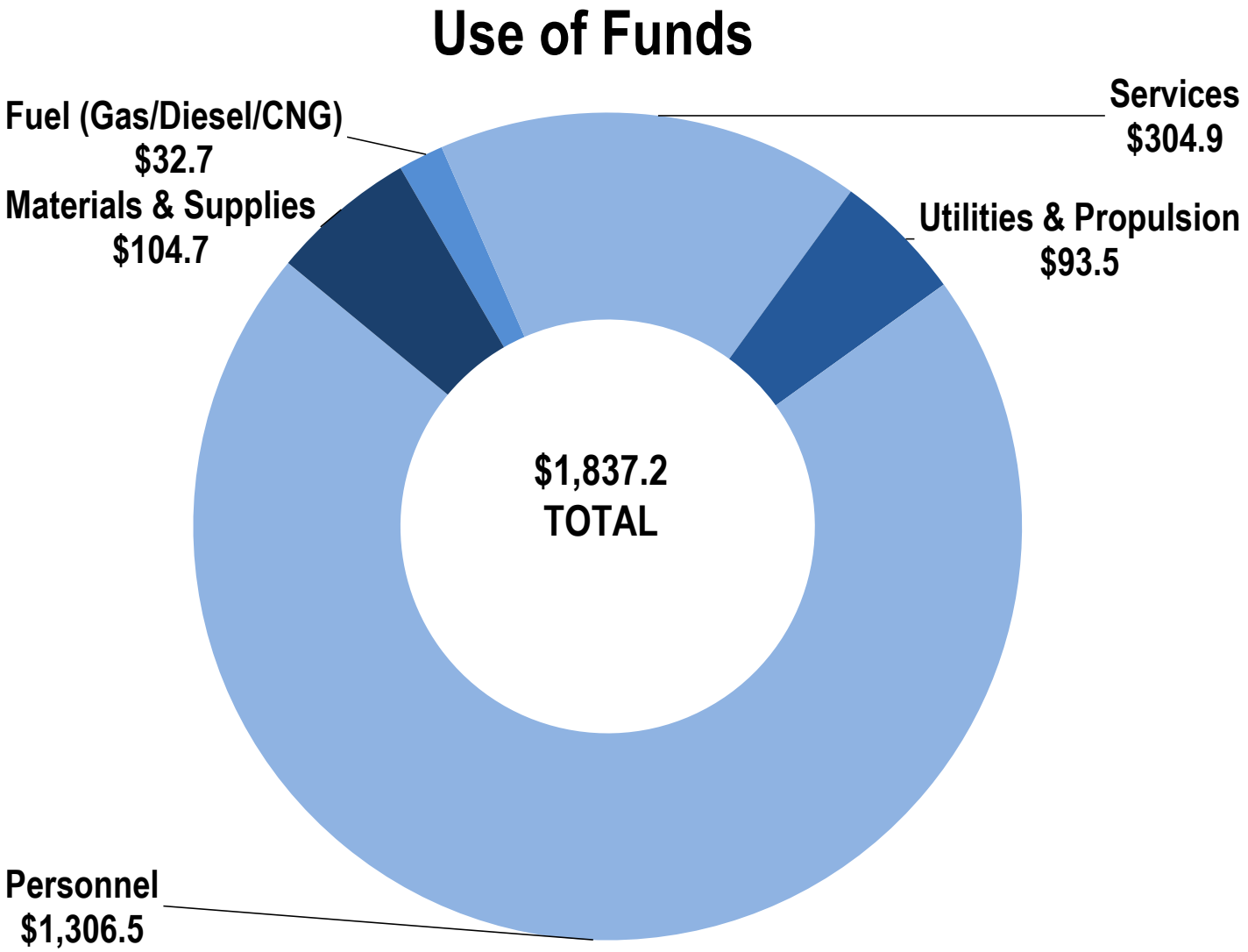
FY2016-FY2019

Jurisdictional subsidy increased by $134.2 million from FY2017 to FY2018 and is projected to increase by $29.4 million or 3.0 percent from FY2018 to FY2019.



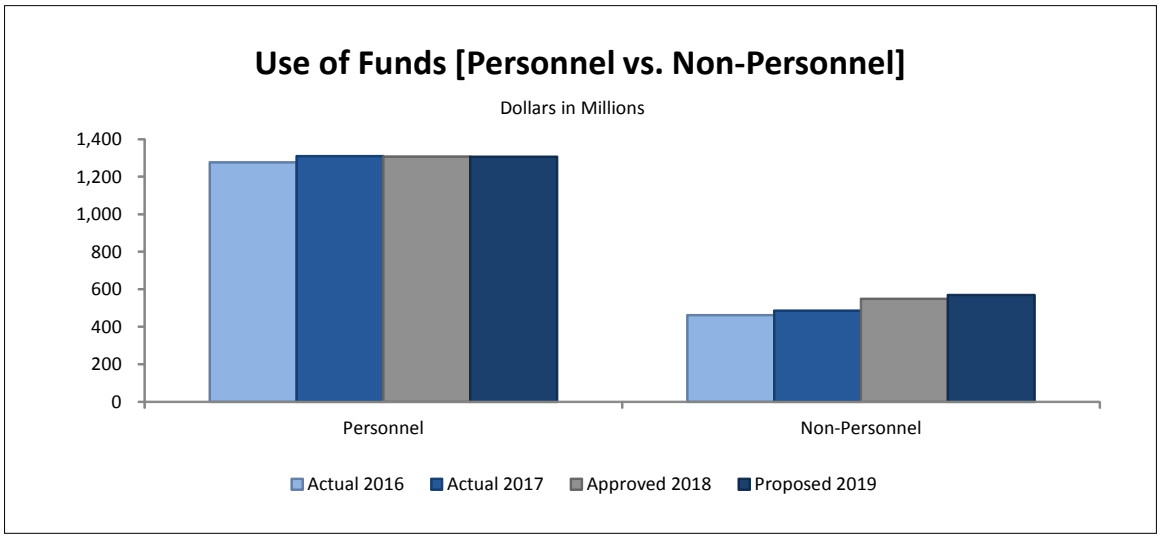
Uses of Funds

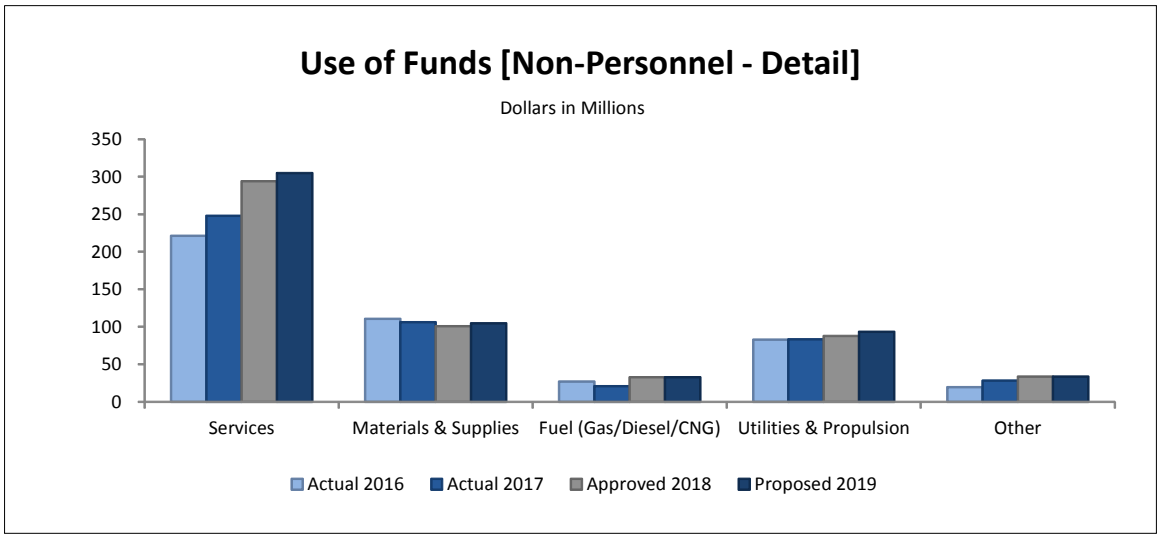
- Personnel expenses are the largest operating expense category, at $1.3 billion or 71.1 percent, followed by Services at $304.9 million or 16.6 percent.
- Service expenses consists primarily of professional and technical, contract maintenance, and temporary labor services. The largest service expense is for paratransit, which is projected to be $109.2 million in FY2019.
- Materials and Supplies budget consists primarily of parts for maintenance of buses and railcars, track and structures, elevators and escalators, and for non-revenue vehicles.
- Metro's energy budget (fuel, utilities and propulsion) consists of propulsion usage by the Metrorail system, diesel, compressed natural gas (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, a decrease of $1.4 million or 0.1 percent below 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 escalations in health care and pension plan expenses for inflationary costs.
- The proposed budget does not include funding for wage increases for FY2019 or prior years, with the outcome of collective bargaining as a substantial risk in the proposed budget.
- FY2019 services budget is $304.9 million, an increase of $11.0 million, or 3.7 percent over FY2018. This increase is driven by higher paratransit costs resulting from contract cost escalations from 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 of the new 7000 series railcars.





Operating Budget

Revenue and Expenses

(Dollars in Thousands)	Actual FY2016	Actual FY2017	Budget FY2018	Proposed 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
Total Revenues	**$899,916**	**$811,105**	**$845,000**	**$828,311**	**($16,688)**
Expenses					
Personnel	$1,276,891	$1,226,205	$1,307,859	$1,306,479	($1,380)
Services	221,230	247,986	293,871	304,858	10,987
Materials & Supplies	110,671	106,253	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	3,817	5,046	4,431	(615)
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**	**$860,502**	**$979,545**	**$1,008,931**	**$29,386**
Cost Recovery Ratio	51.6%	48.5%	46.3%	43.9%	-2.4%

Operating Expense Budget

Authority Wide

(Dollars in Thousands)	Actual 2016	Actual 2017	Budget 2018	Proposed 2019	$ Variance	% Change
Salaries	$276,059	$291,060	$298,797	$322,861	$24,064	8%
Wages	$509,102	$462,266	$504,832	$478,578	($26,253)	-5%
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	182,969	(1,339)	
Fringe Pension	(1)	172,166	140,904	144,019	3,115	
Other Fringe Benefits	391,527	(13,263)	71,886	75,673	3,787	
Workman Compensation	22,507	20,902	25,730	26,396	666	
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	92,478	26,904	
Temporary Help	2,852	3,942	2,274	2,835	561	
Contract Maintenance	61,559	67,738	82,388	61,560	(20,828)	
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)**	**($42,679)**	**($7,232)**	**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**	**$530,764**	**$14,078**	**3%**
Total Cost	**$1,744,708**	**$1,671,607**	**$1,824,545**	**$1,837,243**	**$12,698**	**1%**

Operating Budget

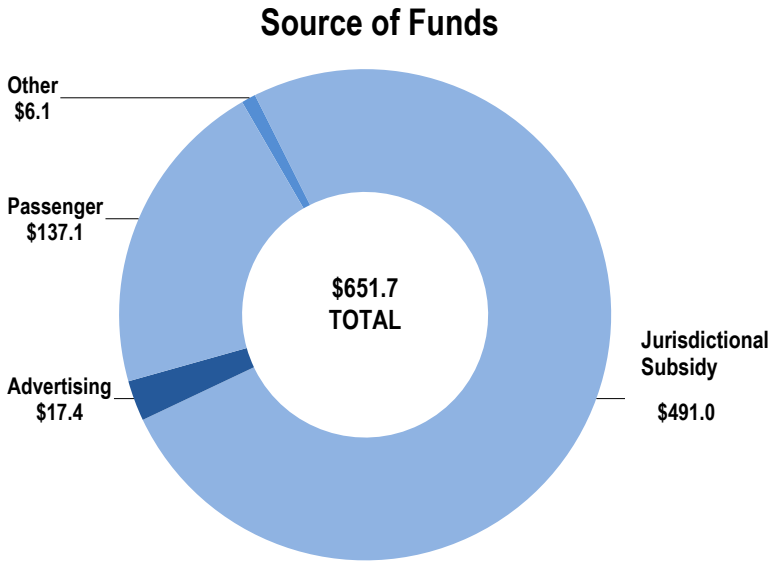
Expenses

(Dollars in Thousands)	Proposed FY2019	BUS FY2019	RAIL FY2019	ACCESS FY2019	Reimbursables FY2019
Salaries	$322,861	$97,945	$214,753	$5,995	$4,168
Wages	$478,578	$223,811	$254,437	$331	$0
Overtime	$75,985	$31,352	$43,606	$23	$1,003
Total Salaries and Wages	**$877,423**	**$353,108**	**$512,796**	**$6,349**	**$5,171**
Fringes	**$429,056**	**$169,416**	**$254,554**	**$3,163**	**$1,923**
Fringe Health	182,969	71,969	108,864	1,346	790
Fringe Pension	144,019	56,649	85,689	1,059	622
Other Fringe Benefits	75,673	30,415	44,296	564	397
Workman Compensation	26,396	10,383	15,705	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	92,478	17,799	48,710	3,660	22,308
Temporary Help	2,835	845	1,935	55	0
Contract Maintenance	61,560	22,193	38,908	459	0
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)**	**($28,527)**	**($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

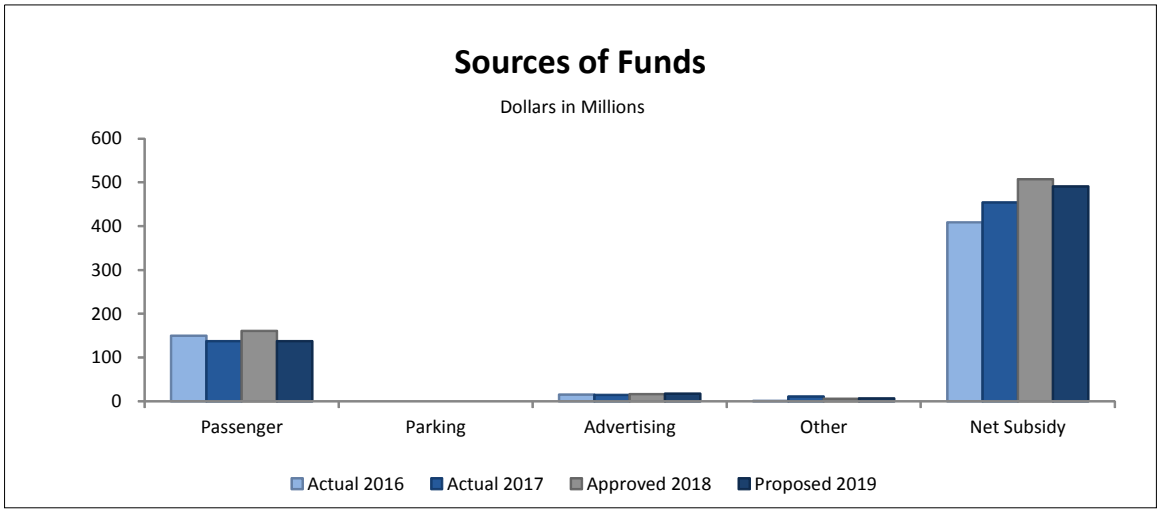
Sources of Funds

- Metrobus sources of funds consist of passenger fares and advertising revenues and subsidy from Metro's jurisdictional partners.
- Total Metrobus revenue in FY2019 is projected at $160.6 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 FY2018 budget. This projected decrease reflects lower ridership performance experienced through the first quarter of FY2018.
- Metrobus is projected to receive advertising revenue of $17.4 million. This amount represents an increase of $1.3 million or 8.3 percent over the FY2018 budget primarily due to an increase in digital advertising inventory.
- Other revenue, which includes lease revenue, third-party reimbursements, and other miscellaneous sources, will contribute $6.1 million in FY2019.



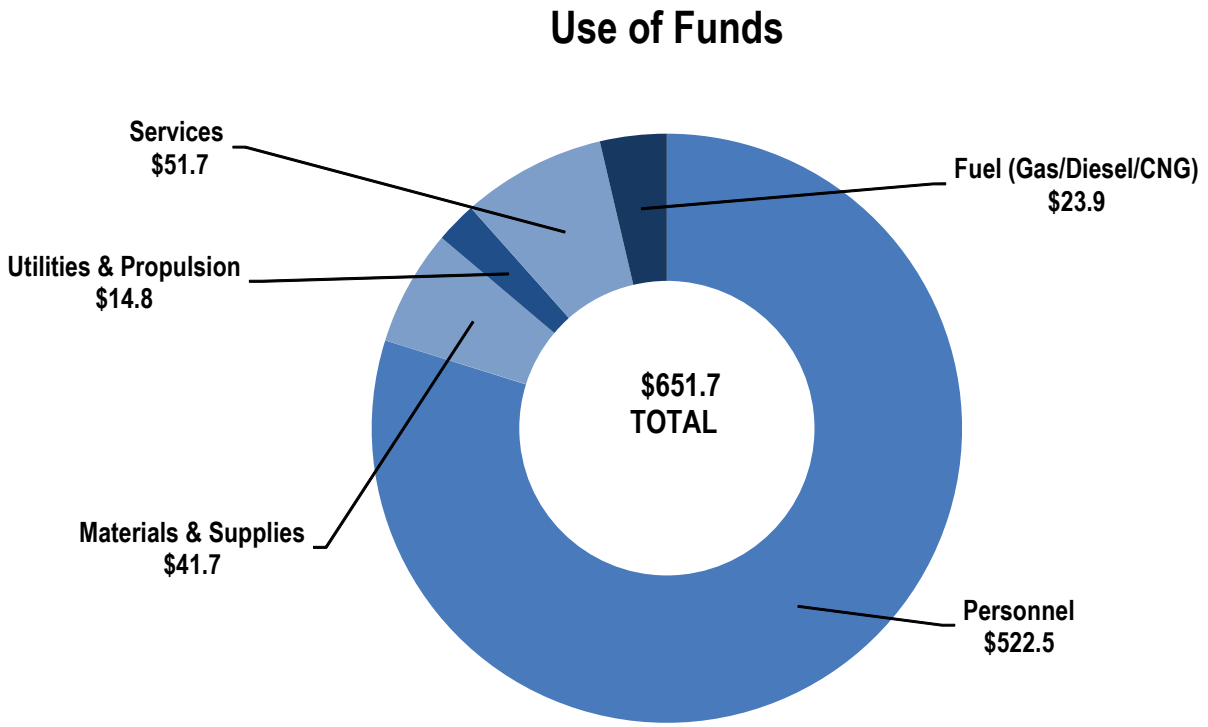
FY2016 - FY2019

Jurisdictional subsidy for Metrobus is budgeted to decrease by $16.4 million or 3.2 percent to $491.0 million from FY2018 to FY2019. Metrobus subsidy is 48.7 percent of the total FY2019 Metro operating subsidy.



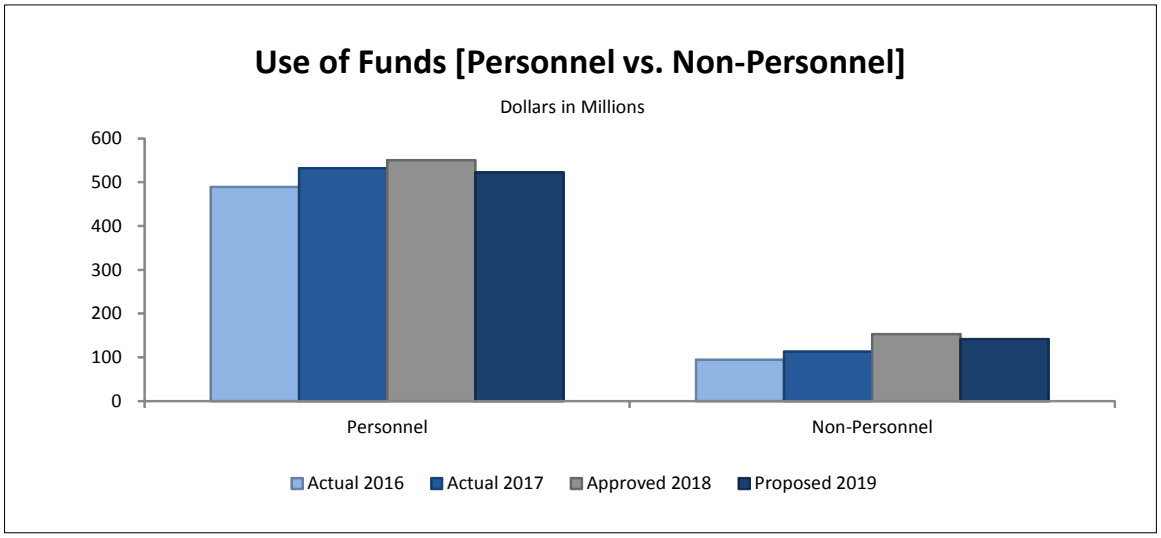
Uses of Funds

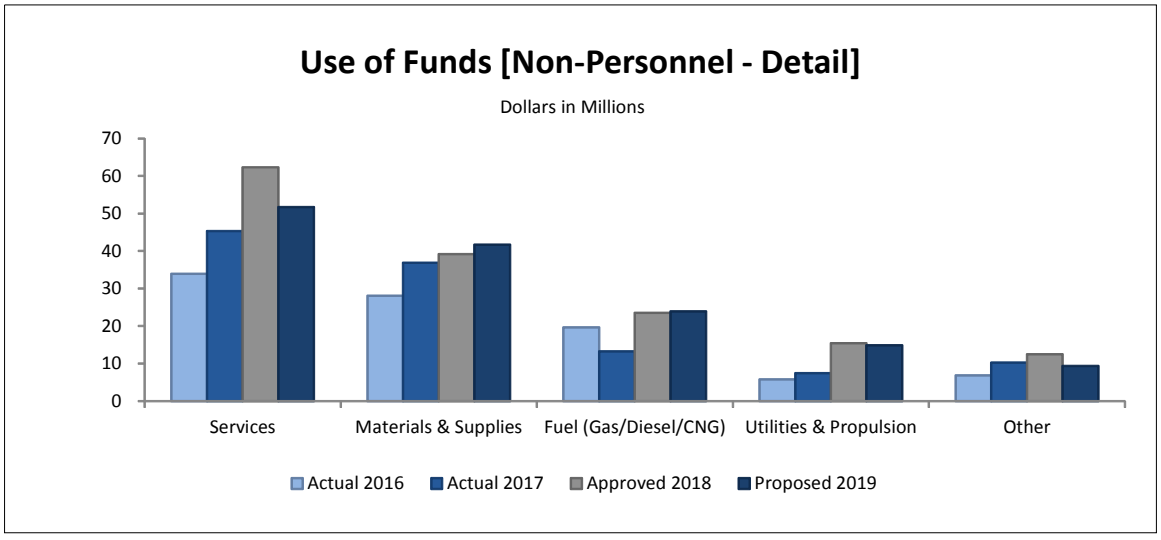
- Personnel expenses are the largest portion of Metrobus budget. For FY2019, personnel cost is estimated at $522.5 million or 80.2 percent of Metrobus budget, which represents a decrease of $27.7 million from FY2018 budget. This decrease is primarily due to changes in Metro's overhead expense allocation methodology. This change from a cost-based to an activity-based model. This will result in a lower indirect expense allocation for Metrobus (and higher indirect expense allocation for Metrorail).
- Services are budgeted at $51.7 million, which is $10.6 million lower than FY2018 budget. The decrease is due to changes in Metro's overhead expense allocation methodology, resulting in a lower indirect expense allocation for Metrobus (and higher indirect expense allocation for Metrorail), offset slightly for increases due to inflation.
- Materials and Supplies are budgeted at $41.7 million, which is $2.5 million higher than FY2018 budget 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 FY2018 budget due to fuel price inflation.
- Other expenses for Metrobus are budgeted at $11.8 million in FY2019. This represents a decrease of $2.7 million compared to FY2018 budget due to changes in Metro's overhead expense allocation methodology, which resulted in a lower indirect expense allocation for Metrobus (and higher indirect expense allocation for Metrorail).



FY2016 - FY2019

- Actual personnel 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 changes in Metro's indirect expense allocations, with Metrobus accounting for a lower share of indirect costs (due to the shift to an activity based model), as well as to 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 is due to changes in Metro's overhead expense allocation methodology which migrated from a cost-based to a more precise activity-based allocation model. The activity-based model increased Metrorail's share of indirect costs and decreased Metrobus' share as compared to the former cost-based model.
- 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 attributable to the higher prices for parts for the newer vehicles.
- Energy costs for fuel decreased by $6.4 million or 32.6 percent from FY2016 to FY2017 due to lower rates, and are projected to increase by $0.4 million or 1.6 percent from FY2018 to FY2019 primarily due to fuel price inflation.
- Other expenses decreased by $2.7 million from FY2018 to FY2019 due to the changes in Metro's overhead expense allocation methodology, taking it from a cost-based to an activity-based model, and reducing the Metrobus share of indirect expenses.





Metrobus

Revenue and Expenses

(Dollars in Thousands)	Actual FY2016	Actual FY2017	Budget FY2018	Proposed 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	17,420	1,340
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**	**$160,635**	**($21,743)**
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**	**$491,031**	**($16,390)**
Cost Recovery Ratio	28.4%	27.1%	26.4%	24.6%	-1.8%

Operating Expense Budget

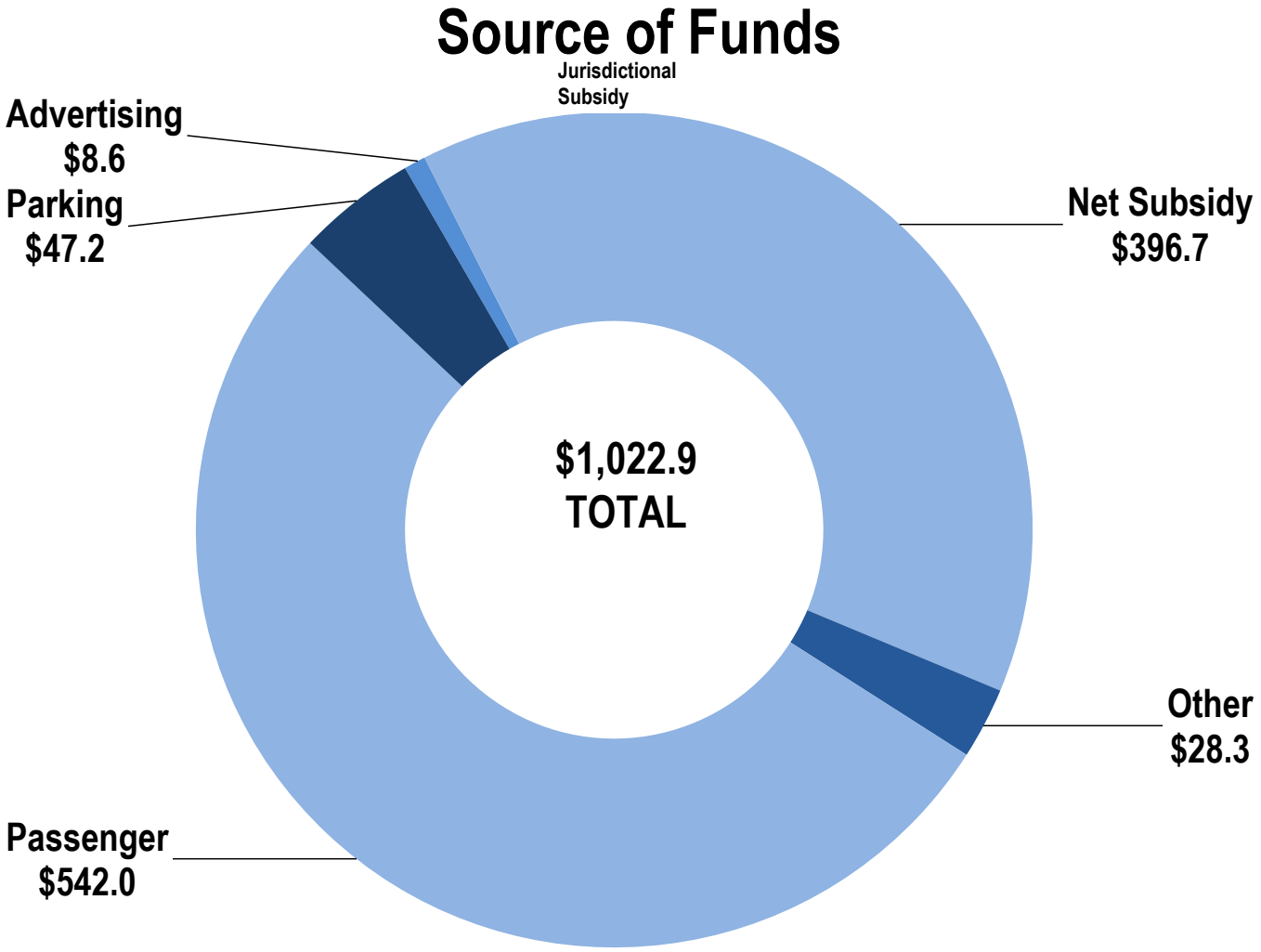
Metrobus

(Dollars in Thousands)	Actual 2016	Actual 2017	Budget 2018	Proposed 2019	$ Variance	% Change
Salaries	**$74,559**	**$92,713**	**$102,432**	**$97,945**	**($4,487)**	**-4%**
Wages	**$225,109**	**$212,878**	**$235,126**	**$223,811**	**($11,315)**	**-5%**
Overtime	**$31,466**	**$36,228**	**$33,527**	**$31,352**	**($2,175)**	**-6%**
Total Salaries and Wages	**$331,134**	**$341,819**	**$371,085**	**$353,108**	**($17,977)**	**-5%**
Fringes	**$158,003**	**$163,135**	**$179,166**	**$169,416**	**($9,749)**	**-5%**
Fringe Health	(67)	70,573	78,054	71,969	(6,085)	
Fringe Pension	(1)	58,607	59,674	56,649	(3,026)	
Other Fringe Benefits	149,339	25,955	30,540	30,415	(125)	
Workman Compensation	8,732	8,000	10,897	10,383	(514)	
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

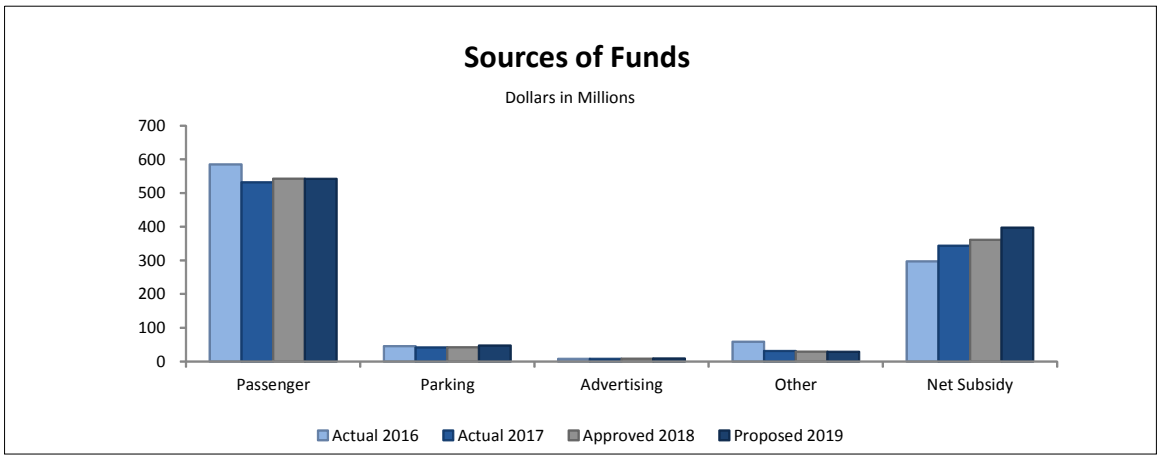
Sources of Funds

- Metrorail sources of funds consist of passenger fares and parking fees, advertising and lease revenues, as well as subsidy from Metro's jurisdictional partners.
- Total Metrorail revenue in FY2019 is projected at $626.2 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. The impact of this decrease on revenue is lessened by a higher average fare per trip. Ridership is expected to stabilize in FY2019, though service reliability and impacts related to the rail system preventive maintenance program continue to be a factors influencing ridership.
- Parking revenue at Metrorail facilities are projected to 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 of parking space licenses for non-transit users.
- Advertising revenue applied to Metrorail is projected to generate $8.6 million in FY2019. This amount is $0.7 million higher than the FY2018 budget due to Metro's plan to expand digital advertising to above ground stations.
- Other revenue, which includes joint development, fiber optics, and other miscellaneous revenue sources, is projected to contribute $28.3 million in FY2019.



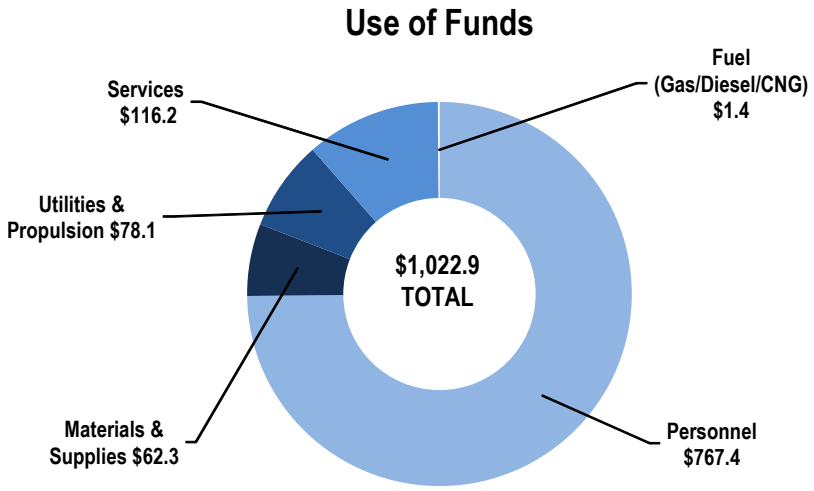
FY2016 - FY2019

Metrorail passenger fare revenue, the main source of revenue, is projected at $542.0 million in FY2019. The jurisdictional subsidy for FY2019 is $396.7 million, an increase of $35.4 million from the FY2018 budget. Metrorail subsidy is 39.3 percent of total FY2019 Metro's operating subsidy.



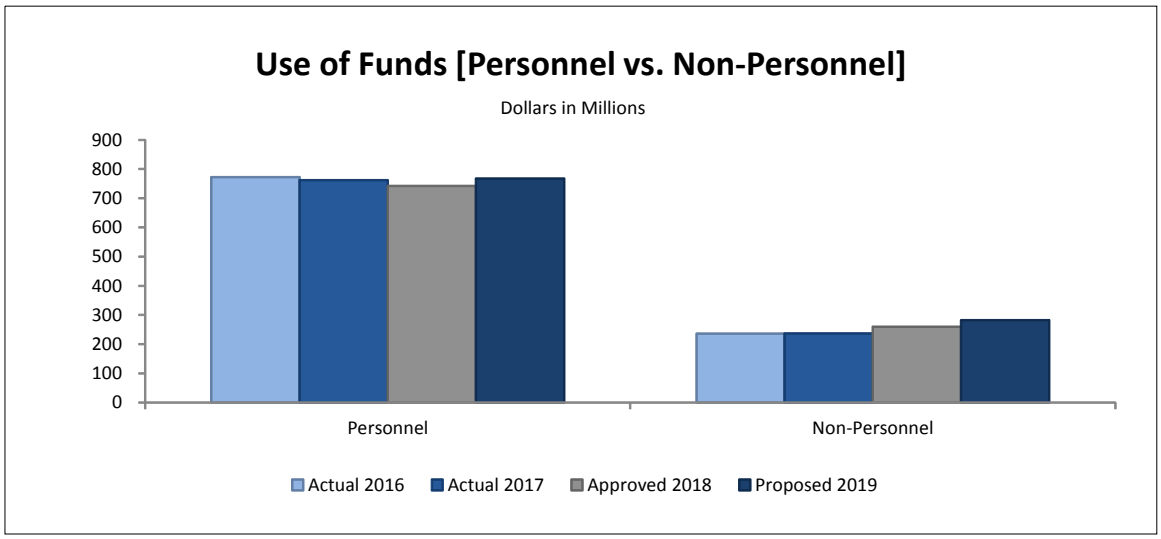
Uses of Funds

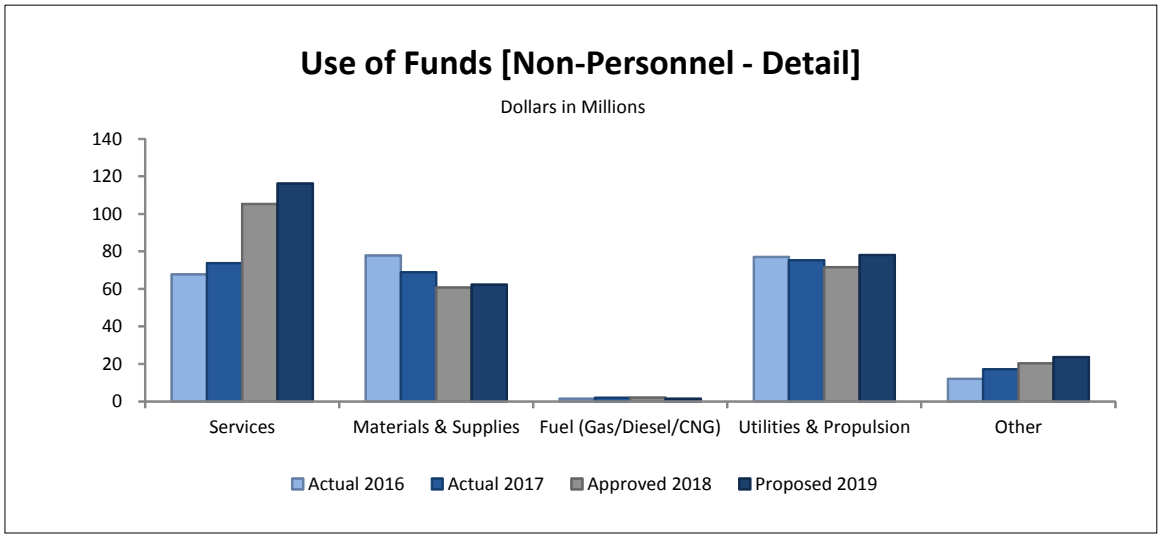
- Personnel expenses are the largest portion of FY2019 Metrorail budget. Personnel costs are estimated at $767.4 million, or 75.0 percent of the Metrorail budget, representing an increase of $25.4 million from FY2018 budget. The increase is due to changes in Metro's overhead expense allocation methodology which migrated from a cost-based to a more precise activity-based allocation model. The activity-based model increased Metrorail's share of indirect costs and decreased Metrobus' share as compared to the former cost-based model.
- Services are budgeted at $116.2 million, which is $10.9 million higher than the FY2018 budget. The increase is due to services associated with safety initiatives and reliability improvements, projected inflation impacts associated with the contract maintenance costs and the higher proportion of allocated indirect costs.
- Materials and Supplies are budgeted at $62.3 million, which is $1.5 million higher than FY2018 budget. This increase is primarily driven by parts for 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 projected increase in propulsion usage as more 7000 Series railcars are added to service.
- Other expenses are offset by a $2.6 million capital allocation credit.



FY2016 - FY2019

- Actual personnel expenses decreased $67.0 million or 8.6 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 increased $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 for parts to support railcar and track maintenance to improve safety and reliability.





Metrorail
Revenue and Expenses

(Dollars in Thousands)	Actual FY2016	Actual FY2017	Budget FY2018	Proposed 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	8,580	660
Joint Development	11,139	9,897	8,000	9,750	1,750
Fiber Optics	15,583	15,703	15,600	15,468	(132)
Other	31,887	5,589	5,639	3,093	(2,546)
Interest	10	19	0	0	0
Reimbursables	0	0	0	0	0
Total Revenues	**$695,953**	**$611,318**	**$622,123**	**$626,169**	**$4,045**
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	183
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**	**$307,948**	**$361,323**	**$396,733**	**$35,410**
Cost Recovery Ratio	68.7%	66.5%	63.3%	61.2%	-2.0%

Operating Budget

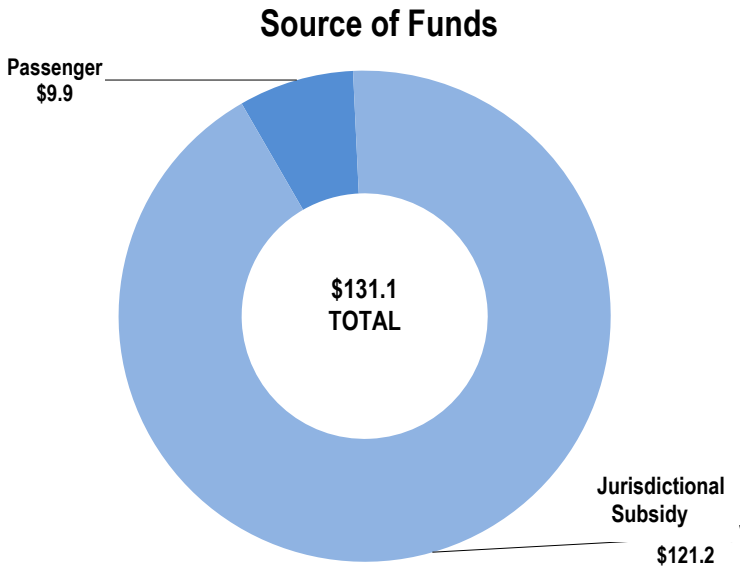
Metrorail

(Dollars in Thousands)	Actual 2016	Actual 2017	Budget 2018	Proposed 2019	$ Variance	% Change
Salaries	$192,405	$189,569	$187,091	$214,753	$27,662	15%
Wages	$283,524	$248,973	$269,115	$254,437	($14,679)	-5%
Overtime	$48,853	$45,900	$46,836	$43,606	($3,229)	-7%
Total Salaries and Wages	**$524,781**	**$484,442**	**$503,042**	**$512,796**	**$9,754**	**2%**
Fringes	**$248,018**	**$221,310**	**$238,899**	**$254,554**	**$15,655**	**7%**
Fringe Health	(3,374)	103,415	104,162	108,864	4,701	
Fringe Pension	0	82,752	79,635	85,689	6,054	
Other Fringe Benefits	238,044	22,614	40,560	44,296	3,737	
Workman Compensation	13,348	12,529	14,542	15,705	1,163	
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)**	**($28,527)**	**($8,020)**	**39%**
Dues and Subscriptions	241	246	359	443	85	
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	753	(147)	
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**	**$14,047**	**6%**
Total Cost	**$1,013,054**	**$919,266**	**$983,447**	**$1,022,902**	**$39,455**	**4%**

Operating Budget by Mode: MetroAccess

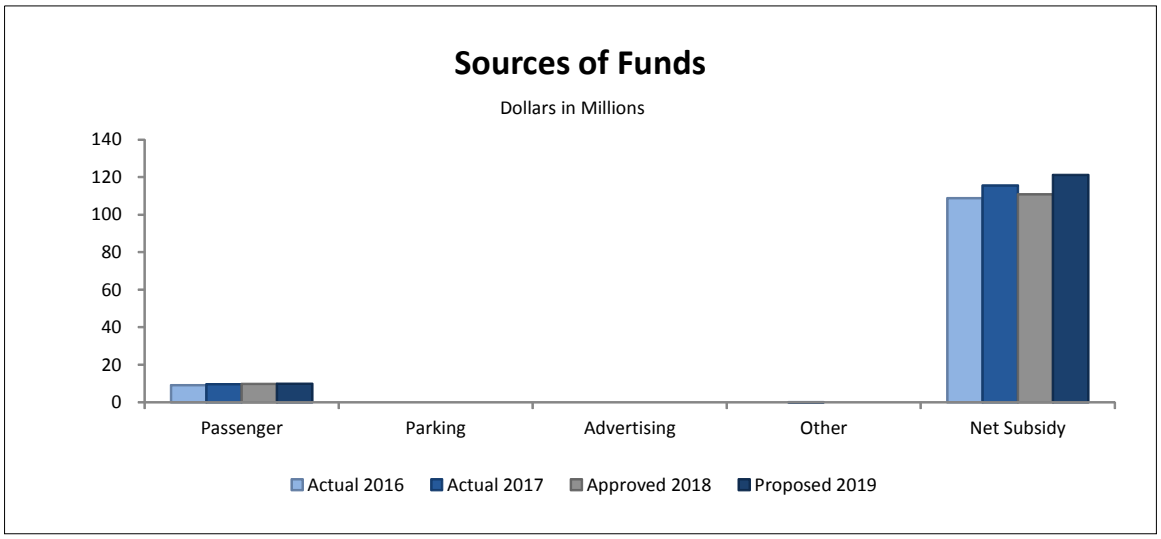
Sources of Funds

- MetroAccess sources of funds include passenger revenue and jurisdictional 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 estimated to increase by $0.2 million or 2.1 percent compared to FY2018 budget. The increase in fare revenue is driven by a projected growth in ridership of 13,000 trips in FY2019. Increased paratransit ridership demand is projected to be absorbed through shifting trips to alternative modes of transportation in the District of Columbia with TransportDC and the Abilities-Ride program in Maryland.



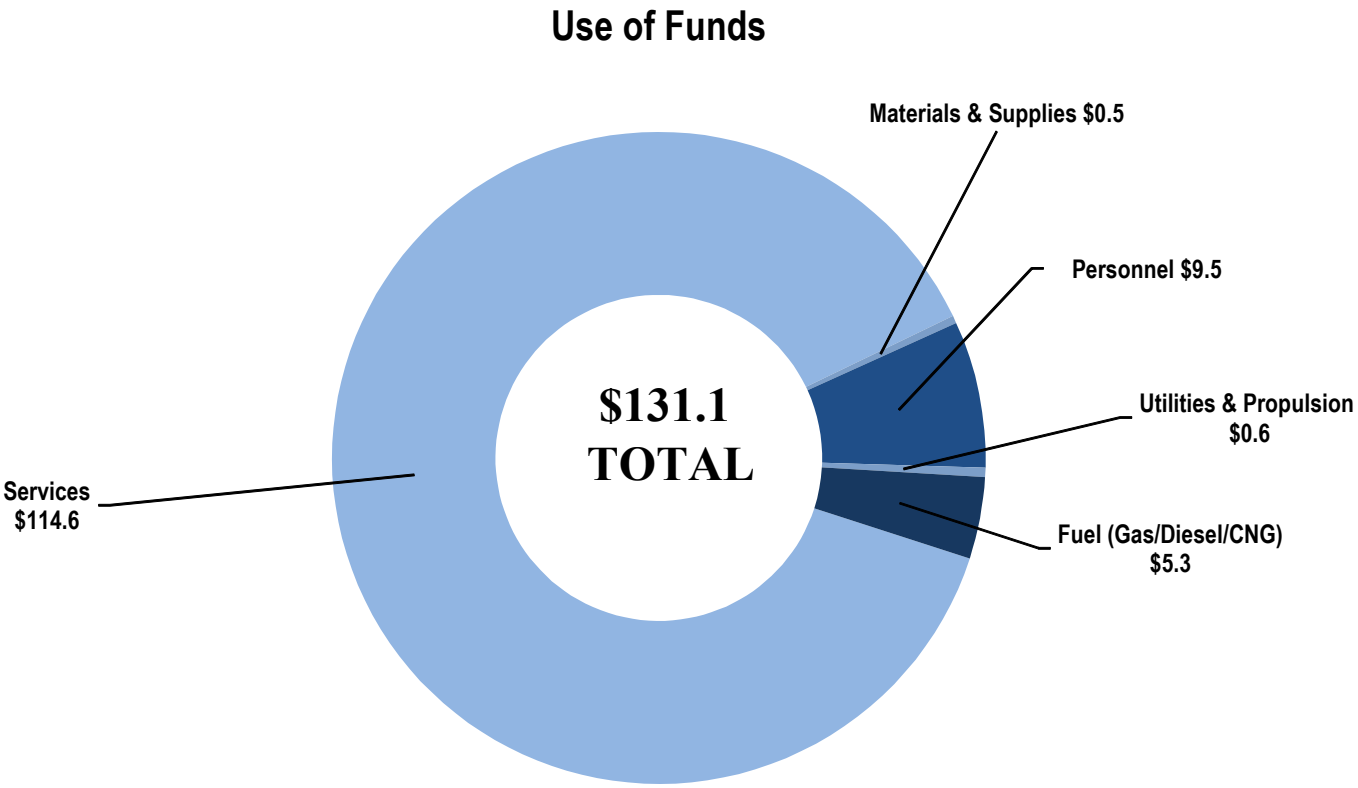
FY2016 - FY2019

Jurisdictional 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 operating subsidy.



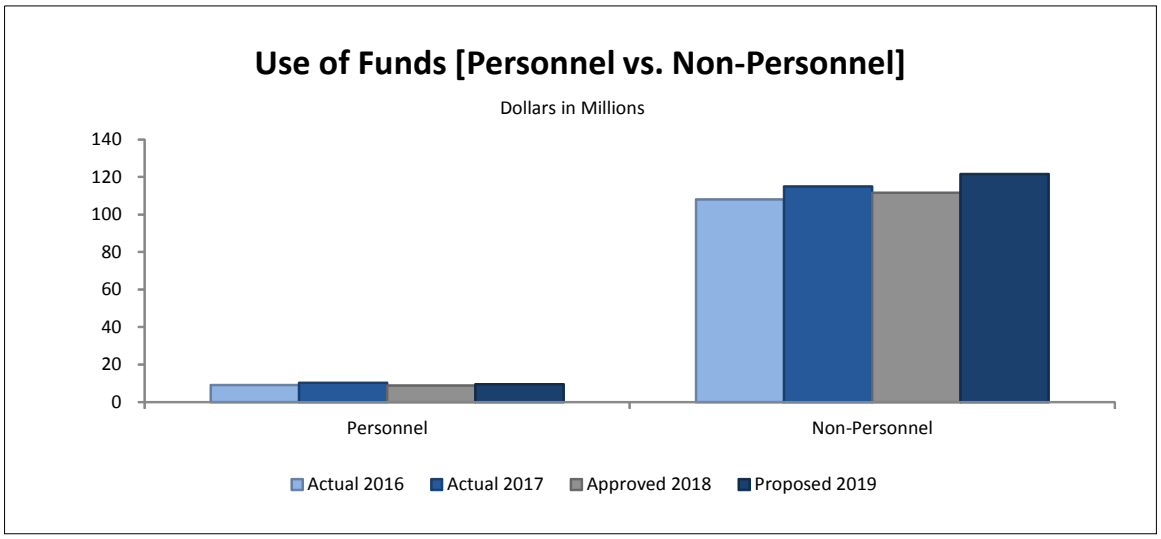
Uses of Funds

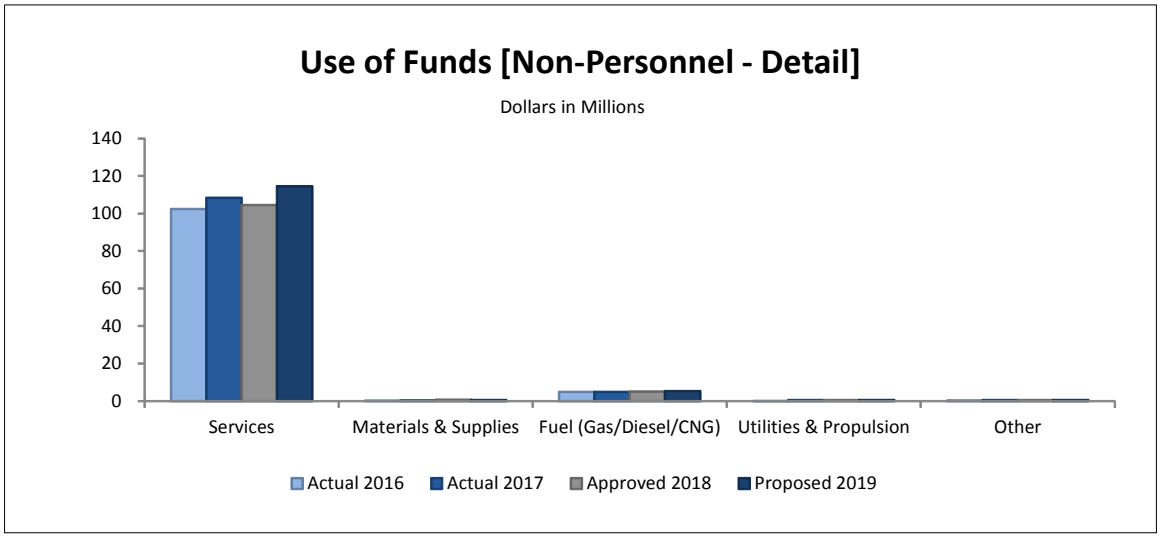
- Personnel costs are budgeted at $9.5 million, which is a $0.6 million increase compared to FY2018 budget. This is primarily due to contractually required step increases offset slightly by the impact of MetroAccess absorbing a lower proportion of allocated indirect costs.
- Services are budgeted at $114.6 million and represent an increase of $10.0 million in comparison to FY2018 budget. This is due to contract cost escalations for paratransit service providers offset by cost savings in other technical services. Paratransit related services account for 87.4 percent of the total MetroAccess budget.



FY2016 - FY2019

- Actual service 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 alternative service options have been offset by cost escalation and increased ridership.
- Energy costs, consisting of fuel, increased by $0.2 million or 3.2 percent from FY2018 to FY2019. This is primarily due to projected price increases.





MetroAccess
Revenue and Expenses

(Dollars in Thousands)	Actual FY2016	Actual FY2017	Budget FY2018	Proposed 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**
					0
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 Budget

MetroAccess

(Dollars in Thousands)	Actual 2016	Actual 2017	Budget 2018	Proposed 2019	$ Variance	% Change
Salaries	$5,796	$6,246	$5,529	$5,995	$465	8%
Wages	$175	$232	$427	$331	($97)	-23%
Overtime	$17	$23	$43	$23	($20)	-46%
Total Salaries and Wages	**$5,988**	**$6,501**	**$6,000**	**$6,349**	**$349**	**6%**
Fringes	**$3,100**	**$3,067**	**$2,882**	**$3,163**	**$281**	**10%**
Fringe Health	0	1,331	1,268	1,346	78	
Fringe Pension	0	1,106	969	1,059	90	
Other Fringe Benefits	2,673	256	468	564	96	
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 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 requested services. Prior to FY2018, reimbursable operating revenues and expenditures were not included in the operating budget, and were reported separately.

Reimbursable Operating Projects

	FY2017 Budget	FY2018 Budget	FY2019 Proposed	Change
State & Local Funding				
DC Circulator [1]	$22,775	$21,464	$21,132	($332)
Federal Grant Funding				
Safety & Security grants	$4,701	$3,647	$5,001	$1,354
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	$1,076	$326
Joint Development & Adjacent Construction projects	$2,788	$2,006	$1,491	($515)
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, DCST and National Park Services (NPS), the Circulator provides visitors, commuters and residents 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 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 jurisdictional and third-party 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 wireless communication infrastructure throughout Metro's underground stations and tunnels. The agreements for neutral host projects 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

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 12,000 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.

FY2019 Business Plan

The GM/CEO's FY2019 proposed budget funds system safety and reliability, which are essential to restoring public confidence and bringing riders back to Metro. Building on recent safety initiatives and system maintenance efforts under SafeTrack and Back2Good programs, the proposed budget remains focused on safety and system performance with a proactive preventive maintenance program to further reduce track-related delays and improve system reliability.

The GM/CEO's proposed FY2019 budget delivers the same level of Metrobus and Metrorail service and does not raise fares in the upcoming fiscal year. To do this, the proposal calls for additional management actions to reduce baseline operating cost and to increase non-fare revenue.

Key actions to improve safety and restore public trust in the Metro system include delivery of the remaining new 7000 Series railcars to replace older, less reliable trains; new buses and paratransit vehicles; addressing the backlog of track and structure maintenance and repairs; enhancing rail power and radio and wireless systems; and funding new preventive maintenance program that supports improved safety and rail service for customers.

The GM/CEO's FY2019 proposed budget holds operating subsidy at a three percent growth from the current fiscal year 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.

Not funded in the GM/CEO's FY2019 budget proposal, however, are additional service including extension of all Red Line trains to Shady Grove (eliminating the Grosvenor turn-back), additional staffing required to ramp up for Silver Line phase 2 service, new bus services and wages adjustments. A major effort in FY2019 will be a comprehensive review of the regional bus network to help establish future operating strategy.

The GM/CEO's business actions is 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

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

Office of Inspector General

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.

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 Policy, 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
- Lead coordination of investigations with outside agencies and/or the MTPD
- Provide Whistleblower/Retaliation training to Metro departments and offices
- Issue management action requests for issues that arise during investigations that require management action

Board Corporate Secretary

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.

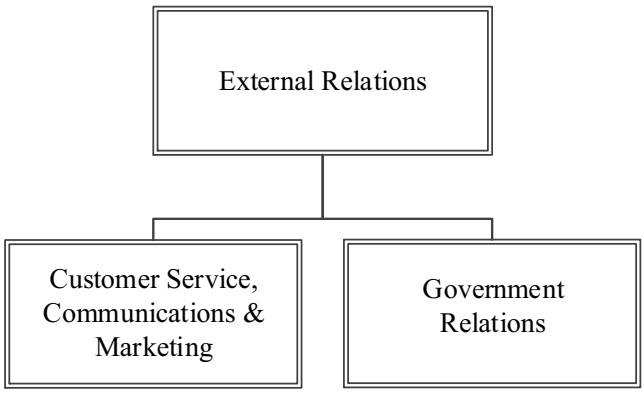
> *The Office of the Board Corporate Secretary works proactively with the GM/CEO and his staff to carry out the policies, goals and initiatives of WMATA Board; and serves as liaison between the Board, the Authority, Board advisory bodies and customers.*

Other responsibilities include the coordination, review and distribution of Metro 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 polices
- 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

External Relations



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 Authority's own 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
- Maintaining communications with customers, community groups and employees
- Engaging all stakeholders in building support for Metro's business goals and objectives
- Informing the public through media relations and marketing tactics
- Responding 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

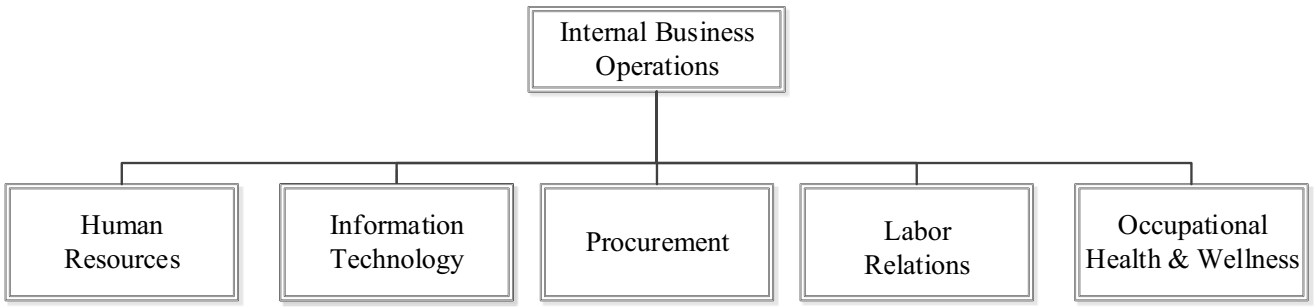
In FY2019, External Relations will continue to integrate the efforts of several functional areas to further develop and enhance its comprehensive program to strengthen Metro's brand.

- 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
- Work to amplify public awareness of Metro's service reliability improvements to build confidence needed to sustain and improve ridership on Metrorail and Metrobus
- Work with local, state, and federal government partners to advocate for dedicated capital funding as proposed under the General Manager's Plan to Keep Metro Safe, Reliable and Affordable
- Communicate continued safety improvements and financial progress, including the implementation of FTA Safety Management Inspection (SMI) Corrective Action Plans (CAPs) and recommendations of other oversight organizations
- Work with Congress, the Administration, federal agencies and national organizations to advocate for Metro

Keeping Metro Safe, Reliable and Affordable Activities

- Customer Focus
  - Build on the Back2Good campaign to increase public confidence in service reliability
  - 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
  - Recognize employees both internally and externally for safety and customer service excellence
- Internal Management Focus
  - Continue to transition customers to digital information channels to improve cost effective customer service
  - Increase non-fare revenue through expanded digital advertising, new commercial opportunities, and special event cost recovery

Internal Business Operations



The Department of Internal Business Operations (IBOP) is comprised of five internal business operations that play integral roles in supporting all operating components of Metro. The five business lines include Human Resources, Information Technology, Labor Relations, Occupational Health and Wellness, and Procurement/Materials Management. 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 and manages unionized employment matters. In addition, IBOP sources and enables the selection of highly qualified talent, provides inclusive employee performance management programs, and employee development and training opportunities. The department is also responsible for providing medical clinical services to Metro employees and prospective employees.

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

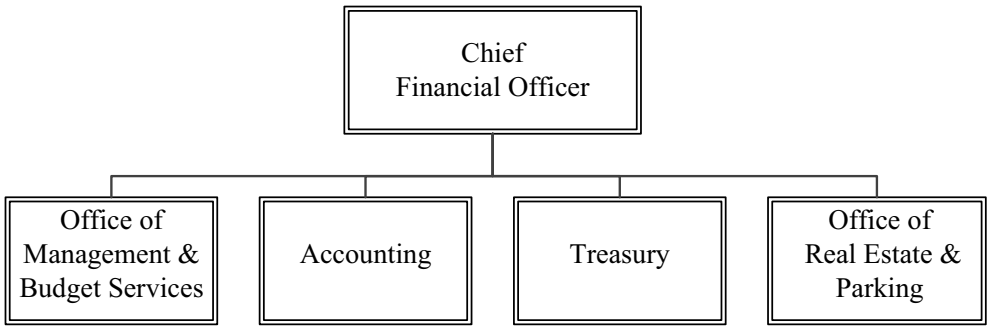
Keeping Metro Safe, Reliable and Affordable

- Customer Focus
  - Customer-facing technology: Six pilot stations are on-air today providing free WiFi service to our customers. Progress is on schedule for 30 stations to be on-air by January 2018. By the end of FY2019, all stations underground and at-grade will provide free public WiFi service
  - Negotiate sustainable and cost-effective collective bargaining agreements
  - 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
- Employee Focus
  - Implement a mentoring program to identify and develop high potential employees
  - 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 implementation of Metro's One Badge program which allows the issuance of a single badge to provide access to Metro facilities, work areas, and service areas while providing improved security and accountability. One Badge Program Badge distribution will be completed for the entire

Authority in FY2018. Phase 2 of the program will include an integration of exit swipe capability and card reader upgrade and expansion in other facilities.

- Internal Management Focus
  - Absenteeism - Establish agency-wide attendance protocols and implement consistent management practices for improving attendance
  - Emphasize training for new supervisors and provide department specific labor relations training

Financial Operations



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 ensure 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 Treasury is responsible for 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.

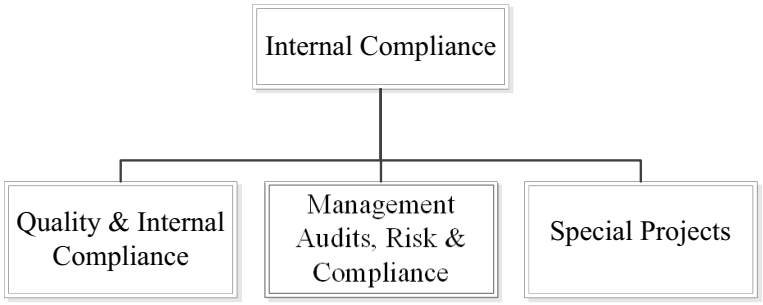
FY2019 Business Plan

The Chief Financial Officer leads corporate efforts to address Metro's fiscal challenges and improve the organization's fiscal accountability. The department ensures 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 more ways for customers to pay for fares and streamline 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
  - Determine and implement Metro's office consolidation strategy
  - Modernize commercial banking platform to take advantage of current banking technology, maximize Enterprise Resource Planning treasury capabilities, and allow staff to manage data instead of gather data
  - Implement modernization of risk management department using new technology with new risk management information system tool, launching initiative to reduce paper files by 90 percent, and taking advantage of new third-party administrator system platform for workmen's compensation program

Internal Compliance



The Office of Internal Compliance (INCP) is an internal management function that provides quality assurance and compliance assessments to assure departments are fulfilling business objectives, addressing corrective actions, and complying with NTSB, FTA, TOC, MSC, and other agency requirements and recommendations. While adding greater accountability and transparency to Metro's compliance and internal control activities.

Under INCP, the Offices of Quality Assurance, Internal Compliance & Oversight (QICO) and Management Audits, Risk and Compliance (MARC) are responsible for performing quality assurance, internal reviews and compliance assessments according to defined areas of review. QICO performs assessments of WMATA's engineering, maintenance and operations, and safety and security business functions. While MARC performs assessments of WMATA's internal business support services and financial management business functions. INCP executes the coordination of management responses and the central management of all assessments issues and 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 preventative measure - to ensure potential issues are identified early, managed efficiently and corrected without delay. Internal reviews comprise a key component of the Metro's quality assurance program. Each Internal Review is followed by corresponding Metro Improvement Plan(s) that outline the review findings, recommendations and action items required to be addressed.

Areas of Focus

- MARC conducts independent and objective assessments and reviews of Metro's internal controls and business processes over financial management and other internal business operations to ensure that internal controls are effective and efficient of operations, and in compliance with internal policy and procedures, external laws, regulations and directives are adhered. In addition to providing Risk Management, Internal Control and Compliance Training, MARC is also responsible for establishing Enterprise Risk Management (ERM) across the organization.
- QICO leads the development and implementation of Metro's 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. QICO's quality assurance assessments and internal reviews provide an unbiased review of service delivery, maintenance and engineering, capital program management and execution, and safe & security for Metrobus, Metrorail and MetroAccess services. 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 principal guidelines for business processes, ensuring that policies are clearly documented and updated to support day-to-day decision making.
- SPEC leads and manages major special and strategic projects at the direction of the GM/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

- Focus on conducting risk-based assessments of internal business support services, financial management, engineering, maintenance and operations, and safety and security functions to ensure established objectives are met in compliance with governing processes, policies, and regulations
- Launch internal reviews targeted at key operations, safety, quality of service, and financial risk to support the GM/CEO's top priorities: 1) restore public trust; 2) improve safety, security; and service reliability and 3) better align Metro's finances through sound accounting and management principals
- Collaborate with Metro's Office of Inspector General (OIG) on internal audit findings, and with all departments and offices to strengthen internal controls, implement quality improvements, and improve data integrity
- Transform data derived from assurance compliance and oversight activities into performance and actionable intelligence that managers can utilize to improve decision-making and resource allocation so that Metro can identify problems, provide proof of change and build credibility through accountability
- Implement an internal control, compliance and quality management training program for Metro management and staff

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 General Manager/CEO's transparency initiative to ensure open and accurate information for internal reviews and corrective action plans
- Employee Focus
  - In conjunction with IT and other applicable departments, implement Archer, a Governance, Risk and Compliance (GRC) management tool, for risk management, internal control monitoring, compliance reviews, audit management, and central issue management
  - Develop an annual set of required training for applicable Metro staff, implement ERM and Metro Quality Management System Plan (QMSP) training across the agency
- Internal Management Focus
  - Guide internal departments in the development of QMSP, to better structure the organization's approach to managing and controlling the execution of work activities that lead to safe and reliable service delivery
  - Support the online regulatory and internal corrective action tracker established to track actions taken to meet regulatory and internal recommendations and provide greater transparency to management

Fair Practices

The Department of Fair Practices (FAIR) administers Metro's comprehensive Equal Employment Opportunity (OEEO), Small Business Program Office (SBPO), and Americans with Disabilities Act (ADA) programs. FAIR also administers affirmative employment planning and implementation, as well as education and training for cultural/ethnic diversity programs. The organization provides direct support to internal organizations and the small business community, ensuring fair practices and adherence to Metro's policies and procedures.

The Department of Fair Practices ensures fairness, non-discrimination and equal opportunity practices in all programs, operations, and activities for all customers, employees, and business partners.

FY2019 Business Plan

- Evaluate, document and implement policies and procedures encouraging Metro's program offices to consider utilizing small and disadvantaged businesses in all contracts for goods and services, regardless of the source of funding for the procurement
- Develop a systematic plan to automate and improve the certification, award, and graduation rates for disadvantaged and small businesses
- Research and apply tailored and responsive diversity awareness engagements activities based on indicative data to support a respectable and high-performing work environment
- Develop and implement an assessment tool to ensure non-discrimination in the execution of Metro contracts and promote positive external customer relations
- Redesign and develop the small business manuals and brochures and update the SBPO program website
- Restructure the SBPO program by rebranding Metro as a small business partner in the metropolitan area
- Revise and implement Title VI knowledge management and Public Participation Plan (PPP) activities that increase cultural awareness, cultural sensitivity and support a positive customer experience for all customers

Keeping Metro Safe, Reliable and Affordable

- Customer Focus
  - Implement tailored communication strategies when engaging with community-based organizations (CBOs) to better communicate service and planning information impacting the specific communities and neighborhoods transit routes
  - Provide instant technology-based marketing platforms to communicate real-time intermittent service maintenance alerts targeting specific communities and neighborhoods of the CBOs and those directly impacted by hourly/daily service changes
  - Re-focus FAIR's Small & Disadvantaged Business Program as a partner to small businesses in the metropolitan area; expand business and training opportunities for Metro's regional small business partners
- Employee Focus
  - Promote a working environment that reinforces Metro's values of fairness, hard work, respect and integrity
- Internal Management Focus
  - Coordinate with leadership to develop competencies that are specifics to the business performance goals of WMATA

General Counsel

The Office of General Counsel (COUN) is responsible for all legal affairs related to Metro and provides quality legal advice to executive management on all of Metro functions.

FY2019 Business Plan

COUN's FY2019 business plan:

- Improve Metro's safety and compliance culture through leadership training and enforcement of policies
- Provide legal advice for business transactions and strategic management initiatives
- Minimize legal risks and costs, and vigorously advocate for Metro in disputes, administrative hearings, and litigation
- Provide cost-effective legal services

Keeping Metro Safe, Reliable and Affordable

- Customer Focus
  - Comply with and promote Metro conduct and ethics standards
  - Support the Public Access to Records Policy (PARP) requests and minimize PARP dwell time in COUN
- Employee Focus
  - Ensure completion of all mandatory training
  - Establish department level recognition and succession planning programs
- Internal Management Focus
  - Advise Metro's management on the legal risks and costs of Metro's office consolidation strategy and all major contract negotiations

Safety and Environmental Management

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

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

SAFE is responsible for the management and compliance of policies and procedures in the areas of system safety, occupational safety and health, accident and incident investigation, hazard identification and mitigation, internal safety audit process, oversight of construction safety, safety and security certification, environmental management, safety data and analysis, industrial hygiene, safety training, and corporate safety programs.

FY2019 Business Plan

- Continue growing Metro's corporate safety culture for employees and customers
- Document and close open Corrective Action Plans (CAP's)/Accident Reports
- Continue implementation of the Federal Transit Administration (FTA) Safety Management System (MAP21) to improve and strengthen Metro's safety culture
- Implement the System Safety Program Plan approved by the Federal Transit Administration
- Perform safety inspections throughout the system in support of rehabilitation and state of good repair efforts
- Take proactive actions to improve the employee and customer injury rates
- Implement and utilize the Fatigue Risk Management System
- Conduct scheduled internal safety and security reviews
- Fully staff the Incident and Accident Investigations team, and update policies and procedures

Keeping Metro Safe, Reliable and Affordable

- Customer Focus
  - Revise the Safety Hot Line process, including the reporting structure and documentation
  - 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 implementation and 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 the System Safety Program Plan
  - Perform FTA safety audits
  - Ensure all local safety committee meetings are attended by senior Metro safety staff.
  - Perform ten Safety Audits, including storage and combustible containers compliance, bus maintenance, and rail yard electrical hazard audits

Capital Planning and Program Management

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

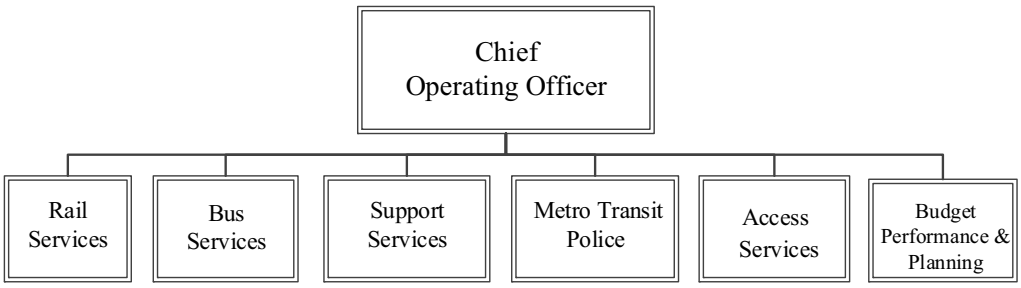
CPPM's business plan is designed to help Metro progress towards the Authority's strategic goals, with specific actions to implement the GM/CEO's capital program priorities and positively influence the following measures:

- Capital improvements to achieve and maintain a state of good repair
- Customer satisfaction performance
- Federal, state, and local compliance
- Safe environment for customers and employees
- Information accessible to all internal and external stakeholders about the capital program

Keeping Metro Safe, Reliable and Affordable

- Customer Focus
  - Continue to execute customer travel monitoring and impact analyses from 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
  - Contribute to the expansion of cellular service at 20 additional stations
  - Ensure that the agency 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
  - Increase knowledge of industry best practices
  - Contribute to the industry knowledge base by leading sessions, presentations, and committees at professional associations
- 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 looks from asset maintenance groups
  - Ensure the accuracy and timeliness on progress towards capital program targets

Chief Operating Officer



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) and Support Services (SSRV), which includes Plant Maintenance, 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 the three core strategies - safety, reliability, and fiscal responsibility.

- 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
  - Provide safe, quality and affordable service
- Employee Focus
  - Improve hiring process and minimize absenteeism and retention challenges, to provide adequate staffing levels necessary to meet our operational requirements
  - Continue the development of a high-performing workforce by providing the appropriate training tailored to safety and operational priorities
- Internal Management Focus
  - Improve inventory acquisition and management policies and practices
  - Develop more adequate asset maintenance and life cycle plans to ensure the long-term health of Metro's operations

Rail Services

The Rail Services (RAIL) department operates and maintains Metro's rail system in a safe, reliable and efficient manner 24-hours a day, 7 days a week, providing service across 118 miles of track and 91 stations, 40 of which are in Washington, D.C., 26 in Maryland and 25 in Virginia. RAIL is responsible for all facets of rail operations including station operations, train operations, 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) - which 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).

FY2019 Business Plan

RAIL supports the General Manager's Keeping Metro Safe, Reliable and Affordable plan by maintaining its assets in a state of good repair to ensure they are available for services and operating trains and service equipment in a safe and efficient manner. In FY2019, RAIL will focus on increasing Metrorail ridership and customer satisfaction through improving service safety, quality and reliability:

- Improve the safety and reliability of rail operations by working with front-line staff to identify and implement ideas to improve efficiency and effectiveness
- 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:

- Investigate all employee injuries and safety incidents to identify and address root causes
- 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
- Increase employee availability through reducing absenteeism and the number of inactive staff
- 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
- 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

Bus Services

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 115 million customers each year, and handles the operation, maintenance, and scheduling of Metrobus service in the District of Columbia, Maryland and Virginia.

Metrobus is responsible for approximately 1,583 buses, 255 routes, 164 lines and 3,937 employees. Additionally, Bus Services handles the maintenance of Metro's service vehicles and equipment.

FY2019 Business Plan

In support of Metro's strategic goals, BUS's core services are to provide customers safe bus transportation and employees a safe work environment; 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 through improving service safety, quality and reliability:

- Install video displays on new buses to increase deterrent value of bus cameras, displaying CCTV feeds to remind customers their actions are recorded
- Identify routes with low On-Time Performance (OTP) and implement schedule adjustments to allow for adequate run-time resulting in more-realistic schedules for our customers and our operators
- Continue Active Service Management on our headway-managed and high-frequency routes – frequency of 15 minutes or less – to ensure reliable, evenly-spaced service
- Continue implementation of the Metrobus Priority Corridor Network (PCN) to speed up bus travel times and improve passenger amenities, access, and information
- Continue installation of electronic signs at bus stop shelters to provide accurate and concise information to our customers on when the next bus is expected to arrive and any alert or advisory notifications that may impact their trip
- Continue deployment of division management solution at all divisions to ensure on-time departures from the garage, the first step at delivering quality, on-time Metrobus service
- Continue to partner with jurisdictions on dedicated bus lanes and Transit Signal Priority (TSP) to provide better on-time performance and faster commutes

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:

- Investigate all employee injuries and safety incidents to identify and address root causes
- Employ job hazard analysis within Bus Maintenance to identify and mitigate potential hazards before a job starts
- Increase employee availability through reducing active employee absenteeism
- Sustain BusStat monthly departmental performance meeting as a forum to review performance, promote accountability and strategic problem solving, and increase communication within Bus Services and between departments

Keeping Metro Safe, Reliable and Affordable Activities

- Customer Focus
  - Continue procurement and acceptance of 100 replacement buses
  - Complete installation of strobe lights to warn pedestrians of approaching buses and vehicles of stopping buses
- Employee Focus
  - Pursue new standards in uniforms that improve the look and identification of personnel, and restore pride in the organization
  - Continue improvement to supervisory and frontline training
- Internal Management Focus
  - Facilitate opening of Cinder Bed Road and Andrews bus facilities, and commission long-term replacement plans for Northern & Bladensburg garages
  - Continue process improvement in divisions to include unscheduled overtime reduction

Access Services

Access Services (ACCS) ensures that Metro provides safe, reliable and accessible transportation to people with disabilities and senior citizens, and develops and implements integrated mobility solutions to ensure the most efficient use of resources and the ongoing sustainability of ADA paratransit service.

ACCS is responsible for:

- MetroAccess ADA paratransit service delivery
- Metro accessibility policy leadership
- Regulatory compliance with ADA and other relevant legislation; Ombudsman service for related issues
- Accessibility planning and design support for Metro facilities
- Accessibility Advisory Committee administrative and policy support
- Eligibility assessments for MetroAccess and Reduced (Half) Fare Programs (performed at the Transit Accessibility Center housed at Metro headquarters)
- 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, principally a policy office, provides guidance on the application of 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 contract compliance staff work in conjunction with contractors (service delivery, call center operations, and quality assurance) that provide turnkey operational service to MetroAccess.

FY2019 Business Plan

The ACCS Business Plan is centered on three strategic objectives:

- MetroAccess paratransit service is delivered safely, efficiently, and in compliance with ADA
- 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
- Optimal accessibility is provided through multiple avenues such that the majority of customers with disabilities can make use of high-volume fixed-route transit and affordable specialized transportation without jeopardizing the sustainability of ADA paratransit

Growing ridership requires a regional strategy emphasizing demand management. MetroAccess ridership increased from just under a million trips in 2003 to 2.4 million trips in 2010. The increase was driven largely by an aging population and reduction in services offered by human service agencies. Metro implemented a series of demand management strategies that lowered annual MetroAccess ridership to 2.1 million trips. Driven again by the aging regional population and reductions in human service agency transportation, growth has resumed and is estimated to be 2.4 million trips in FY2019.

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
  - Facilitate establishment of a third party Elevator Outage Shuttle Bus Service

Metro Transit Police

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

The Metro Transit Police Department (MTPD) is comprised of uniformed and plain clothes sworn Police Officers charged with the duty of enforcing the laws of the jurisdictions, 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. The Office of Emergency Management (OEM), comprised of civilian personnel, plans, trains, and provides on-scene assistance for natural and man-made emergencies. MTPD is also responsible for digital video management of cameras throughout the Metro system, crime analysis, police records management, police radio communications, and various administrative support functions.

FY2019 Business Plan

In support of Metro's strategic goals, MTPD is investing in technologies to improve security across the Metro system to deter crime before it happens and help Metro Transit Police quickly and effectively respond when incidents occur. Approximately five Part I crimes (aggravated assault, larceny, motor vehicle theft, robbery etc.) are committed per million passenger trips. In addition, assaults are a significant driver of employee injuries, especially for bus operators. With Metro Transit Police already utilizing data analytics to set strategy and tactics through MetroStat, investing in security technology is the most promising lever for further reductions in crime.

Investments include:

- Expand the scope and quality of CCTV coverage at Metro facilities
  - Build on the substantial progress in developing real-time monitoring and retrieval capabilities at the Security Operational Control Center (SOCC)
  - Install additional CCTV cameras at rails 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 share information and document incidents
- Enhance access control at Metro facilities and prioritize 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 recordable

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 collaborate with Customer Service, Communications and Marketing (CSCM) on youth focus groups
  - Improve visibility in the Metro system with targeted deployment of uniformed patrol officers and reduce the response time to calls for service via technology enhancement
- Employee Focus
  - Promote the bus operator assault reduction campaign to improve safety and security
  - 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 training command staff by conducting 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
  - Add Fire Life Safety positions which will enhance the OEM's support for regional first responders and regional first responder training

Support Services

Support Services (SSRV) is responsible for supporting Metrobus and Metrorail operations, and maintaining infrastructure and equipment systems in a state of good repair by providing a coordinated approach to maintaining 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 maintains 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 and mechanical equipment systems in support of Metrorail and Metrobus operations by maintaining facilities, grounds, and mechanical equipment in a state of good repair
- Office of Systems Maintenance (SMNT) - Manages the electronic and electrical maintenance activities related to Rail wayside operations; SMNT is composed of the following sub-offices:
  - Office of Automatic Fare Collection (AFCS) - Manages the installation, maintenance, and repairs of fare collection and parking lot equipment
  - Office of Communications (COMM) - Maintains Metro's communications systems in support of BUS, RAIL and MTPD operations, as well as fire/ life safety systems in order to help ensure public safety
  - Office of Low Voltage Power (LVP) - Maintains and distributes all 480 volt electrical systems in support of WMATA's daily business operations
  - Office of Shops and Material Support (SAMS) - Provides component-level repair and supports procurement actions for all of SMNT

FY2019 Business Plan

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

- Station cleanliness - All 91 stations will receive annual power washing and surface scrubbing and polishing to enhance aesthetics and safety for customers
- Station lighting - 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 will be replaced at 20 stations; additionally, all tunnel light fixtures will be replaced
- Rail Station Champion Program - Promote collaboration between senior managers and station personnel to ensure internal coordination of timely repair to equipment and systems
- Vertical Transportation - Sustain high levels of escalator availability by advancing the aggressive $151 million escalator rehabilitation and replacement program, including replacement of 130 escalators by 2020
- Safety - The following will be conducted to enhance 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

COO Office of Budget, Performance and Planning

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 to internal clients who maintain and safely deliver the premium transit experience.
- Office of Performance (CPO) aligns 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 Vital Signs Report, which communicates why performance has changed and what actions will be taken to improve. CPO works collaboratively across the agency to turn data into performance information to help prioritize decision making on actions. Products and services include 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 including work assignments, signage changes, facility improvements and coordination efforts with other local carriers and jurisdictions.

FY2019 Business Plan

- Under of the COO productivity project, develop a course for sustaining operations over the long term to limit Metro's operating subsidy growth. COO is partnering with the Office of Planning to develop multi-year initiatives to achieve cost management targets in a way that is beneficial for service and operations and enables reinvestment in priority areas.
- Partner with Bus Services to make bus service faster and more reliable for customers. Provide analysis and support implementation of schedule adjustments on routes with low on-time performance, active service 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 Vital Signs Report to demonstrate progress toward Metro's strategic goals, and deploy tools and performance review platforms to assist department leadership and superintendents to monitor performance and identify business process improvement areas. This includes COO Dashboard enhancements, Stat meetings and participation in industry best practice and benchmarking organizations.
- Maximize fare collection in a cost-effective way and reduce 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
  - 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

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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 respond to identified 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) on a rolling basis.

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 maintain a dashboard of funded D&E elements and 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 rail yards, such as those currently underway at Brentwood, New Carrollton, and Alexandria yards.

Component improvements on the legacy fleet, including the 2000, 3000, 5000, 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 for 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 additional 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 possible 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; 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	$436.0	$224.0	$291.7	$320.1	$363.5	$529.8	$2,165.0
Rail Systems	184.5	111.3	131.1	128.4	156.6	140.5	852.4
Track and Structures Rehabilitation	134.0	180.1	210.9	212.4	248.6	210.2	1,196.2
Stations and Passenger Facilities	248.2	344.5	248.9	255.6	259.8	229.4	1,586.4
Bus and Paratransit	192.0	315.0	317.6	337.1	302.2	292.8	1,756.8
Business Support	84.4	125.2	175.0	246.7	194.3	147.6	973.2
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 Multi-Year Investments

Dollars in Millions

(Dollars in Millions)	FY2019 Plan	FY2020 Plan	FY2021 Plan	FY2022 Plan	FY2023 Plan	FY2024 Plan	6 Year Total
Railcar Acquisition	$289.0	$17.7	$106.5	$98.9	$33.6	$219.2	$764.9
Railcar Maintenance/Overhaul	116.5	91.3	96.0	110.8	160.8	145.6	721.0
Railcar Maintenance Facilities	30.5	115.0	89.1	110.4	169.1	165.0	679.2
Railcar Investments	**$436.0**	**$224.0**	**$291.7**	**$320.1**	**$363.5**	**$529.8**	**$2,165.0**
Propulsion	65.9	74.0	88.0	75.1	74.4	74.4	451.6
Signals & Communications	118.6	37.3	43.1	53.3	82.2	66.2	400.8
Rail Systems Investments	**$184.5**	**$111.3**	**$131.1**	**$128.4**	**$156.6**	**$140.5**	**$852.4**
Fixed Rail	97.7	109.3	126.3	112.1	122.9	118.0	686.3
Structures	36.3	70.8	84.6	100.3	125.7	92.2	509.9
Track and Structures Rehabilitation Investments	**$134.0**	**$180.1**	**$210.9**	**$212.4**	**$248.6**	**$210.2**	**$1,196.2**
Platforms & Structures	110.0	169.9	80.3	96.2	110.3	111.2	677.9
Vertical Transportation	60.4	60.4	61.4	49.7	50.8	52.2	335.0
Station Systems	77.7	114.1	107.2	109.7	98.7	66.0	573.5
Stations and Passenger Facilities Investments	**$248.2**	**$344.5**	**$248.9**	**$255.6**	**$259.8**	**$229.4**	**$1,586.4**
Bus & Paratransit Acquisition	94.6	109.2	117.4	117.9	124.8	130.7	694.7
Bus Maintenance/Overhaul	60.9	61.3	63.1	64.9	66.8	72.2	389.2
Bus Maintenance Facilities	31.9	106.9	94.4	99.0	44.4	36.3	413.0

CIP Multi-Year Investments
Dollars in Millions

(Dollars in Millions)	FY2019 Plan	FY2020 Plan	FY2021 Plan	FY2022 Plan	FY2023 Plan	FY2024 Plan	6 Year Total
Bus Passenger Facilities/Systems	4.6	37.5	42.7	55.3	66.2	53.6	259.9
Bus and Paratransit Investments	**$192.0**	**$315.0**	**$317.6**	**$337.1**	**$302.2**	**$292.8**	**$1,756.8**
IT	55.3	51.2	54.2	59.8	62.0	58.5	341.0
MTPD	1.0	1.1	1.2	1.3	1.5	1.6	7.7
Support Equipment/Services	28.1	72.9	119.6	185.6	130.8	87.5	624.5
Business Support Investments	**$84.4**	**$125.2**	**$175.0**	**$246.7**	**$194.3**	**$147.6**	**$973.2**
Total Capital Programs	**$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.

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	$304.9	$304.9	$304.9	$304.9	$304.9	$304.9	$1,829.4
Federal PRIIA	148.5	148.5	0.0	0.0	0.0	0.0	297.0
Other Federal Grants	5.9	3.6	4.1	4.4	4.0	4.0	26.1
Subtotal Federal	**$459.3**	**$457.0**	**$309.0**	**$309.3**	**$308.9**	**$308.9**	**$2,152.5**
Match to Federal Formula	76.2	76.2	76.2	76.2	76.2	76.2	457.4
System Performance	560.8	608.2	960.7	1,104.1	1,134.3	1,162.1	5,530.2
State and Local PRIIA	148.5	148.5	0.0	0.0	0.0	0.0	297.0
Other State and Local	1.5	0.9	1.0	1.1	0.7	0.0	5.2
Subtotal State and Local	**$787.0**	**$833.8**	**$1,037.9**	**$1,181.4**	**$1,211.2**	**$1,238.3**	**$6,289.8**
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**	**$838.8**	**$1,040.9**	**$1,184.4**	**$1,214.2**	**$1,241.3**	**$6,312.0**
MWAA	27.5	4.2	25.2	6.5	1.9	0.0	65.3
Total	**$1,279.1**	**$1,300.0**	**$1,375.2**	**$1,500.3**	**$1,525.0**	**$1,550.2**	**$8,529.8**
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 $2.15 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 proposed FY2019 capital budget includes $787 million in total state and local investment.

The proposed FY2019 capital budget also includes locally requested and funded investments, formerly referred to as reimbursable projects 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 Silver Line extension and the associated expansion railcars (MWAA), 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							
District of Columbia	**$230.2**	**$237.3**	**$359.5**	**$409.2**	**$419.7**	**$429.3**	**$2,085.1**
Montgomery County	112.1	115.6	175.1	199.3	204.4	209.1	1,015.6
Prince George's County	109.1	112.5	170.4	194.0	198.9	203.5	988.3
Maryland Subtotal	**$221.2**	**$228.0**	**$345.5**	**$393.3**	**$403.3**	**$412.6**	**$2,004.0**
City of Alexandria	29.7	32.9	49.8	56.7	58.1	59.5	286.6
Arlington County	56.3	58.0	87.8	100.0	102.6	104.9	509.6
City of Fairfax	1.8	1.8	2.8	3.1	3.2	3.3	16.0
Fairfax County	96.2	108.2	163.9	186.6	191.4	195.8	942.1
City of Falls Church	1.7	1.8	2.7	3.1	3.2	3.3	15.8
Loudoun County	-	16.4	24.9	28.3	29.1	29.7	128.4
Virginia Subtotal	**$185.6**	**$219.1**	**$331.9**	**$377.9**	**$387.5**	**$396.4**	**$1,898.5**
Subtotal Federal Formula Match & System Performance	**$637.0**	**$684.4**	**$1,036.9**	**$1,180.3**	**$1,210.5**	**$1,238.3**	**$5,987.6**
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							
DRPT (CMAQ Match)	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**
Total Contributions before Debt	**$1.5**	**$0.9**	**$1.0**	**$1.1**	**$0.7**	**-**	**$5.2**
Sub-Total Before Jurisdictional Reimbursable Projects	**$787.0**	**$833.8**	**$1,037.9**	**$1,181.4**	**$1,211.2**	**$1,238.3**	**$6,289.8**
Union Station	**-**	**-**	**-**	**-**	**-**	**-**	**-**
District of Columbia	1.9	1.7	0.0	0.0	0.0	0.0	3.6
State of Maryland	0.4	0.3	0.0	0.0	0.0	0.0	0.7
Subtotal Union Station	**$2.3**	**$2.0**	**$0.0**	**$0.0**	**$0.0**	**$0.0**	**$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 (NVTA)	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**
Sub Total Jurisdictional Reimbursable Projects	**$5.3**	**$5.0**	**$3.0**	**$3.0**	**$3.0**	**$3.0**	**$22.3**
Grand Total	**$792.3**	**$838.8**	**$1,040.9**	**$1,184.4**	**$1,214.2**	**$1,241.3**	**$6,312.0**

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

Dollars in Millions

	FY2018 Budget					FY2019 Proposed				
	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**	**$58.7**	**$58.1**	**$57.6**	**$55.8**	**$230.2**
Montgomery County	$10.6	$8.4	$9.5	$9.5	$38.0	$28.6	$28.3	$28.1	$27.2	$112.1
Prince George's County	$10.1	$7.9	$9.0	$9.0	$35.9	$27.8	$27.5	$27.3	$26.5	$109.1
Maryland Subtotal	**$20.7**	**$16.3**	**$18.5**	**$18.5**	**$73.9**	**$56.4**	**$55.8**	**$55.4**	**$53.6**	**$221.2**
City of Alexandria	$2.7	$2.1	$2.4	$2.4	$9.7	$7.6	$7.5	$7.4	$7.2	$29.7
Arlington County	$5.2	$4.1	$4.6	$4.6	$18.4	$14.3	$14.2	$14.1	$13.6	$56.3
City of Fairfax	$0.2	$0.1	$0.2	$0.2	$0.6	$0.5	$0.4	$0.4	$0.4	$1.8
Fairfax County	$9.1	$7.1	$8.1	$8.1	$32.4	$24.5	$24.3	$24.1	$23.3	$96.2
City of Falls Church	$0.2	$0.2	$0.2	$0.2	$0.7	$0.4	$0.4	$0.4	$0.4	$1.7
Commonwealth of Virginia	—				—					—
Virginia Subtotal	**$17.4**	**$13.6**	**$15.5**	**$15.5**	**$61.8**	**$47.3**	**$46.8**	**$46.5**	**$45.0**	**$185.6**
Subtotal Formula Match & System Performance	**$59.0**	**$46.4**	**$52.7**	**$52.7**	**$210.9**	**$162.4**	**$160.7**	**$159.5**	**$154.5**	**$637.0**
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	**$0.0**	**$0.0**	**$0.0**	**$0.0**	**$0.0**	**$0.0**	**$0.0**	**$0.0**	**$0.0**	**$0.0**
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**	**$0.0**	**$0.0**	**$1.4**	**$0.0**	**$0.2**	**$0.7**	**$0.6**	**$1.5**
Subtotal Before Jurisdictional Reimbursable Projects	**$108.6**	**$87.3**	**$82.4**	**$82.4**	**$360.8**	**$226.2**	**$199.1**	**$203.4**	**$158.3**	**$787.0**
King Street Bus Loop (Alexandria)	**$0.3**	**$0.3**	**$0.3**	**$0.3**	**$1.2**	**$0.0**	**$0.0**	**$0.0**	**$0.0**	**$0.0**
Potomac Yards (Alexandria)	**$1.3**	**$1.3**	**$1.3**	**$1.3**	**$5.2**	**$0.0**	**$0.0**	**$0.0**	**$0.0**	**$0.0**
Purple Line (Maryland	**$1.0**	**$1.0**	**$1.0**	**$1.0**	**$4.0**	**$0.0**	**$0.0**	**$0.0**	**$0.0**	**$0.0**
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**
Total	**$112.0**	**$90.6**	**$85.8**	**$85.8**	**$374.4**	**$227.4**	**$200.3**	**$204.7**	**$159.8**	**$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.

Proposed Budget (in 000s)	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	Total
Major Active Capital Projects	$284,391	$17,673	$106,530	$38,864	$33,590	$41,712	$522,761
Development & Evaluation	4,600	0	0	0	0	0	4,600
Future Major Projects	0	0	0	60,000	0	177,500	237,500
Budget Total	**$288,991**	**$17,673**	**$106,530**	**$98,864**	**$33,590**	**$219,212**	**$764,861**

Major Active Capital Projects		
Project (FY2019 - 2024)	**Objectives**	**Cost (in 000s)**
7000 Series Railcar Procurement	Acquisition of 7000 Series Railcars	$522,761
	Total	**$522,761**

The Major Active Capital Projects in this program will include the procurement of new, advanced series railcars to replace the oldest, least reliable railcars in the fleet, as well as to expand the fleet.

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 March 2019.

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	$1,708,883
Expense thru FY 2017	$834,165
Projection for FY 2018	$325,304
Remaining Cost (FY2019 thru Completion)	$549,414

Development & Evaluation

Development & Evaluation funding of $4.6 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 $237.5 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.

Proposed Budget (in 000s)	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	Total
Safety & State of Good Repair	$116,453	$90,359	$95,001	$100,687	$103,815	$107,100	$613,413
Development & Evaluation	0	948	200	2,020	11,400	7,700	22,268
Future Major Projects	0	0	800	8,082	45,600	30,800	85,282
Budget Total	**$116,453**	**$91,306**	**$96,001**	**$110,789**	**$160,815**	**$145,600**	**$720,964**

Safety, State of Good Repair & Minor Projects

Element (FY2019 - 2024)	Quantity	Cost (in 000s)
Rehab Railcars	225 cars annually	$367,624
Preventive Maintenance	1,240 cars annually	210,000
Safety & Reliability Enhancements	1,000 cars annually	35,789
	Total	**$613,413**

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 $22.3 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 $85.3 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.

Proposed Budget (in 000s)	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	Total
Safety & State of Good Repair	$19,348	$41,479	$50,209	$58,813	$48,768	$37,338	$255,955
Major Active Capital Projects	7,200	0	0	0	0	0	7,200
Development & Evaluation	4,000	4,345	3,000	0	0	0	11,345
Future Major Projects	0	69,168	35,940	51,589	120,373	127,628	404,698
Budget Total	**$30,548**	**$114,991**	**$89,148**	**$110,403**	**$169,141**	**$164,966**	**$679,198**

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	2,652
Switchgear, Transformer, Switchboard, etc.	7 locations	88,098
Grinder, Lathe, Saw, Lift, etc.	7 locations	130,007
Sprinkler, Standpipe, Control Panel, etc.	7 locations	5,425
Air Handler, Condensing Unit, Heater, etc.	7 locations	14,196
Pavement Paintings, Riding Surfaces, etc.	6 locations	3,946
Roofing System	7 locations	6,133
Elevators	1 locations	101
	Total	**$255,955**

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	$2,400
Complete Remaining Work at the Yards	Extensive rehabilitation, repairs and improvements to facilities at rail yards. Completion of current projects.	2,688
Railcar Lift Rehabilitations	Rehabilitation of railcar lifts at varies locations	2,112
	Total	**$7,200**

Active major projects in this program will include extensive rehabilitation, repairs and improvements to facilities at rail yards, such as the Alexandria Administrative Building, Alexandria Service & Inspection (S&I) Shop, the Brentwood S&I shop and the Brentwood yard exterior.

Metro is also building out and relocating parts of five departments to the new facility at Good Luck Road and other locations.

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	$20,768
Expense thru FY 2017	$14,311
Projection for FY 2018	$4,057
Remaining Cost (FY2019 thru Completion)	$2,400

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 $11.3 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 $404.7 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.

Proposed Budget (in 000s)	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	Total
Safety & State of Good Repair	$38,357	$41,499	$45,134	$49,356	$49,356	$49,356	$273,058
Major Active Capital Projects	27,500	29,455	21,585	0	0	0	78,540
Development & Evaluation	0	3,000	1,250	750	0	0	5,000
Future Major Projects	0	0	20,000	25,000	25,000	25,000	95,000
Budget Total	**$65,857**	**$73,954**	**$87,969**	**$75,106**	**$74,356**	**$74,356**	**$451,598**

Safety, State of Good Repair & Minor Projects		
Element (FY2019 - 2024)	**Quantity**	**Cost (in 000s)**
AC Rooms (2 rooms/station)	18	$108,000
Room Rehab Design	40	10,000
UPS Power Supplies	80	8,000
Traction Power Substations	28	84,000
Tie Breaker Stations	6	12,000
Cabling (per year)	30k ln. ft.	27,500
MPR/PQM/Rectifier/SCADA	Misc.	23,558
	Total	**$273,058**

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 indefinitely to support safety, reliability, and state of good repair and will involve purchase of new equipment to compliment the ongoing rehabilitation effort.

Power cable will be installed at a rate of approximately 30,000 feet per year, out of 3.7 million linear feet powering the Metrorail system.

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	$78,540
	Total	**$78,540**

Current power upgrades will improve the condition of all traction power components and support the operation of eight-car trains, increasing system capacity for customers and reducing crowding during peak hours. Cable upgrades will be completed at a rate of approximately 30,000 feet per year,

This effort to run eight-car trains will also involve replacing existing equipment throughout the system, which would otherwise have been replaced or rehabilitated as part of a state of good repair initiative. 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	$161,336
Expense thru FY 2017	$64,275
Projection for FY 2018	$18,521
Remaining Cost (FY2019 thru Completion)	$78,540

Development & Evaluation

Metro has allocated $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 machines, 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.

Proposed Budget (in 000s)	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	Total
Safety & State of Good Repair	$26,898	$22,000	$20,000	$19,000	$21,000	$18,000	$126,898
Major Active Capital Projects	89,360	15,345	21,114	31,303	55,211	39,192	251,525
Development & Evaluation	2,339	0	0	0	2,000	5,000	9,339
Future Major Projects	0	0	2,000	3,000	4,000	4,000	13,000
Budget Total	**$118,597**	**$37,345**	**$43,114**	**$53,303**	**$82,211**	**$66,192**	**$400,762**

Safety, State of Good Repair & Minor Projects		
Element (FY2019 - 2024)	**Quantity**	**Cost (in 000s)**
Cabling (per year)	30k ln. ft.	$21,000
High Current Bonds	1116	19,470
Switch Machines	132	9,486
EMIs	Various	15,600
Cross Bonds and D-loops	Various	5,200
Future Track Circuit Replacement	TBD	32,000
Alexandria Yard ATC Rehab	46 switches	18,522
Future NTSB Recommendations	TBD	5,620
	Total	**$126,898**

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	$231,474
ETS Infrastructure Improvements	Complete replacement of existing WMATA Emergency Trip Station telephones	19,500
Track Inspector Location	Complete pilot for bi-directional warning system for trains and track inspectors	551
	Total	**$251,525**

Metro will complete the replacement of the existing Comprehensive Radio Communications System (CRCS) during the six-year period, with a new system operating in the 700MHz band, as required by the Federal Communications Commission (FCC), while maintaining the current CRCS in working order until the frequencies are secured and replaced. Improved warning systems to alert train operators, track inspectors, and other wayside workers will also be put in place. 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	$322,392
Expense thru FY 2017	$31,472
Projection for FY 2018	$59,446
Remaining Cost (FY2019 thru Completion)	$231,474

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	$2,000
Remaining Cost (FY2019 thru Completion)	$19,500

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 $9.3 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 $13 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 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.

Proposed Budget (in 000s)	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	Total
Safety & State of Good Repair	$90,712	$97,302	$96,870	$97,242	$99,887	$106,501	$588,515
Development & Evaluation	4,000	0	0	0	15,000	11,500	30,500
Future Major Projects	3,000	12,000	29,450	14,828	8,000	0	67,278
Budget Total	**$97,712**	**$109,302**	**$126,320**	**$112,070**	**$122,887**	**$118,001**	**$686,293**

Safety, State of Good Repair & Minor Projects		
Element (FY2019 - 2024)	Quantity	Cost (in 000s)
Crossties	79139	$121,808
DF Fasteners	129258	148,212
Insulators	58231	50,685
Track Tamping	330 (miles)	6,728
Switches	48	46,004
Running Rail	87 (miles)	127,047
Open Joints	9207	31,072
Engineering/Consulting	N/A	16,766
Locomotives	4	15,094
Snow Throwers	7	8,400
Ballast Cars	6	1,500
Switch/Spot Tampers	2	1,200
Prime Movers	7	14,000
	Total	**$588,515**

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 aide 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 $30.5 million for the Development & Evaluation of potential projects technologies or procedural changes, which could enhance the program outcomes.

Future Major Projects

This program also includes funding of $67.3 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.

Proposed Budget (in 000s)	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	Total
Safety & State of Good Repair	$13,785	$13,785	$14,199	$14,625	$15,064	$15,516	$86,974
Major Active Capital Projects	3,300	4,464	0	0	0	0	7,764
Development & Evaluation	2,000	1,000	1,000	0	6,000	4,500	14,500
Future Major Projects	17,170	51,530	69,391	85,721	104,678	72,135	400,624
Budget Total	**$36,255**	**$70,779**	**$84,590**	**$100,346**	**$125,742**	**$92,150**	**$509,862**

Safety, State of Good Repair & Minor Projects

Element (FY2019 - 2024)	Quantity	Cost (in 000s)
Underground Tunnel	Various locations	$46,133
Grout Pads	14 (miles)	38,744
Rail Track Signage	2061	2,097
	Total	**$86,974**

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	$7,764
	Total	**$7,764**

Critical structures throughout the system are enhanced or significantly reinforced through this program to improve reliability and prevent safety hazards. In FY2019, Major Active Capital Projects in this program will include the following:

Major Active Capital Projects (cont.)

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	$10,405
Expense thru FY 2017	$698
Projection for FY 2018	$1,943
Remaining Cost (FY2019 thru Completion)	$7,764

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 $14.5 million for the development & evaluation of specific needs related to the rehabilitation of these and other aerial structures.

Future Major Projects

This program also includes funding of $400.6 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.

Proposed Budget (in 000s)	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	Total
Safety & State of Good Repair	$44,942	$44,509	$35,394	$36,858	$39,508	$44,721	$245,932
Major Active Capital Projects	57,107	45,287	25,676	25,597	18,164	12,000	183,830
Development & Evaluation	4,000	0	600	3,470	19,016	24,960	52,045
Future Major Projects	3,986	80,141	18,623	30,266	33,565	29,478	196,059
Budget Total	**$110,034**	**$169,937**	**$80,292**	**$96,191**	**$110,253**	**$111,159**	**$677,866**

Safety, State of Good Repair & Minor Projects		
Element (FY2019 - 2024)	**Quantity**	**Cost (in 000s)**
Bicycle & Pedestrian	26	$14,964
Station Rehabilitation	162	76,192
Rehab Parking Garages	8 locations	21,974
Resurface parking lots	8 locations	1,525
Switchgear, Transformer, Switchboard, etc.	6	102,365
Power Supply	1	394
Sprinkler, Standpipe, Control Panel, etc.	6	2,625
Air Handler, Fan, Heater, etc.	6	24,935
Riding Surfaces, etc.	3	919
Roofing System	3	39
	Total	**$245,932**

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)**
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	130,772
Escalator Canopies	Installation of canopies over exposed escalators	27,798
Union Station Project	Improve passenger circulation	4,250
CCTV Station Enhancements	Upgrade and installation of CCTV cameras at various station locations	6,417
	Total	**$183,830**

This program will continue ongoing, multi-year improvement efforts on various structures and systems – including kiosks, platforms, fan systems, traction power, canopies, ceiling work, and support of major new construction.

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

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.

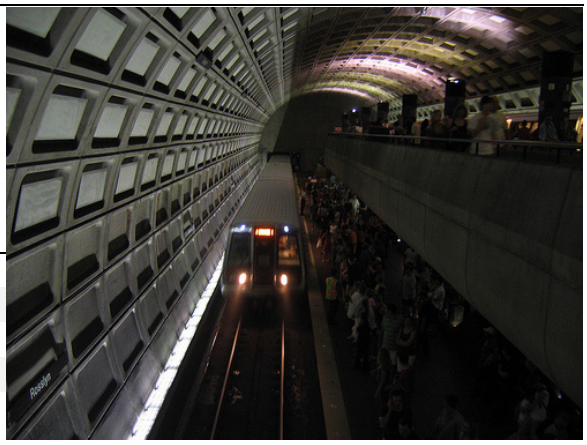
The first phase of this project was completed in FY2018 consisting of emergency concrete repair to the structure. The second phase, beginning in FY2018 and completing in FY2019 will address the remaining concrete platform repair, as well as repair to the aerial structure that spans the roadway at Rhode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

Major Active Capital Projects (cont.)

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	$270,315
Expense thru FY 2017	$125,972
Projection for FY 2018	$10,552
Remaining Cost (FY2019 thru Completion)	$133,791

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	$43,023
Expense thru FY 2017	$7,625
Projection for FY 2018	$7,600
Remaining Cost (FY2019 thru Completion)	$27,798

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

Major Active Capital Projects (cont.)

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	$13,909
Expense thru FY 2017	$2,373
Projection for FY 2018	$5,119
Remaining Cost (FY2019 thru Completion)	$6,417

Development & Evaluation

This program includes $52 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).

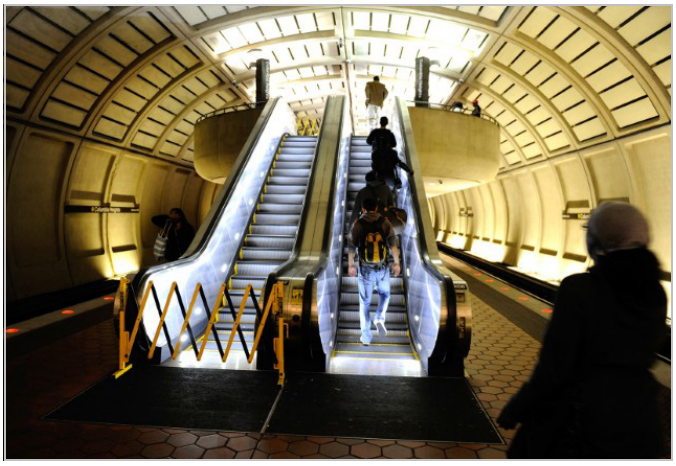
Future Major Projects

This program also includes provisional funding of $196 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.



Proposed Budget (in 000s)	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	Total
Safety & State of Good Repair	$60,426	$60,419	$61,377	$49,688	$50,829	$52,229	$334,969
Budget Total	**$60,426**	**$60,419**	**$61,377**	**$49,688**	**$50,829**	**$52,229**	**$334,969**

Safety, State of Good Repair & Minor Projects		
Element (FY2019 - 2024)	**Quantity**	**Cost (in 000s)**
Elevator Rehabs	64	$45,344
Escalator Rehabs	118	81,312
Escalator Replacement	100	165,490
Break Boards	81	2,569
Reducer Refurbishments	203	8,136
Step Assembly	1000	8,993
Steps	16517	23,124
	Total	**$334,969**

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

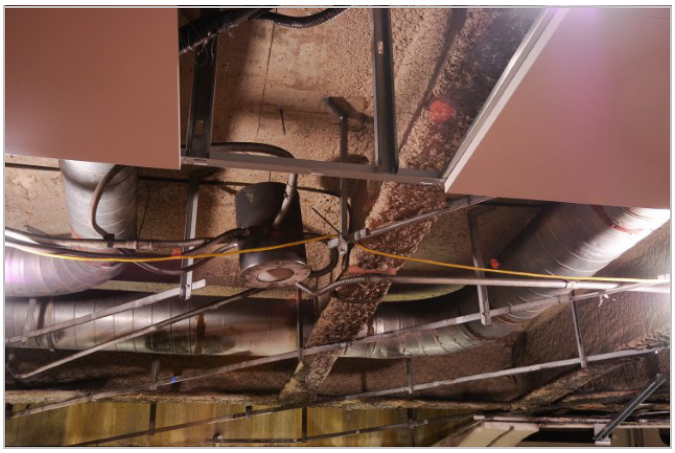
Escalator components will be replaced or refurbished – 81 brake boards, 203 reducers, 1,000 step assemblies, and 16,517 steps (which includes step molds to build out additional step replacements).

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.



Proposed Budget (in 000s)	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	Total
Safety & State of Good Repair	$15,290	$15,423	$17,056	$18,698	$15,800	$15,800	$98,068
Major Active Capital Projects	62,450	88,762	80,539	88,831	69,766	43,550	433,898
Development & Evaluation	0	9,928	9,626	2,210	13,150	6,640	41,554
Budget Total	**$77,740**	**$114,113**	**$107,220**	**$109,739**	**$98,717**	**$65,990**	**$573,519**

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	$45,618
Fare System Server Upgrades	Various	2,275
Station Dry Standpipe Installation	18	23,400
Facility Fire Alarm System Upgrades	5	26,775
	Total	**$98,068**

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	$107,150
Fare Collection Modernization	Replace and upgrade system wide fare collection software and hardware	239,500
Fire Alarm System Upgrade	Upgrade station fire alarms to NFPA72 and NFPA130 standards	68,692
Vent Shaft Elevation	Elevate vent shafts in low lying areas	10,006
Drainage Improvements	Replace and improve drainage pumping stations	8,550
	Total	**$433,898**

Future investment Metro will alter, upgrade and modernize a number of systems to reduce water intrusion, improve drainage, streamline fare collection, and enhance fire safety. 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	$131,019
Expense thru FY 2017	$11,869
Projection for FY 2018	$12,000
Remaining Cost (FY2019 thru Completion)	$107,150

Fare Collection Modernization

Metro will upgrade and replace the current Fare Collection System to provide a more seamless and efficient process for fare collection, and modernize the fare collection process with new and existing technologies that enhance the customer experience.

In FY2019, Metro will begin the first stage of the fare collection system upgrade by beginning an upgrade to the customer website for SmartBenefits, as well as continue power and communications infrastructure upgrades in preparing to overhaul the fare gate system. The project will also begin procurement of new fare gates and continue rotary actuator maintenance of existing equipment and rehabilitation.

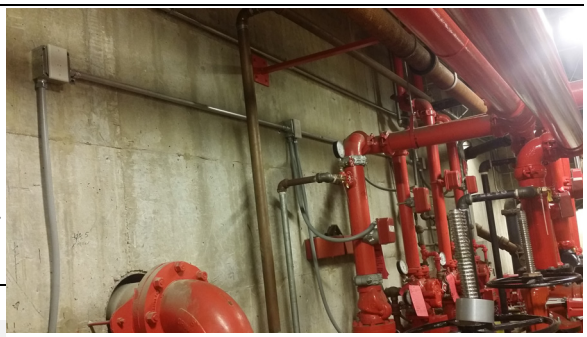
Project Schedule	Start: FY2017 - End: FY2023
Total Project Cost	$244,078
Expense thru FY 2017	$968
Projection for FY 2018	$3,610
Remaining Cost (FY2019 thru Completion)	$239,500

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: FY2025
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	$15,354
Expense thru FY 2017	$3,347
Projection for FY 2018	$2,000
Remaining Cost (FY2019 thru Completion)	$10,007

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	$15,673
Expense thru FY 2017	$3,123
Projection for FY 2018	$4,000
Remaining Cost (FY2019 thru Completion)	$8,550

Development & Evaluation

Metro has included $41.6 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.

Initiatives under Development & Evaluation in this program will include (but will not be limited to) the station renewal program, Silver Line signage updates, and rehabilitation of fare gates to correct “fail-safe closed” issues.

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.

Proposed Budget (in 000s)	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	Total
Safety & State of Good Repair	$94,645	$109,244	$117,428	$117,921	$124,803	$130,685	$694,726
Budget Total	**$94,645**	**$109,244**	**$117,428**	**$117,921**	**$124,803**	**$130,685**	**$694,726**

Safety, State of Good Repair & Minor Projects		
Element (FY2019 - 2024)	**Quantity**	**Cost (in 000s)**
CNG Buses	Procure 281 buses	$196,974
Hybrid Buses	Procure 250 buses	201,474
Clean Diesel Buses	Procure 128 buses	83,240
Articulated Buses	Procure 40 buses	55,200
Spare Parts	Procure spare parts for all fleets	43,838
Vans, Cutaways and Autos	1190 vans	114,000
	Total	**$694,726**

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.

Proposed Budget (in 000s)	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	Total
Safety & State of Good Repair	$60,882	$60,344	$61,384	$64,905	$66,792	$68,736	$383,045
Development & Evaluation	0	0	0	0	0	3,500	3,500
Future Major Projects	0	950	1,689	0	0	0	2,639
Budget Total	**$60,882**	**$61,294**	**$63,073**	**$64,905**	**$66,792**	**$72,236**	**$389,184**

Safety, State of Good Repair & Minor Projects		
Element (FY2019 - 2024)	**Quantity**	**Cost (in 000s)**
Rehab Buses	100 buses annually	$285,707
Replace Repair Equipment	Replacement of various equipment	14,961
Replace Bus Lifts	Replace 25 lifts annually	600
CCTV Replacement	Replace Bus Cameras	12,600
Rebuild Engine Assembly	Annually 100 Engines	17,612
Rebuild Trans. Assembly	Annually 150 Trans. Assy	17,245
Replace DPIM Assembly	10 DPIMs annually	2,520
Replace ESS Assembly	100 ESS annually	31,800
	Total	**$383,045**

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 $3.5 million in this program for the Development & Evaluation of new maintenance and overhaul technologies or initiatives.

Future Major Projects

Provisional funding of $2.6 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.

Proposed Budget (in 000s)	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	Total
Safety & State of Good Repair	$2,937	$15,845	$31,490	$38,635	$9,335	$11,313	$109,556
Major Active Capital Projects	28,000	6,500	0	0	0	0	34,500
Development & Evaluation	0	2,000	6,000	0	0	0	8,000
Future Major Projects	1,000	82,581	56,925	60,353	35,087	24,991	260,936
Budget Total	**$31,937**	**$106,926**	**$94,415**	**$98,988**	**$44,421**	**$36,303**	**$412,991**

Safety, State of Good Repair & Minor Projects		
Element (FY2019 - 2024)	**Quantity**	**Cost (in 000s)**
Switchgear, Transformer, Switchboard, etc.	8 locations	$19,128
Grinder, Lathe, Saw, Lift, etc.	6 locations	25,138
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	303
Shephard Parkway Bus Division- CNG Refueling Station	1	18,107
	Total	**$109,556**

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	$34,500
	Total	**$34,500**

Obsolete bus maintenance facilities will be replaced with safe, modern, and environmentally friendly facilities. These facilities will increase Metro's capacity to service and maintain a modern bus fleet, and will improve the economy and sustainability of bus maintenance operations.

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

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	$192,960
Expense thru FY 2017	$88,960
Projection for FY 2018	$69,500
Remaining Cost (FY2019 thru Completion)	$34,500

Development & Evaluation

Metro will allocate $8 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 $260 million is also included for the initiation of future projects that progress beyond the Development & Evaluation phase and into design and construction. Future Projects in this category will include the rebuild or replacement of the Northern and Bladensburg bus garages, and construction on the MetroAccess operating garage and command center. 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.

Proposed Budget (in 000s)	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	Total
Safety & State of Good Repair	$2,563	$3,077	$7,077	$11,099	$11,980	$7,611	$43,407
Development & Evaluation	1,000	5,282	10,458	12,151	14,824	7,200	50,915
Future Major Projects	1,000	29,133	25,132	32,054	39,421	38,800	165,540
Budget Total	**$4,563**	**$37,492**	**$42,668**	**$55,304**	**$66,225**	**$53,611**	**$259,862**

Safety, State of Good Repair & Minor Projects		
Element (FY2019 - 2024)	**Quantity**	**Cost (in 000s)**
Bus Customer Facility Improvement	Annual renovations authority-wide	$38,519
ADA Improvements	Complete 27 Bus stops	565
Bus planning studies	Annual service delivery assessment	4,323
	Total	**$43,407**

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 $50.9 million in this program for the Development & Evaluation of potential new projects related to the improvement of Bus Passenger Facilities & Systems. D&E initiatives in this program will include a Bike & Ride program, a new Pedestrian Warning System, and additional passenger facility improvements.

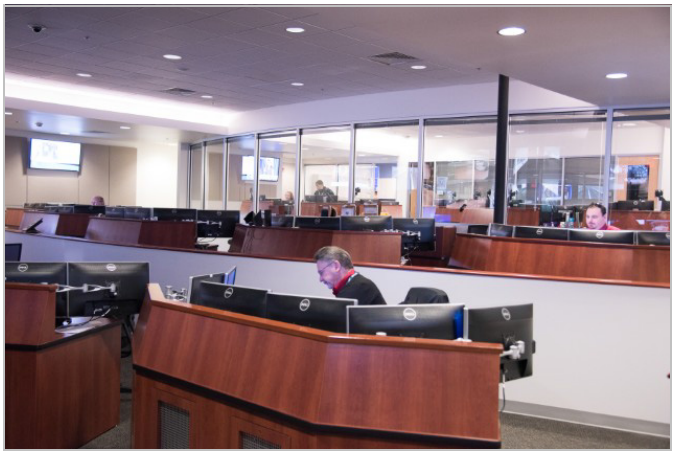
Future Major Projects

Provisional funding of $165.5 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.



Proposed Budget (in 000s)	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	Total
Safety & State of Good Repair	$38,701	$45,192	$43,773	$38,597	$44,115	$50,678	$261,056
Major Active Capital Projects	2,600	0	0	0	0	0	2,600
Development & Evaluation	1,500	2,500	0	0	0	0	4,000
Future Major Projects	12,500	3,470	10,448	21,226	17,898	7,810	73,350
Budget Total	**$55,301**	**$51,162**	**$54,221**	**$59,822**	**$62,012**	**$58,488**	**$341,006**

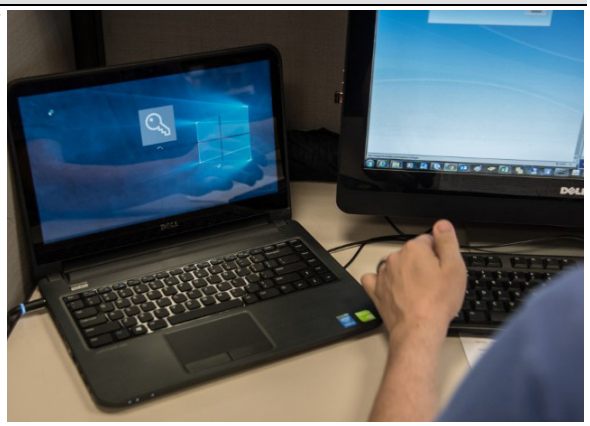
Safety, State of Good Repair & Minor Projects		
Element (FY2019 - 2024)	**Quantity**	**Cost (in 000s)**
Software Development & Maintenance	Various systems	$150,325
Network System Components (Severs, Uninterruptible Power Supply and Routers)	578	97,748
Computers	9,435	10,083
Safety Management System	N/A	2,900
	Total	**$261,056**

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**

The Information Technology program will include the development and roll-out of new systems that automate and standardize essential functions, creating efficiencies and cost savings through improved accuracy and tracking.

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 $4 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 $73.3 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

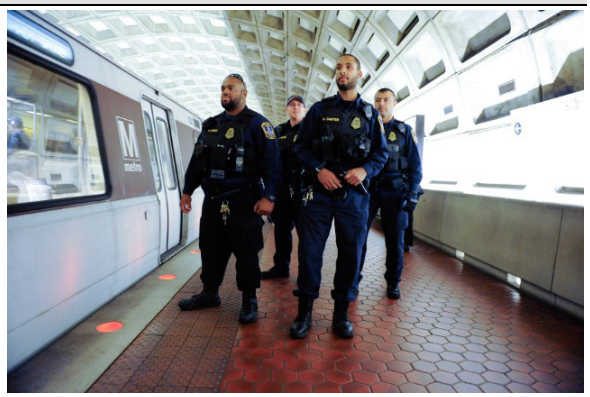
The Metro Transit Police Department (MTPD) supports 462 sworn police officers, 144 security special police, and 88 civilian personnel. MTPD is supported with essential administrative, storage and training facilities, as well as new and replacement public safety and emergency management equipment through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

Proposed Budget (in 000s)	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	Total
Safety & State of Good Repair	$1,000	$1,100	$1,210	$1,331	$1,464	$1,611	$7,716
Budget Total	**$1,000**	**$1,100**	**$1,210**	**$1,331**	**$1,464**	**$1,611**	**$7,716**

Safety, State of Good Repair & Minor Projects		
Element (FY2019 - 2024)	**Quantity**	**Cost (in 000s)**
Bullet Resistant safety vest	1029	$1,543
Non-Lethal	2058	1,440
Chemical Sensor Replacement	13	900
Body Cameras	13	1,286
Training Equipment Update	N/A	2,016
Portable Radio	76	530
	Total	**$7,716**

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.

Proposed Budget (in 000s)	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	Total
Safety & State of Good Repair	$27,346	$41,553	$61,400	$69,030	$62,979	$54,640	$316,949
Development & Evaluation	800	1,124	6,202	10,521	29,798	25,816	74,261
Future Major Projects	0	30,250	52,000	106,000	38,000	7,000	233,250
Budget Total	**$28,146**	**$72,926**	**$119,603**	**$185,551**	**$130,777**	**$87,456**	**$624,460**

Safety, State of Good Repair & Minor Projects		
Element (FY2019 - 2024)	**Quantity**	**Cost (in 000s)**
Non-Revenue vehicles	Annual replacement	$31,382
Pollution Prevention	9 yard locations	28,963
Fluid Tank Rehabilitations	8 locations	41,143
Supply Chain Equipment (forklifts, man lifts, material transport equip., components and support infrastructure)	186	7,049
Roof Rehab/Replace	50	31,862
Borrowing Costs	Annual fees	13,500
Admin Facility Rehab Program	9	34,985
Stormwater Facility Assessment	Varies by location	1,010
Environmental Compliance Remediation	Varies by location	41,862
Sustainability Investments	N/A	6,000
Transit Asset Management System	N/A	11,000
Jurisdictional Project Planning	N/A	18,000
General Engineering Services	N/A	12,000
Emergency Construction	N/A	12,000
General Project Administration and Planning	N/A	6,187
Core & System Capacity Project Development	N/A	7,200
Facilities Reconfiguration/ Repairs	Varies by location	8,500
Storage Facility Sprinkler Systems	Varies by location	4,306
	Total	**$316,949**

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 $74.3 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 $233.3 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.

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Appendix B - Sustainability and Energy

Sustainable Transportation

Investments in sustainability are one of the key ways Metro can promote cost savings and responsible stewardship of the region's funding support.

Metro provides a transit network which creates opportunities for a compact and low-carbon region to prosper. By supporting transit-oriented development as the region grows, Metro contributes to economic growth, enhanced mobility and reduced greenhouse gas emissions by replacing automobile trips with efficient bus and rail trips, and reducing traffic congestion. Each vehicle commute Metro eliminates saves 67 kilograms of carbon dioxide equivalent emissions per week. Additionally, each year Metro riders help prevent the release of about 400,000 tons of carbon and 22 tons of particulates into the atmosphere, minimize regional storm water run-off by supporting compact development and save approximately 40 million gallons of fuel.

Reinvesting to Meet Fiscal and Environmental Goals

In FY2019 Metro's continues working to get "Back2 Good" though reinvesting in our infrastructure. We are seeing tangible improvements in reliability of our train fleet.

The Back2Good plan also focuses on improving Metro's financial management and stability. As Metro rebuilds the system, it is critical that Metro invest smartly and demonstrate responsible stewardship of the region's dollars. Sustainable projects facilitate long term savings.

Energy Management

The FY2019 Budget for water and energy across all uses facilities, traction power and fuel) is $126.2 million. In 2014, Metro adopted an energy reduction target of 15 percent per vehicle mile from 2013 levels by 2025 to address both sustainability and cost containment needs of the agency. At the end of the first quarter of FY2018, Metro remains on target to attain these savings having realized a three percent reduction in energy use per vehicle mile since 2013.

In order to remain on track to reach the Authority's ambitious 2025 energy goals and the associated savings, in FY2018 Metro conducted an Authority-wide Energy Audit that recommended smart sustainable investments. The audit identified programs that can help us meet ambitious energy reduction targets while also reducing costs.

Not all of the measures can be implemented immediately. So projects have been reviewed and prioritized based on potential energy reduction, cost savings, project capital costs, overall project payback, and timing of related upcoming capital projects. Projects are being implemented through capital, asset management, and maintenance programs as well as being incorporated into how we rebuild and operate the system. Progress on the roll out on energy audit recommendations will be reported each fiscal year in Metro's Annual Sustainability Report.

In addition to moving forward on the Energy Audit recommendations, Metro has successfully launched an Enterprise Energy Management System (EEMS) that allows internal transparency, accountability and asset management of Metro's $126.2 million energy budget. By incorporating the management of energy use across the authority, Metro will be able to reach its energy reduction targets and achieve associated cost savings.

Sustainability Initiative

Metro's Sustainability Initiative is designed to achieve financial and environmental goals while improving safety and reliability. The initiative set forward three regional and seven internal service efficiency targets to manage and attain by 2025. It also established the Sustainability Lab and Sustainability Awards to promote cost effective innovation and best practice adoption at the Authority.

Since its adoption in 2014, Metro's sustainability projects have included efficient passenger garage lighting, remote monitoring of passenger station chillers, and solar powered emergency portable site lighting. Combined, sustainability projects have saved Metro millions annually while reducing use of utilities, upgrading equipment, and reducing labor requirements.

Programs like the Sustainability Lab allow the Authority's creative minds to show what is possible as Metro improves its system. Financially sound, environmentally-friendly projects are being submitted as improvements are made throughout the system. The Sustainability Lab has

funded pilots, that alone, are expected to save the Authority more than $2 million in operating costs over the next five years and if rolled out agency-wide, could save over $10 million annually. In FY2019, the program will continue to invest in high-return initiatives that can bring down long- term operating costs.

Employees are essential to spurring agency innovation and achieving Metro's Sustainability Initiative targets. Through its annual Sustainability Awards program, Metro recognizes and presents awards to staff for implementation of projects that create cost saving and/or sustainable business practices to the Authority.

Metro sustainability projects completed to date include:

- Completion of and beginning implementation of recommendations from an Authority-wide Energy Audit and prioritized action plan, and standing up an energy monitoring program to set the agency on course to achieve ambitious 2025 energy use reduction target of 15 percent per vehicle mile by 2025.
- Metro has begun to replace existing lighting with LED technology as the standard for station lighting. These enhancements, which provide better visibility and improve accessibility, are underway throughout the system. Pylon lighting has been retrofitted to LED technology at 12 interior stations thus far – saving the authority about $68,000 annually. To date 55 mezzanines have been upgraded with new LED fixtures and lamps and the final six mezzanines will begin construction in February 2018. Construction will commence on interior station platform lighting upgrades in early 2018. Once all 48 interior stations are complete, the project will result in an 80 percent reduction in platform lighting energy use and at the same time greatly improve station lighting and visibility.
- Metro continues to support access and connectivity for the region through a number of features including: facilities at College Park-U of MD and future East Falls Church and Vienna stations provide free secure bike parking with SmarTrip® card access. Metro currently owns and operates about 2,400 bicycle racks, and is replacing older racks with new inverted-U racks and about 2,400 bicycle lockers. Bicycle transport is also free aboard Metrobus in quality, heavy-duty racks attached to the front of each bus. In addition, Capital Bikeshare has bikesharing locations at or near more than one-third of Metrorail stations.
- The Sustainability Lab funded a pilot for three solar powered portable lighting towers that will eliminate the use of diesel generators for temporary site lighting throughout the system. The pilot provided three solar light tower units to the MTPD and Power departments that are currently undergoing testing. The three units are estimated to save approximately $15,000 per year in diesel fuel, providing a simple payback of approximately five years on diesel costs alone. In addition to fuel savings, Metro's existing diesel generators are labor intensive - requiring nightly re-fueling, switching on/off, periodic oil changes, and bulb replacements. Eliminating these processes would provide annual labor savings of approximately 1,170 hours. The successful pilot will be rolled out to build on these savings.
- A 24 month railcar wrapping pilot, was funded by the Sustainability Lab to significantly reduce the use of hazardous hydrofluoric acid used to clean railcars, reduce environmental compliance risks, and reduce labor required to resurface and keep railcars clean. If the pilot is successful the biggest impact to operations is the increased availability of railcars in revenue service. The current railcar clear coating process costs $4,000 (materials) and takes 1.25 weeks of labor per railcar. Vinyl wrap costs approximately $5,000 per car and is faster to apply. This will save approximately 200 man hours and reduce railcar time in the paint booth/out of service.

- To improve stormwater management Metro has added drain medallions to 226 storm drains at rail stations as a best management practice for stormwater education and outreach and is conducting a stormwater infrastructure assessment to identify and evaluate the cost efficacy of future green infrastructure investments.

- Metro has begun roll out of high-bay lighting retrofits at its eight railcar repair facilities based on the Sustainability Lab funded pilot LED retrofit of high-bay lighting at Metro's main supply warehouse. The Pilot replaced 315 lamps saving about 530,000 kWh of electricity and approximately $37,000 each year. In addition, Metro is pre-approved for a one-time $50,000 utility rebate that will be applied to our remaining energy bill at the site moving forward.
- Metro is in the process of signing an agreement with the District of Columbia Sustainable Energy Utility (DCSEU) for the DCSEU to perform a full facility lighting retrofit to LED at no cost to Metro. The value of the retrofit (labor and equipment) is estimated at just under $215,000 and will provide an estimated annual energy savings of 930,000 kWh, or $65,000 in energy savings annually. In the summer of 2016, Metro partnered with the DC Sustainable Energy Utility in a successful pilot to replace florescent office lighting in Metro's headquarters building with over 17,000 LEDs. In addition to reducing maintenance costs, this retrofit is providing energy savings of approximately 800,000 kWh, or $60,000, each year.
- Additionally, equipment specifications are being developed based on recommendations from a sustainability lab funded study of the potential benefits of regenerative braking equipment – which would allow for the "recycling" of energy that is currently wasted as heat when trains brake.

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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 which include unemployment insurance and payroll taxes. The proposed Authority-wide FY2019 fringe benefit budget for operating and capital is $525.9 million. The proposed FY2019 fringe benefit budget is $32.1 million more than the FY2018 approved budget, primarily due to the increase of fringe benefit costs for pensions, health care and FICA taxes associated with higher labor costs.

The following tables provide a detailed, three-year comparison of total human capital staffing levels for Metro. The staffing requirement for FY2019 is 12,232, consisting of 10,902 operating positions and 1,330 capital positions.

The table below shows a breakdown, by department, of the staffing levels for FY2017 - FY2019.

Human Capital by Department

	FY2017 Budget	FY2018 Budget	FY2019 Proposed	Change
General Manager / CEO	6	4	3	(1)
Inspector General	36	35	35	—
Board Secretary	4	4	4	—
External Relations	139	115	116	1
Internal Business Operations	571	520	520	—
Chief Financial Officer	271	252	244	(8)
Internal Compliance	118	60	59	(1)
Fair Practices	12	22	22	—
General Counsel	48	48	48	—
Safety & Environmental Management	66	76	76	—
Capital Planning and Program Management	499	420	421	1
Chief Operating Officer	11,262	10,676	10,684	8
Chief Operating Officer - Admin	6	5	7	2
Rail Services	4,415	4,059	4,069	10
Bus Services	4,086	3,947	3,937	(10)
Access Services	53	50	50	—
Metro Transit Police	726	694	694	—
Support Services	1,718	1,714	1,717	3
Office of Budget, Performance and Planning	258	207	210	3
TOTAL	**13,032**	**12,232**	**12,232**	**0**

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 Budget	FY2018 Budget	FY2019 Proposed	Change
POSITIONS	**13,032**	**12,232**	**12,232**	**0**
LABOR	**$1,102,420,774**	**$1,040,126,330**	**$1,081,185,953**	**$41,059,623**
Health Care	$221,126,580	$213,387,242	$226,489,150	$13,101,908
Taxes -- FICA	$84,010,943	$78,204,437	$81,969,489	$3,765,052
Pension -- Defined Benefit	$155,961,882	$151,756,546	$163,856,502	$12,099,956
Pension -- Defined Contribution	$12,124,000	$11,660,669	$12,068,791	$408,122
Life Insurance	$2,024,358	$2,009,434	$2,079,764	$70,330
Long Term Disability	$1,237,500	$1,190,208	$1,231,865	$41,657
Taxes -- Unemployment	$1,148,516	$1,152,219	$1,192,547	$40,328
Workers' Compensation Reserve Contribution and Assessment	$25,855,735	$30,055,889	$32,470,005	$2,414,116
Total Allocated Fringe Benefits	**$503,489,514**	**$489,416,643**	**$521,358,113**	**$31,941,470**
Unallocated Fringe Benefits*	$5,073,026	$4,414,214	$4,593,118	$178,904
TOTAL FRINGE BENEFITS	**$508,562,540**	**$493,830,857**	**$525,951,231**	**$32,120,374**

* Includes: Uniform, Tools, Meal Allowance, Tuition Reimbursemetns etc.

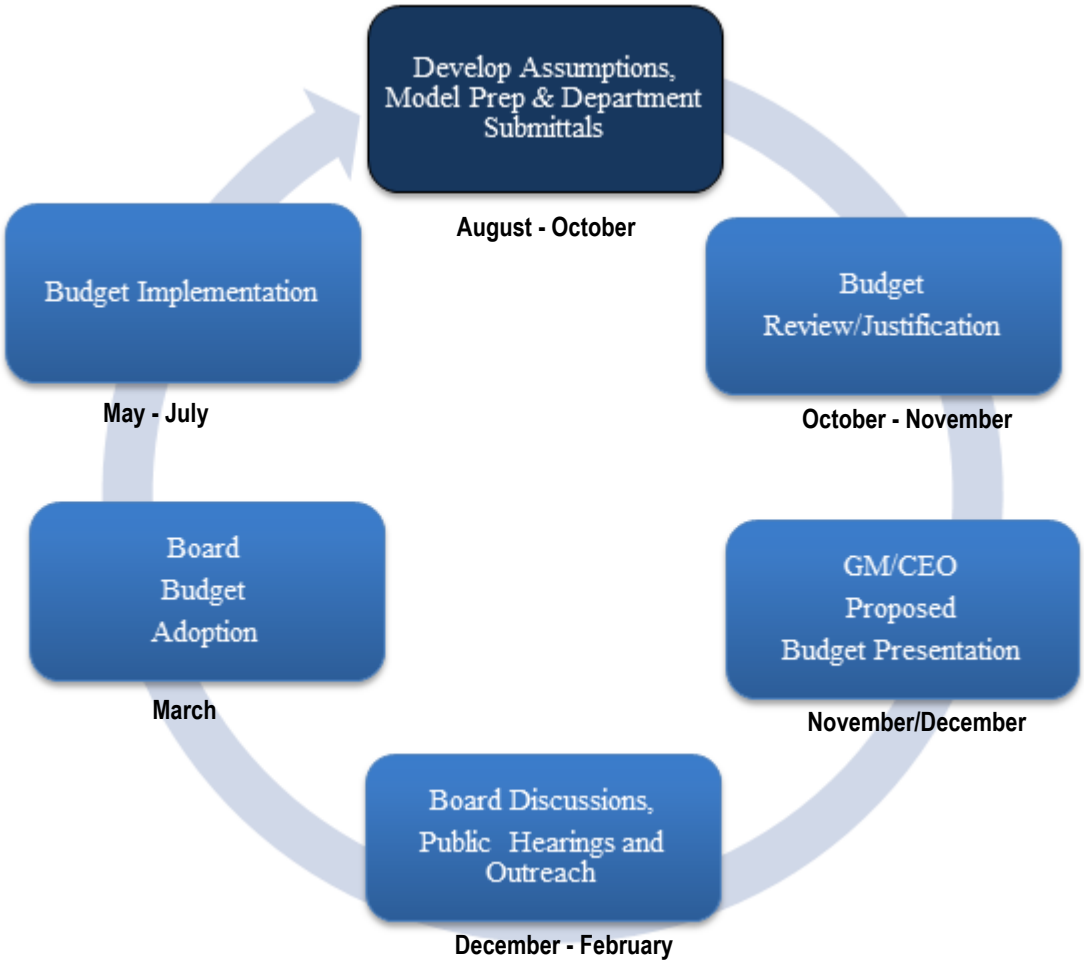
Human Capital Summary
Fringe Benefit Annual Budgeting Rates

	FY2017 Budget	FY2018 Budget	FY2019 Proposed	Change
Average Annual Pay	$84,593	$85,033	$88,390	$3,357
Average Full Fringe Cost	$39,024	$40,372	$42,998	$2,626
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 Proposed 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 2043. $21.7 million was placed in a capitalized interest fund to service interest on the debt through January 2019. 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 2009B1 - Due Bondholders 1/1/19[1]	—	$1,297,739	$1,297,739
Series 2009B1 - Due Bondholders 7/1/192[2]	—	$1,297,739	$1,297,739
Series 2016A - Due Bondholders 1/1/19	—	$3,712,875	$3,712,875
Series 2016A - 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 2009B1 - 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 March 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 Budget	FY2019 Proposed
STATISTICS:				
Total Bus Miles (000s)	51,424	51,113	48,661	48,661
Revenue (budget) Bus Miles (000s)	38,877	38,407	37,675	37,675
Total Passengers (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	$160,365
Total Operating Expenses (000s)	$584,986	$600,466	$689,799	$651,666
Net Subsidy (000s)	$418,920	$437,689	$507,421	$491,301
RATIOS:				
Cost Per Total Bus Mile	$11.38	$11.75	$14.18	$13.39
Passengers Per Bus	82.91	76.90	73.89	70.07
Passengers Per Revenue Bus Mile	3.28	3.17	3.10	2.94
Cost Per Passenger	$4.59	$4.93	$5.90	$5.88
Subsidy Per Passenger	$3.29	$3.60	$4.34	$4.43
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%	24.6%

* Average is lower than base fare due to the impact of the transfer discount, senior and student discounts, and passes

Active Proposed 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**

* NABI
** NEW FLYER - HYBRID

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 Actual	FY2017 Actual	FY2018 Budget	FY2019 Proposed
Total Scheduled*	**50,080,598**	**49,797,108**	**47,360,806**	**47,360,806**
Strategic				
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**	**51,112,687**	**48,660,601**	**48,660,601**
Estimated miles of articulated bus included in above miles	1,900,948	1,900,948	1,628,570	1,628,570

* Strategic miles included in Scheduled Miles

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 FY18 Scheduled Pay Hours. Non-Scheduled OT includes funding for bus bridges, supporting Rail shutdowns, 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 to all of the Metro contributing jurisdictions. Costs associated with non-regional are allocated to a greater degree 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, and this measure captures the total time between a bus leaving its storage and maintenance facility and its return at the end of the day. For the FY2019 proposed budget, the average cost per platform hour for all routes is $148.83. For the allocation of the proposed FY2019 operating subsidy, the budgeted cost per platform hour for non-regional routes (which has certain overhead and administrative expenses removed) is $107.36.

Metro Regional and Non Regional Route
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	1,768,469
Maryland	822,385	874,355	868,570	886,898	893,716	892,750	912,623	912,623
Virginia	743,905	798,923	800,416	823,206	830,318	837,830	827,814	827,814
Totals for Regional:	3,203,803	3,375,068	3,360,324	3,465,643	3,508,023	3,486,645	3,508,905	3,508,905
Non-Regional Routes								
District of Columbia	396,675	394,654	380,811	381,898	368,793	368,025	346,502	346,502
Maryland	387,451	391,759	379,565	379,118	387,432	387,121	388,031	388,031
Virginia	103,320	117,305	111,991	129,831	132,187	132,237	135,056	135,056
Totals for Non-Regional:	887,446	903,718	872,367	890,847	888,413	887,383	869,590	869,590
TOTAL METROBUS ROUTES	**4,091,249**	**4,278,786**	**4,232,691**	**4,356,490**	**4,396,435**	**4,374,028**	**4,378,495**	**4,378,495**

DC Regional Routes - Platform Hours

Line	Line Name	Routes	Revenue Miles	Revenue Hours	Platform Miles	Platform Hours
11	Benning Road-H St Exp	X9	83,258	9,650	120,048	12,125
14	Benning Road-H Street	X2	454,576	67,408	503,418	71,588
18	East Capitol Street-Cardozo	96,97	500,186	55,650	601,503	62,129
22	Glover Park-Federal Triangle	D1	24,719	3,610	47,852	5,428
32	Connecticut Avenue	L1,2	243,284	30,012	289,956	39,955
35	Crosstown	H2,3,4	389,843	49,895	448,309	54,363
37	Mac Blvd-Geotown	D5	26,185	2,993	46,664	4,560
42	Pennsylvania Avenue Limited	39	52,188	6,663	116,715	10,988
43	Fort Totten-Petworth	60,64	273,184	38,204	305,521	41,283
52	14th Street	52,53,54	520,631	93,953	589,647	102,007
55	Sibley Hosp. - Stad. Armory	D6	387,955	49,432	473,588	56,185
57	Fairfax Village-L'Enfant Plaza	V5	25,738	2,917	46,422	4,498
59	Takoma-Petworth	62,63	206,975	28,345	240,025	31,877
62	Brookland-Potomac Park	H1	23,435	3,858	43,105	5,415
75	Massachusetts Avenue	N2,4,6	319,379	34,004	393,084	39,840
77	Military Road-Crosstown	E4	304,764	34,887	323,500	36,633
79	Ivy City - Fort Totten	E2	107,811	13,320	121,353	14,323
81	Mount Pleasant	42,43	280,218	52,187	393,348	61,032
86	North Capitol Street	80	406,501	59,286	454,288	63,047
89	P Street-Ledroit Park	G2	135,059	23,217	167,900	26,538
93	Pennsylvania Avenue	32,34,36	493,777	63,974	780,569	84,149
95	Deanwood-Alabama Avenue	W4	497,422	50,088	561,276	54,729
99	Wisconsin Avenue	31,33	341,134	53,400	396,846	58,899
100	Wisconsin Avenue Limited	37	36,743	5,054	79,160	8,817
101	Rhode Island Avenue	G8	269,302	35,374	317,140	39,130
107	Georgia Avenue Metro Extra	79	381,021	44,412	421,982	48,255
108	16Th Street	S2,4	857,184	98,315	994,542	109,768
109	16Th Street-Potomac Park	S1	58,626	8,310	110,586	13,800
111	ML King Jr Avenue Limited	A9	61,798	6,483	108,555	9,508
112	16th Street Exp	S9	199,937	20,616	244,939	25,098
113	Friendship Heights - Southeast	30N, 30S	430,204	51,170	458,475	53,430
118	Georgia Avenue-7th Street	70	527,467	73,673	663,249	80,717
119	Convention Center- SW Waterfront Line	74	112,930	17,161	140,287	20,077
130	U Street-Garfield	90,92	658,222	103,177	821,898	115,669
132	Benning Heights-M Street	V1	43,610	5,479	81,063	7,942
133	Capitol Heights- Minn Ave	V2,4	451,451	51,464	520,124	56,430
134	Deanwood- Minnesota Ave.	U7	68,678	8,914	84,550	9,963
135	Mayfair-Marshall Heights	U5,6	247,379	26,693	278,412	29,345
141	Stanton Road	94	71,605	10,272	85,493	11,294
150	Bladensburg Road-Anacostia	B2	467,604	56,473	521,029	60,205
151	Benning Road	X1,3	56,748	6,696	112,611	10,982
581	Anacostia-Congress Heights	A2,6,7,8	627,791	67,956	745,683	76,347
582	Anacostia-Fort Drum	A4,W5	337,450	34,499	357,559	36,161
587	South Capitol St Limited	W9	19,898	2,617	36,242	3,938
	SUBTOTAL Regional DC		**12,083,865**	**1,561,760**	**14,648,516**	**1,768,469**

DC Non Regional Routes - Platform Hours

Line	Line Name	Routes	Revenue Miles	Revenue Hours	Platform Miles	Platform Hours
15	Garfield-Anacostia Loop	W6,8	218,601	25,896	254,193	28,526
25	Maryland Avenue	X8	61,034	8,259	66,289	8,755
34	Brookland-Fort Lincoln	H6	194,340	19,247	200,318	19,798
44	Capitol Hts-Benning Hts	U8	134,434	18,355	145,317	19,384
45	Hospital Center	D8	287,989	36,030	334,251	40,403
46	Fairfax Village	M6	126,870	12,997	154,771	14,888
49	Fort Lincoln Shuttle	B8,9	54,230	5,308	56,140	5,513
51	Glover Park-Dupont Circle	D2	136,822	16,591	157,005	18,085
56	Ivy City-Franklin Square	D4	112,555	18,270	135,380	20,220
71	Chevy Chase	E6	64,783	5,621	65,403	5,804
78	Sheriff Road-River Terrace	U4	107,135	10,157	126,068	12,202
82	Shipley Terrace-Ft. Drum	W1	102,079	10,724	118,677	12,172
84	Nebraska Avenue	M4	101,777	9,831	107,848	10,325
91	Park Road-Brookland	H8,9	224,069	29,887	251,592	32,413
158	United Medical Ctr.-Anacostia	W2,3	330,531	34,472	373,771	37,583
504	Anacostia High School	A31,32,33	1,716	333	4,904	653
517	Deal Junior High School	D31,32,33,34	9,533	1,267	23,363	2,592
519	Eastern High School	E32	1,590	208	4,923	422
539	Sousa Middle School	S35	1,617	144	5,205	349
540	Phelps High School	S41	1,284	144	3,028	330
544	Anacostia-Eckington	P6	314,830	45,386	387,095	49,503
545	Mckinley High School	M31	1,571	304	5,397	694
549	Duke Ellington School Of The Arts	D51	1,897	227	3,892	365
550	Wilson High School	W45,47	2,483	311	6,198	685
583	Takoma-Fort Totten	K2	28,244	3,712	43,531	4,840
	SUBTOTAL Non-Regional DC		**2,622,012**	**313,679**	**3,034,557**	**346,502**

Maryland Regional Routes - Platform Hours

Line	Line Name	Routes	Revenue Miles	Revenue Hours	Platform Miles	Platform Hours
9	Annapolis Road	T18	281,952	25,594	304,132	27,474
13	Greenbelt-Twinbrook	C2,4	887,777	84,005	1,110,162	95,801
16	Bethesda-Silver Spring	J1,2,3	577,655	53,519	727,765	60,781
28	Chillum Road	F1,2	214,839	17,525	284,263	20,392
29	Clinton	C11,13	47,458	3,342	82,690	5,092
41	Eastover-Addison Road	P12	463,497	41,275	578,282	46,388
47	Forestville	K12,13	176,496	16,089	307,836	20,917
53	Georgia Avenue-Maryland	Y2,7,8	671,534	64,097	873,953	72,772
63	Hillcrest Heights	C12,14	96,708	9,080	119,009	10,573
73	Marlow Heights-Temple Hills	H11,12,13	158,277	14,448	310,865	19,322

Maryland Regional Routes - Platform Hours

Line	Line Name	Routes	Revenue Miles	Revenue Hours	Platform Miles	Platform Hours
74	College Park	83,83X,86	501,747	45,170	607,887	50,609
83	New Hampshire Avenue Limited	K9	95,435	9,778	166,039	12,932
85	New Hampshire Avenue-Md	K6	377,023	39,057	548,754	46,857
88	Oxon Hill-Fort Washington	P17,18,19	229,489	16,279	415,521	24,977
90	Martin Luther King Jr. Highway	A12	424,725	31,489	485,379	35,222
97	New Carrollton-Silver Spring	F4	466,578	46,418	508,531	49,290
98	New Carrollton-Fort Totten	F6	198,216	15,775	224,978	17,879
103	College Park-White Flint	C8	353,413	26,954	370,107	27,659
123	Veirs Mill Road	Q1,2,4,5,6	652,290	60,407	737,549	65,052
147	Fairland	Z8	360,426	30,280	499,623	36,401
274	College Park-Suppl Service	83X	0	0	0	0
542	RI Ave. - New Carrollton	T14	183,179	15,656	204,617	17,143
580	Bock Road	W13,14	122,245	9,216	224,047	14,208
584	Oxon Hill-Suitland	D12,13,14	608,084	46,481	731,330	54,235
629	College Park-Bethesda	J4	91,530	9,113	159,623	12,104
790	District Heights-Suitland	V12	193,963	16,400	246,547	19,285
800	Riggs Road	R1,2	271,412	22,911	342,435	26,749
17	National Harbor-Alexandria Line	NH2	270,446	20,696	307,211	22,509
	SUBTOTAL Regional MD		**8,976,394**	**791,054**	**11,479,135**	**912,623**

Maryland Non Regional Routes - Platform Hours

Line	Line Name	Routes	Revenue Miles	Revenue Hours	Platform Miles	Platform Hours
6	I-270 Exp	J7,9	89,328	4,767	121,390	6,200
7	National Harbor-Southern Avenue Line	NH1	196,878	15,180	242,892	18,262
10	Ardwick Industrial Park Shuttle	F12	81,511	6,240	94,291	6,919
19	Bowie-Belair	B24	155,428	9,725	170,634	10,445
20	Bowie State University	B21,22	172,880	6,791	198,585	7,760
26	Pointer Ridge	C28	121,850	5,238	147,170	6,270
30	Colesville-Ashton	Z2	137,460	9,104	177,323	10,954
33	Connecticut Avenue-Md	L8	226,753	18,549	261,000	20,617
36	Kenilworth Avenue	R12	193,187	15,089	239,732	17,042
38	District Heights-Seat Pleasant	V14	203,290	15,405	269,569	18,760
65	Bowie-New Carrollton	B27	58,313	3,108	62,645	3,446
67	Twinbrook-Silver Spring	J5	49,633	3,350	61,893	4,042
72	Marlboro Pike	J12	151,075	10,978	195,559	12,563
96	Langley Park -Cheverly Line	F8	182,788	15,101	251,251	17,947
102	River Road	T2	296,911	18,304	316,071	19,707
104	Laurel-Burtonsville Exp	Z7	97,058	5,902	203,243	9,195
105	Sheriff Road-Capitol Heights	F14	235,023	18,810	258,713	20,007
146	Calverton-Westfarm	Z6	275,613	23,217	369,429	27,508

Maryland Non Regional Routes - Platform Hours

Line	Line Name	Routes	Revenue Miles	Revenue Hours	Platform Miles	Platform Hours
149	Cheverly-Wash Business Park	F13	116,403	8,602	125,558	9,114
152	Central Avenue	C21,22,26,29	392,067	23,486	489,243	28,142
252	Central Avenue Suppl Service	C27	25,975	1,234	50,080	2,225
525	Laurel	89,89M	159,256	9,142	208,698	10,859
526	Laurel Exp	87	133,652	7,211	188,235	9,079
527	Greenbelt-New Carrollton	G12,14	417,686	33,802	471,024	36,721
531	Greencastle-Briggs Chaney Exp.	Z11	122,933	8,757	223,042	12,891
634	Crofton-New Carrollton	B29	64,398	2,550	80,043	3,092
645	Indian Head Exp	W19	142,265	6,532	203,930	8,559
647	Greenbelt-Bwi Airport Exp	B30	409,351	16,153	446,493	17,433
802	Queens Chapel Road	R4	110,031	10,786	131,175	12,273
	SUBTOTAL Non- Regional MD		**5,018,994**	**333,114**	**6,258,912**	**388,031**

Virginia Regional Routes - Platform Hours

Line	Line Name	Routes	Revenue Miles	Revenue Hours	Platform Miles	Platform Hours
3	Landmark-Ballston	25B	234,374	25,549	291,565	28,703
5	Leesburg Pike	28A	617,284	56,106	703,474	63,446
8	Annandale	29C,G	125,095	8,565	281,597	14,356
12	Ballston-Farragut Square	38B	230,030	34,162	448,448	44,125
23	Leesburg Pike Limited	28X	93,810	7,042	124,075	8,683
27	Chain Bridge Road	15K,L	95,838	5,679	163,278	8,117
54	Mclean-Crystal City	23A,B,T	518,478	48,912	611,916	53,937
58	Braeburn Drive - Pentagon Express	29W	83,990	3,283	101,403	4,175
94	Pershing Drive-Arlington Blvd	4A,B	212,980	22,619	279,702	26,919
106	Foxchase-Seminary Valley	8S,W,Z	140,188	8,214	166,173	9,819
121	Pimmit Hills-Falls Church	3T	151,214	9,211	195,732	10,900
126	Washington Boulevard-Dunn Loring	2A	125,398	24,921	248,357	30,382
127	Tysons Corner-Dunn Loring	2T	131,353	12,463	173,209	13,967
128	Fair Oaks-Jermantown Road	2B	215,001	16,461	272,862	18,746
131	Richmond Highway Exp	REX (R99)	379,412	35,634	531,965	43,811
137	Wilson Boulevard-Vienna	1A,B	452,806	42,250	644,056	50,209
138	Lee Highway-Farragut Square	3Y	30,720	3,683	67,895	5,878
139	Fair Oaks-Fairfax Boulevard	1C	249,614	20,330	285,858	21,736
156	Hunting Point-Ballston	10B	290,318	31,614	337,269	34,628
176	Lincolnia-Park Center-Pentagon	7C,P	41,201	3,010	47,803	3,471
512	Barcroft-South Fairlington	22A,B,C,F	304,768	26,418	384,126	31,293
522	Columbia Pike-Farragut Square	16Y	88,048	9,367	187,793	15,558
692	Annandale-East Falls Church	26A	129,483	10,088	185,403	12,325
2	Hunting Point-Pentagon	10A,E	222,220	31,797	463,360	36,224
4	Alexandria-Fairfax	29K,N	379,507	30,257	471,315	35,169

Virginia Regional Routes - Platform Hours

Line	Line Name	Routes	Revenue Miles	Revenue Hours	Platform Miles	Platform Hours
39	Arlington-Union Station	13Y	6,196	613	8,282	800
69	Annandale Road	3A	109,228	10,511	167,889	12,857
70	Lincolnia-North Fairlington	7A,F,Y	346,423	28,468	503,272	36,974
76	Lincolnia-Park Center-Pentagon	7W,X	70,390	5,713	140,038	8,871
110	Skyline City	28F,G	71,335	5,089	85,620	5,871
142	Columbia Pike	16A,B,E,J,P	477,616	49,283	568,068	54,930
143	Columbia Hts West-Pent City	16G,H,K	273,436	31,235	353,169	35,609
144	Columbia Pike-Federal Triangle	16X	77,821	7,356	130,051	10,411
157	Mt Vernon Exp	11Y	59,390	3,688	125,135	7,154
521	Annandale-Skyline City-Pent.	16L	44,402	2,976	75,674	4,538
129	DC-Dulles	5A	589,292	20,755	619,770	23,217
	SUBTOTAL Regional VA		**7,668,658**	**693,321**	**10,445,596**	**827,814**

Virginia Non Regional Routes - Platform Hours

Line	Line Name	Routes	Revenue Miles	Revenue Hours	Platform Miles	Platform Hours
61	Kings Park Exp	17G,H,K,L	303,688	13,300	575,354	24,074
66	Kings Park	17A,B,F,M	203,783	9,924	317,196	14,453
68	Landmark-Pentagon	21A,D	77,781	5,249	183,503	9,738
80	Mark Center-Pentagon	7M	148,488	8,021	164,413	9,242
87	Orange Hunt	18G,H,J	128,590	6,567	241,895	10,879
148	Metroway Potomac Yard	MW1	224,978	32,188	246,996	34,108
541	Burke Centre	18P,R,S	207,868	10,749	427,742	19,578
640	Springfield Circulator	S80,91	9,413	11,320	56,276	12,984
	SUBTOTAL Non-Regional VA		**1,304,589**	**97,317**	**2,213,375**	**135,056**

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 Budget	FY2019 Proposed
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 Passengers (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	$611,318	$622,123	$626,169
Total Operating Expense (000s)	$1,013,054	$919,266	$983,447	$1,022,902
Net Subsidy (000s)	$317,101	$307,948	$361,323	$396,733
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	$5.29	$5.19	$5.51	$5.90
Net Subsidy Per Passenger	$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%	66.5%	63.3%	61.2%

* 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**
Verizon Arena	1,711,283	1,711,283	1,711,283	1,711,283
Gap Trains	360,000	360,000	360,000	360,000
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**

1 Maximum 30-hour work week.

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
Yellow Line	Huntington - Mt. Vernon 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 FY2018					
Mid-day			Weekdays	Saturday	Sunday
Red	Silver Spring to Grosvenor		6	6	7.5
Orange/Blue/Silver	Rosslyn to Stadium Armory		4	4	5
Yellow/Green	L'Enfant Plaza to Mount 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
50% 8-Car Train Program[1]	-	-	-	-
Option Cars	-	-	-	-
Gap	18	18	36	36
Total Scheduled Car	**954**	**954**	**854**	**868**
Spares[2]	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 Previously, the "6000 Series".
2 Spares were 15% 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's-6's	3's-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	**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	76
Breda Construzioni Ferroviarie	3,000	1984-1988	288	284	282
Breda Construzioni Ferroviarie	4,000	1992-1994	100	52	—
Construcciones y Auxiliar de Ferrocarriles, S.A. (CAF)	5,000	2001-2004	192	192	152
Alstom	6,000	2006-2008	184	184	182
Kawasaki	7,000	2014-Present	378	444	440
Total			**1,518**	**1,238**	**1,132**

* There are six (6) 1000 Series vehicles dedicated for revenue collection. All 1000 series and 4000 series vehicles have been decommissioned. As of November17, 2017, (xxx) 7000 series cars have been delivered, 356 vehicles have been accepted, and 352 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 Budget	FY2019 Proposed
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 Passengers	2,280,730	2,367,878	2,400,000	2,413,000
Passengers 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, so the calculation will apply to all ridership.

MetroAccess Statistics - Fleet

	FY2016 Actual	FY2017 Actual*	FY2018 Budget	FY2019 Proposed
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 - Age

Manufacturer	Fiscal Year Entered Service	Number of Vans	Average Age
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**	

Appendix H - Vital Signs Report

Vital Signs

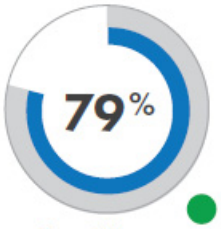
July-September 2017

Published: November 2017

Q1

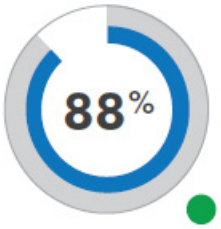
Key Performance Indicators

Bus On-Time Performance



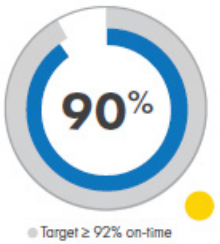
Target ≥ 79% on-time

Rail On-Time Performance



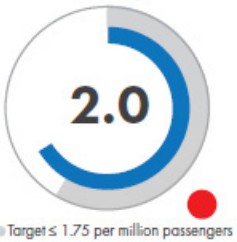
Target ≥ 75% on-time

MetroAccess On-Time Performance



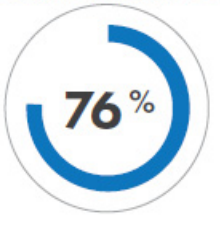
Target ≥ 92% on-time

Customer Injuries

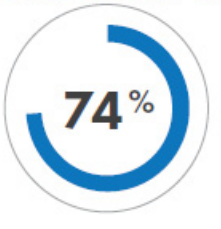


Target ≤ 1.75 per million passengers

Customer Satisfaction – Bus



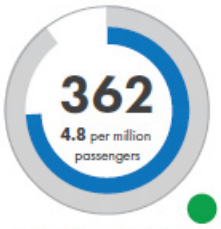
Customer Satisfaction – Rail



Ridership

Budget Forecast 77.5 million passengers

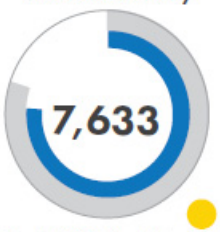
Crime



Target ≤ 437.5 Part I Crimes

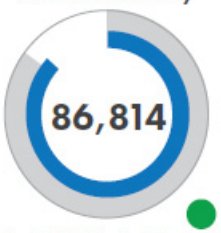
Key Drivers

Bus Fleet Reliability



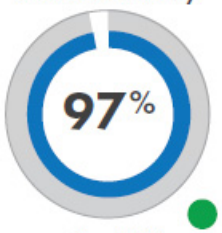
Target ≥ 8,000 miles between failure

Rail Fleet Reliability



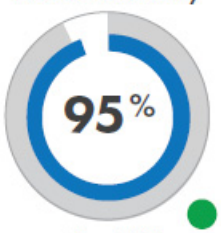
Target ≥ 75,000 miles between delay

Elevator Availability



Target ≥ 97%

Escalator Availability

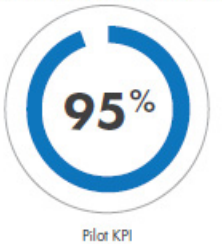


Target ≥ 93%

KEY
- TARGET
- ACTUAL
- MET OR ABOVE TARGET
- NEAR TARGET
- UNACCEPTABLE RESULT

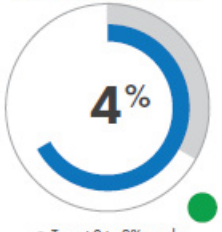
NOTE
Percentages rounded to the nearest whole number

Rail Infrastructure Availability



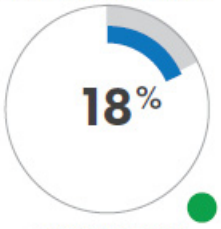
Pilot KPI

Budget Management



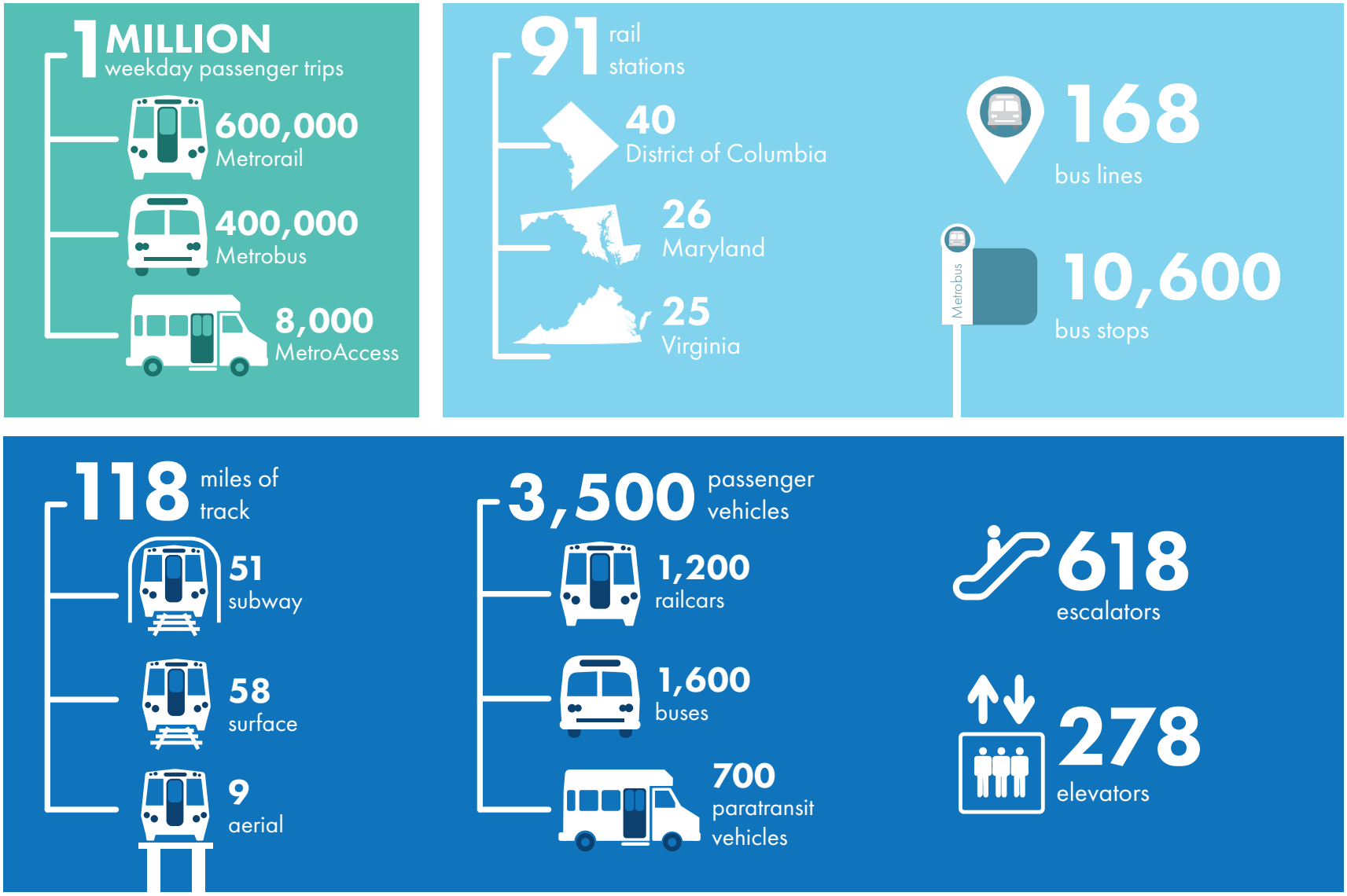
Target 0 to 2% surplus

Capital Funds Invested



FY2018 Target ≥ 95%

About Metro


1 MILLION
weekday passenger trips
600,000
Metrorail
400,000
Metrobus
8,000
MetroAccess
91
rail
stations
40
District of Columbia
26
Maryland
25
Virginia
168
bus lines
Metrobus
10,600
bus stops
118
miles of
track
51
subway
58
surface
9
aerial
3,500
passenger
vehicles
1,200
railcars
1,600
buses
700
paratransit
vehicles
618
escalators
278
elevators

Path to Improved Performance

Vital Signs communicates the transit system's performance to the Board of Directors on a quarterly and annual basis.

The public and other stakeholders are invited to monitor Metro's performance using a web-based scorecard at wmata.com.

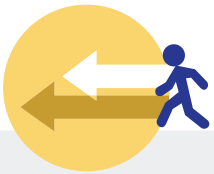
Metro's managers measure what matters and hold themselves accountable to stakeholders via a focused set of Key Performance Indicators (KPIs) reported publicly in Vital Signs.

Communicate system performance quarterly and annually

Balanced scorecard approach, but focus is Metro's core business of quality service delivery

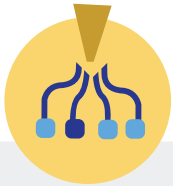
What gets measured gets managed, leading to **improved performance**

Answer three questions...



What actions are being taken to improve?

Why did performance change?



Is Metro achieving its **four strategic goals?**

Utilizing systematic, **data-driven** analysis

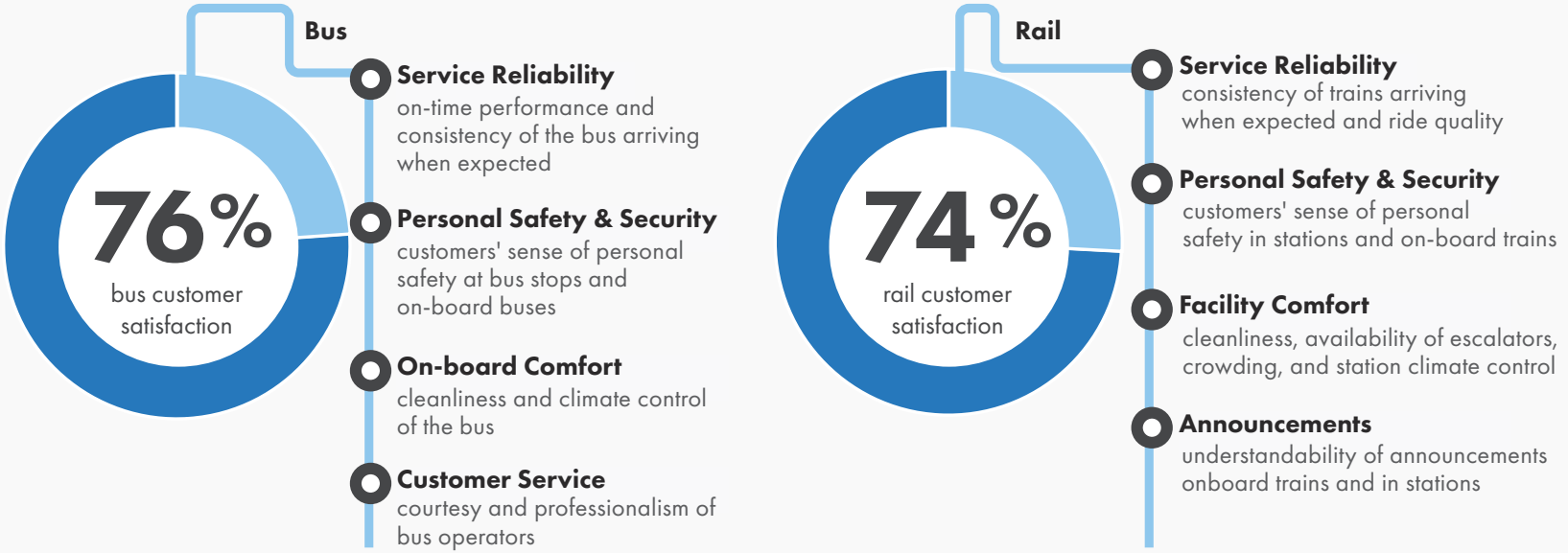
Targeting that gauges progress and identifies success

KPI: Customer Satisfaction

QUALITY SERVICE

Bus customer satisfaction remained steady, statistically unchanged with the previous year; rail customer satisfaction is improving with the number of customers that feel Metro is getting better more than doubling this same time last year

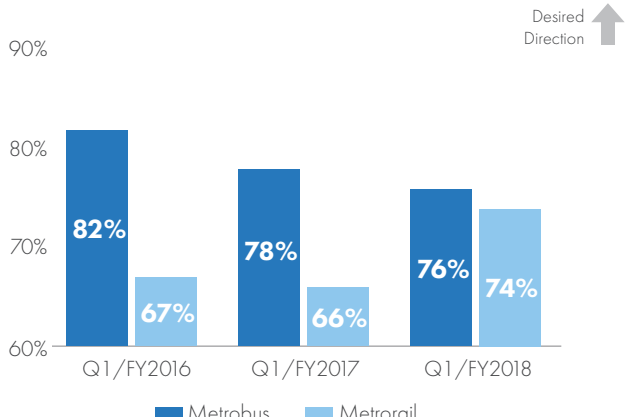
What caused customers to not be satisfied?



Key actions to improve performance

- Sustain improvements in rail and bus on-time performance, including:
  - » Implement active service management on headway-managed bus routes
  - » Execute railcar "get well" program, including continued acceptance of 7K trains
  - » Implement new, aggressive preventive maintenance and capital programs that will cut unplanned delays by half by July 2019
  - » Minimize customer impact of planned track outages by taking advantage of longer evening and weekend work windows and "piggy-backing" work
- Improve station management and make stations cleaner and brighter to better serve customers

3-YEAR TREND IN PERFORMANCE

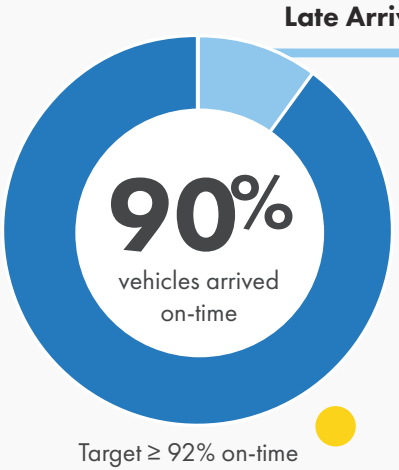


KPI: MetroAccess On-Time Performance

QUALITY SERVICE

While more MetroAccess vehicles arrived within the on-time window compared to Q1/FY2017, results fell short of target, as newly hired operators adjusted to their roles

What caused vehicles to not arrive on-time?



Late Arrivals

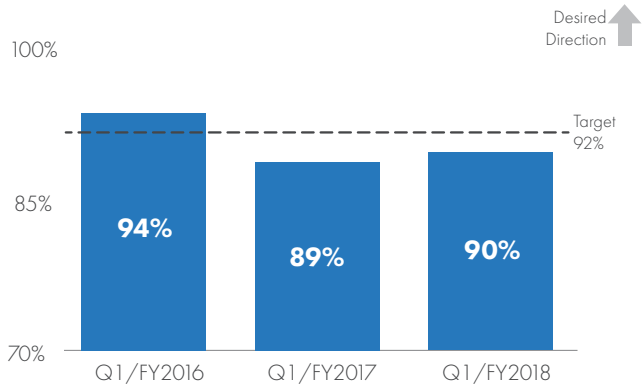
Operations-Related Delays

» With abatement of driver shortage, a substantial number of newly hired operators experienced a learning curve

Key actions to improve performance

- Award contracts for paratransit service providers
- Monitor performance of Abilities-Ride pilot program
- Fleet modernization effort – retiring portion of legacy paratransit vans and adding 207 new paratransit vans – will help enable MetroAccess to better meet strong service demand stemming from high ridership levels
- Review route management practices by call center operators

3-YEAR TREND IN PERFORMANCE

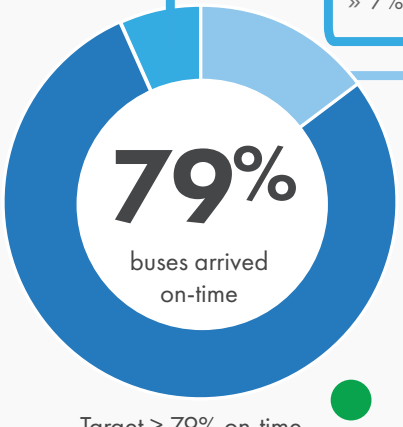


KPI: Metrobus On-Time Performance

QUALITY SERVICE

Metrobus on-time performance of 79% improved 3% compared to Q1/FY2017 and is the best first quarter result since the Vital Signs Report began in 2010

What caused buses to not arrive on-time?



Early Arrivals buses arriving at stops greater than 2 minutes ahead of schedule

» 7% of buses arrived early, a 1% improvement compared to Q1/FY2017, with fewer buses arriving early across all service periods

Late Arrivals buses arriving at stops more than 7 minutes behind schedule

» 15% of buses arrived late, a 2% improvement compared to Q1/FY2017

» Even with September's seasonal road congestion, late arrivals decreased 3% during AM Peak period service (6AM-9AM) with 82% of buses arriving on-time; late arrivals also decreased 3% during PM Peak period service (3PM-7PM) with 73% of buses arriving on-time

» On-time arrival improvements driven by schedule adjustments of low-performing routes; schedule adjustments implemented in July improved Q1/FY2018 on-time performance 1% compared to this same time last year

Bus Fleet Reliability

» Fleet reliability performed 5% below target due to summer seasonal weather impact in Q1/FY2018, with buses traveling 7,633 miles on average between breakdown

» The fleets that provide the most service – Hybrid and CNG – experienced 3% improved reliability compared to last year despite impacts from the summer heat due to a number of mitigating and proactive actions implemented

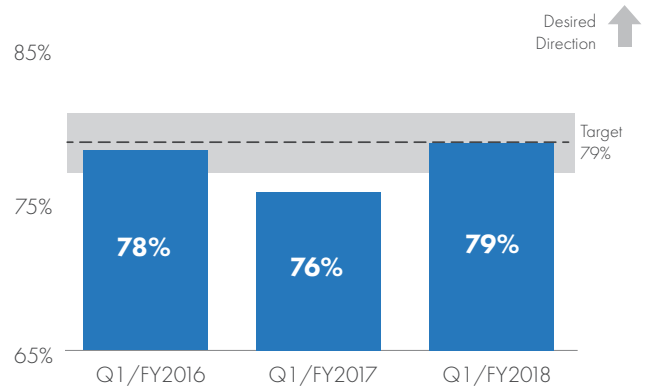
Operator-Related » Operator availability-related delays increased due to bus operator vacancies

Collisions » Metrobus collisions per million miles decreased 2% compared to Q1/FY2017 with 16 fewer collisions

Key actions to improve performance

- Upgrade Street Supervisor technology to allow for real-time tracking of buses
- Implement active service management on headway-managed routes in support of providing reliable, evenly-spaced service
- Utilize SmartYard division management tool for ensuring on-time departures from the garage, the first step in delivering on-time service
- Continue to identify routes with low on-time performance and implement schedule adjustments to allow for adequate run-time resulting in more realistic schedules for customers and operators
- Continue to retire less-reliable, older buses, and complete mid-life overhauls annually

3-YEAR TREND IN PERFORMANCE

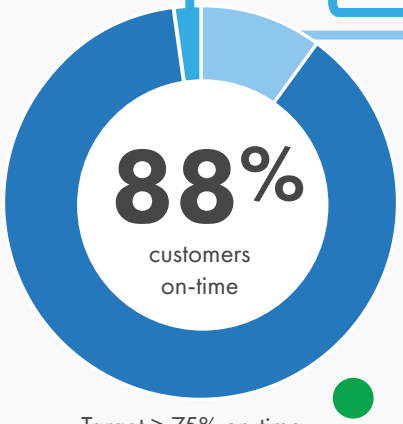


KPI: Metrorail Customer On-Time Performance

QUALITY SERVICE

Metrorail on-time performance improved in the first quarter to 88%, thanks to a more realistic rail schedule and fewer railcar-related delays

What caused customers to not be on-time?



Target ≥ 75% on-time
Performance Band 73%–77%

Planned Delays
» Accounted for about 2% of customer trips; crews executed an intensive schedule of rebuilding and maintenance work over weekends and late night weekdays to keep infrastructure in a state of good repair

Unplanned Delays » Accounted for about 10% of customer trips, a 15% improvement relative to Q1/FY2017

Railcar Reliability
» Railcar-related delays down over 35% compared to Q1/FY2017
» Retired all 378 of the oldest and worst performing railcars by June 2017, six months ahead of schedule and added 56 new 7000 series cars this quarter
» Better railcar performance resulted in 46% fewer offloads and 80% fewer missed dispatches; Metro ran 98% of scheduled trains during its peak periods each weekday

Rail Infrastructure
» Improved track condition resulted in 18% fewer speed restrictions identified by inspectors
» Over 200 trains were held for an average of 5 minutes based on new safety measures put in place to protect track workers
» Fire and Smoke events were up 14% – while WMATA's efforts to keep track beds free from debris reduced these types of fires by 39%, insulator incidents more than doubled due to about twice as much rainfall

Police, Customer » Up 50% as more trains were held due for customers needing medical attention and for police activity

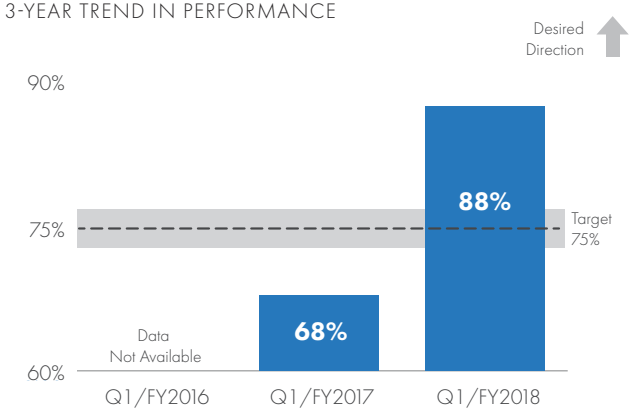
Operator-Related » Unplanned breaks down 50% as the new schedule allotted sufficient time for operators to complete runs

Other » On average, 95% of escalators and 97% of elevators were available, beating target and Q1/FY2017

Key actions to improve performance

- Implement railcar "get well" program, including continued acceptance of 7K trains
- Begin retirement of the 5000 series fleet in calendar year 2018
- Implement new railcar maintenance strategy and rail fleet plan
- Execute rail preventive maintenance and capital renewal programs designed to cut infrastructure-related delays in half by July 2019
- Repair escalators, elevators and fare gates to enable smooth flow of passengers through station

3-YEAR TREND IN PERFORMANCE

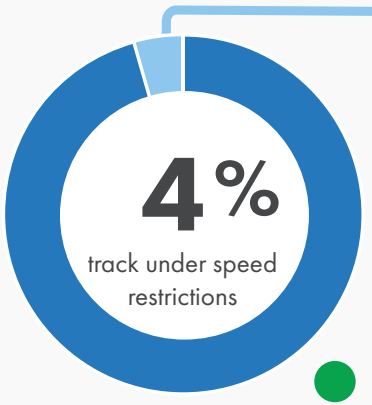


KPI: Rail Infrastructure

QUALITY SERVICE

Speed restriction through the downtown core of the system reduced availability but had limited impact on customer on-time performance

What caused rail infrastructure to not be available?



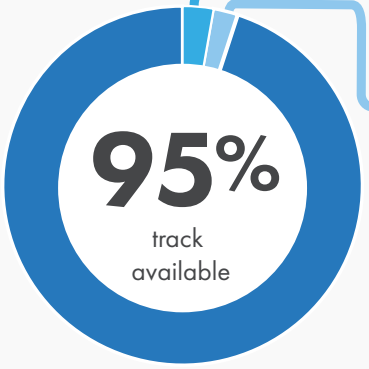
Target < 5% under speed restriction

The Federal Transit Agency (FTA) requires all transit providers to report the percentage of track segments with performance restrictions at 9AM the first Wednesday of every month

Speed Restrictions

» On average this quarter, 4.4% of track, or about 10.4 of 239 miles, was under speed restriction at 9AM the first Wednesday of every month

» In mid-August, Metro put in place a 35 mile per hour speed restriction covering almost 23 miles of track through the downtown core of the system to reduce trains' traction power draw while Metro completes an analysis to optimize the power system used to propel trains. It has a minimal impact on customer on-time performance as most trains do not travel above 35 miles per hour on these segments.



Pilot KPI

WMATA has also begun measuring track availability during all revenue hours not just 9AM the first Wednesday of the month

Planned 2%

» Crews executed an aggressive track work program to keep the system in a state of good repair, with at least two major work efforts each weekend that resulted in around-the-clock single tracking or shutdown portions of the system

Unplanned 3%

Speed Restrictions

» A 35 mile per hour speed restriction covering most of the downtown area reduced availability by 1%

» All other speed restrictions were resolved on average within 36 hours thanks to improved overall track condition

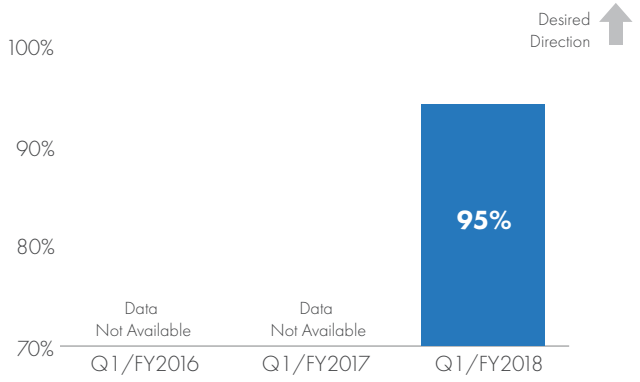
Single-Tracking Events

» There averaged 27 single-track events per month, most resolved in under an hour

Key actions to improve performance

- Implement new, aggressive preventive maintenance and capital programs that will cut unplanned delays by half by July 2019
- Minimize customer impact of planned track outages by taking advantage of longer evening and weekend work windows and "piggy-backing" work
- Continue rigorous track inspection program to identify and fix degraded conditions before they become safety hazards and implement a new comprehensive track inspector training program
- Conduct more analysis of Track Geometry Vehicle inspection data to inform maintenance program and schedules
- Expand waterproofing technique in Red Line tunnels most affected by leaks, with

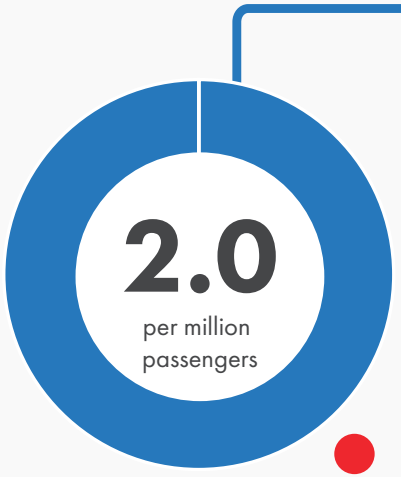
3-YEAR TREND IN PERFORMANCE



KPI: Customer Injuries

While customer injuries were higher than the same period last year driven by non-preventable bus collision-related injuries, there was a noticeable reduction in MetroAccess customer injuries

What injuries occurred?



Target ≤ 1.75 per million passengers
Performance Band 1.55–1.95

Metrobus

» Q1/FY2018 bus customer injuries accounted for 55% of total customer injuries, and the rate increased 22% compared to Q1/FY2017

» Collision-related injuries continue to be the leading cause of bus customer injuries

Metrorail

» Q1/FY2018 rail customer injuries accounted for 38% of the total customer injuries, and the rate increased 6% compared to Q1/FY2017

» Slips, trips, or falls, in stations (20%) or on escalators (16%) were the leading cause of rail customer injuries

MetroAccess

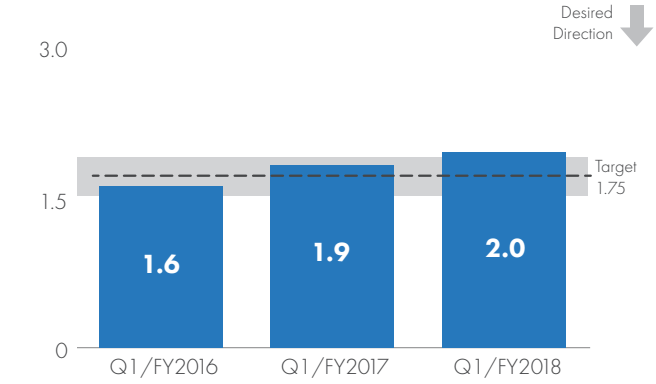
» Q1/FY2018 MetroAccess customer injuries accounted for 7% of the total customer injuries, and the rate decreased 37% compared to Q1/FY2017

» Collision-related injuries were the leading cause of MetroAccess injuries

Key actions to improve performance

- Deploy deceleration lights on the back on buses and employ DriveCam reviews in defensive driving curriculum for bus operators
- Improve lighting and target safety messages to customers in rail stations
- Conduct station inspections to identify uneven surfaces and other hazards
- Continue revised MetroAccess operator training, facilitated by an occupational therapist, with better methods to assist customers who have difficulty maintaining balance

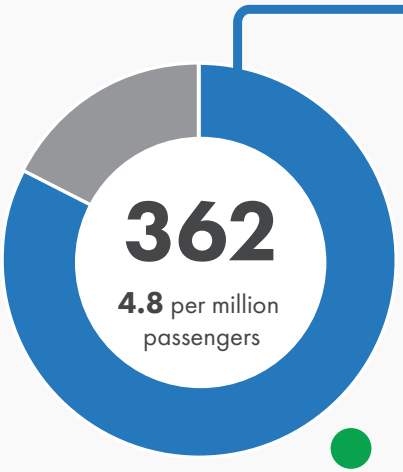
3-YEAR TREND IN PERFORMANCE



KPI: Crime

Part I crimes decreased 19% compared to the same period last year with decreases in both crimes against persons and crimes against property

What crimes occurred?



Target ≤ 437.5 Part I crimes
Performance Band 413 – 463

Crimes Against Property

» The rate of crimes against property, accounting for 70% of Part I crimes, declined 25% compared to Q1/FY2018 driven by a decrease in larcenies

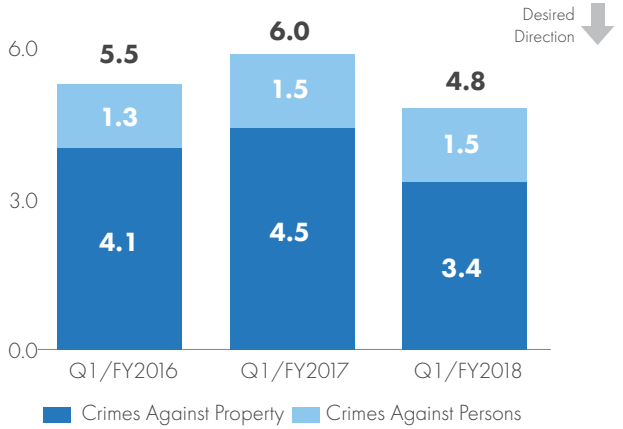
Crimes Against Persons

» The rate of crimes against persons, accounting for 30% of Part I crimes, declined 1% overall compared to Q1/FY2018

Key actions to improve performance

- Enhance safety features
  - » Install public safety radio systems and cabling for cellphone service in tunnels
  - » Improve station lighting
- Surge deployments of uniformed officers during high crime periods for increased visibility to deter aggravated assaults and other crimes in rail stations
- Continually adjust tactics and resource allocation to address changing crime hotspots
- Sustain the fare evasion initiative on rail and bus and continue the collaboration with bus operators and managers to reduce bus crime and operator assaults

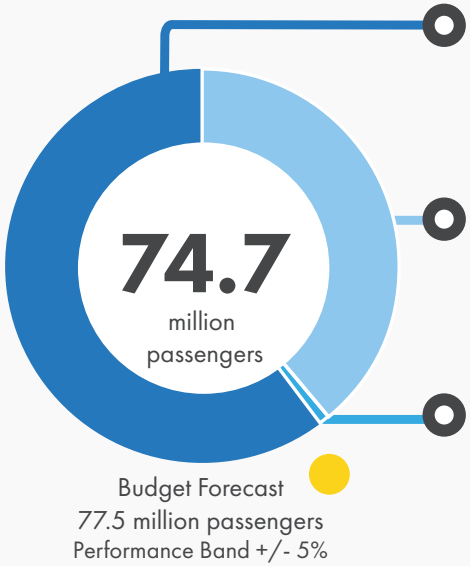
3-YEAR TREND IN PERFORMANCE



KPI: Ridership

Through Q1/FY2018, total ridership was 74.7 million, 3% below forecasted ridership of 77.5 million

How much service was consumed?



Metrorail
- » Through Q1/FY2018, ridership was 44.9 million, 3% below forecast
- » Average weekday ridership was 615,000, a year-over-year increase of 1%
- » Average weekend ridership was 213,000, a year-over-year decrease of 1%

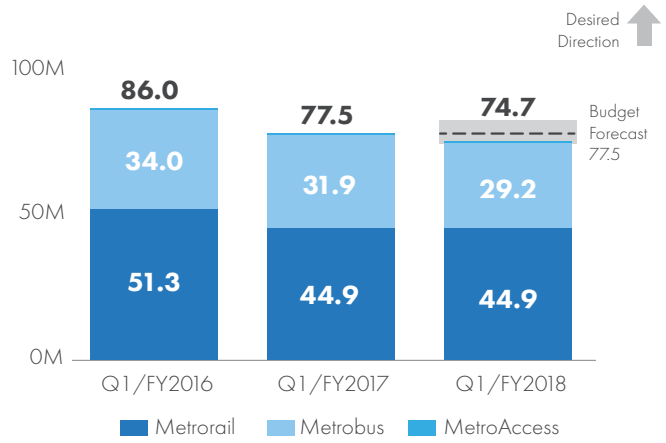
Metrobus
- » Through Q1/FY2018, ridership was 29.2 million, 4% below forecast
- » Average weekday ridership was 383,000, a year-over-year decrease of 8%
- » Average weekend ridership was 174,000, a year-over-year decrease of 6%

MetroAccess
- » Through Q1/FY2018, ridership was 0.6 million, 2% below forecast
- » MetroAccess ridership remained near its highest level since FY2011, averaging 8,000 trips per weekday

Key actions to improve performance

- ▶ Sustain improvements in rail and bus on-time performance
- ▶ Promote pass products, auto-reload, and other fare products through tailored marketing
- ▶ Strengthen SmartBenefits and regional employer relationships
- ▶ Encourage off-peak ridership
- ▶ Improve ability to forecast ridership with new model
- ▶ Partner with local jurisdictions to promote transit-oriented development

3-YEAR TREND IN PERFORMANCE

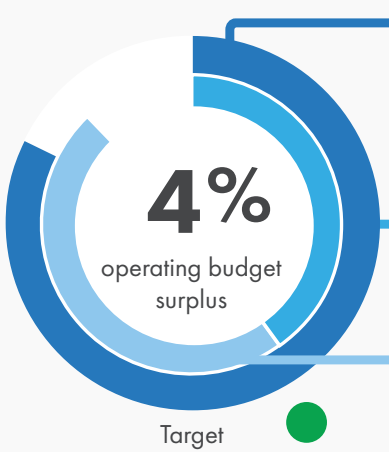


KPI: Budget Management and Capital Funds Invested

FISCAL RESPONSIBILITY

Through Q1/FY2018, the operating budget had a 4% surplus due to expense reductions exceeding revenue shortfalls; 18% of the total $1.25 billion FY2018 capital budget was invested, $228 million of $231 million budgeted Q1

Budget Management

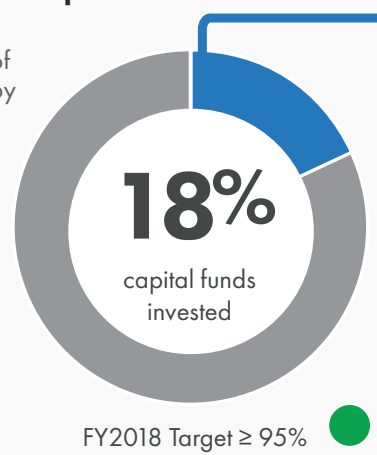


Expense
» Through Q1/FY2018, expenses of $429million were under budget by $27 million due to management controlling costs through aggressive actions

Revenue
» Revenues of $206 million were below budget by $9 million, primarily due to ridership below forecast

Subsidy
» Through Q1/2018, the budget had a $19 million surplus; the year-end forecast projects a balanced budget with a small surplus of less than 1%

Capital Funds Invested



Railcars
» Added 56 new 7000 series railcars

Station & Passenger Facilities
» Replaced escalators and rehabilitated elevators

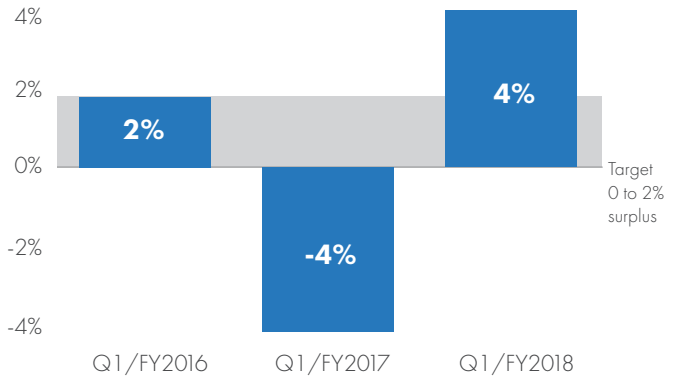
Bus & Paratransit
» Rehabilitated 25 Metrobuses
» Building new Cinder Bed Road and Andrews Federal Center bus maintenance facilities

Rail Systems
» Traction power upgrades

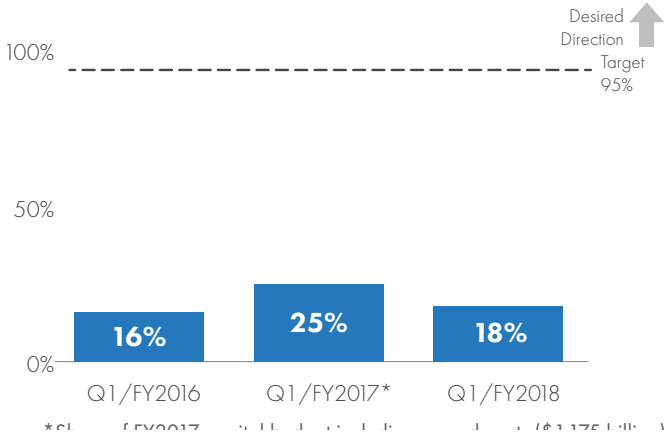
Track & Structures

Business Support

BUDGET MANAGEMENT, 3-YEAR TREND IN PERFORMANCE



CAPITAL FUNDS INVESTED, 3-YEAR TREND IN PERFORMANCE



Performance Data

FY2018

KPI: METROBUS CUSTOMER SATISFACTION RATING					
	Q1	Q2	Q3	Q4	FYTD
FY 2016	82%	81%	74%	78%	82%
FY 2017	78%	79%	74%	76%	78%
FY 2018	76%				76%

KPI: METRORAIL CUSTOMER SATISFACTION RATING					
	Q1	Q2	Q3	Q4	FYTD
FY 2016	67%	69%	68%	66%	67%
FY 2017	66%	66%	69%	72%	66%
FY 2018	74%				74%

KPI: METROACCESS ON-TIME PERFORMANCE [TARGET 92%]													
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	FYTD
FY 2016	95%	95%	94%	93%	93%	94%	94%	93%	93%	93%	93%	92%	94%
FY 2017	92%	91%	84%	83%	84%	87%	88%	87%	85%	88%	87%	92%	89%
FY 2018	89%	91%	90%										90%

continued

KPI: METROBUS ON-TIME PERFORMANCE [TARGET 79%]													
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	FYTD
FY 2016	79%	80%	76%	76%	77%	78%	77%	78%	78%	77%	77%	75%	78%
FY 2017	77%	77%	72%	73%	73%	76%	77%	78%	77%	76%	76%	76%	76%
FY 2018	80%	80%	76%										79%

KPI: METROBUS ON-TIME PERFORMANCE BY TIME PERIOD [TARGET 79%]													
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	FYTD
AM Early (4AM-6AM)	89%	90%	89%										89%
AM Peak (6AM-9AM)	84%	84%	79%										82%
Mid Day (9AM-3PM)	79%	79%	77%										79%
PM Peak (3PM-7PM)	75%	75%	69%										73%
Early Night (7PM-11PM)	80%	80%	78%										79%
Late Night (11PM-4AM)	77%	79%	78%										78%

BUS FLEET RELIABILITY (BUS MEAN DISTANCE BETWEEN FAILURES) [TARGET 8,000 MILES]													
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	FYTD
FY 2016	6,518	7,352	7,542	7,307	9,185	7,893	8,422	8,332	8,359	9,138	8,711	7,736	7,096
FY 2017	7,540	7,425	8,428	8,378	8,262	8,421	7,962	9,881	9,254	8,499	7,784	8,350	7,760
FY 2018	7,555	7,764	7,571										7,633

BUS FLEET RELIABILITY (BUS MEAN DISTANCE BETWEEN FAILURE BY FLEET TYPE)													
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	FYTD
CNG *Average Age 8.4*	7,633	8,270	6,636										7,472
Hybrid *Average Age 6.2*	8,201	8,483	8,940										8,526
Clean Diesel *Average Age 10.3*	5,072	4,111	4,981										4,652
All Other *Average Age 17.5*	3,058	6,673	3,643										4,085

continued

Q1/FY 2018 TOP 10 MOST CROWDED ROUTES BY JURISDICTION

Service Code	Line Name	Route Name	Time Period	Highest Passenger Load	Load Factor
DC	16th Street	S4*	AM Peak	119	**2.0**
	16th Street	S1*	AM Peak	110	**2.0**
	16th Street	S2*	AM Peak	106	**2.0**
	Georgia Ave - 7th Street	70*	Midday	101	**2.0**
	Benning Road - H Street	X2*	AM Peak	98	**2.0**
	Deanwood - Alabama Avenue	W4	Midday	80	**2.0**
	14th Street	52	AM Peak	79	**2.0**
	14th Street	54	AM Peak	79	**2.0**
	Friendship Heights - Southeast	30N	PM Peak	79	**2.0**
	14th Street	54	PM Peak	79	**2.0**
MD	New Carrollton - Silver Spring	F4	PM Peak	78	**1.9**
	Calverton - Westfarm	Z6	Midday	76	**1.9**
	Greenbelt-Twinbrook	C4	PM Peak	76	**1.9**
	Greenbelt-Twinbrook	C4	Midday	76	**1.9**
	Eastover - Addison Road	P12	PM Peak	76	**1.9**
	Georgia Avenue - Maryland	Y8	Midday	76	**1.9**
	New Hampshire Ave - Maryland	K6	PM Peak	75	**1.9**
	Georgia Avenue - Maryland	Y2	PM Peak	75	**1.9**
	Georgia Avenue - Maryland	Y2	Midday	75	**1.9**
	New Carrollton - Silver Spring	F4	Midday	74	**1.9**
VA	Leesburg Pike	28A	AM Peak	71	**1.8**
	Leesburg Pike	28A	PM Peak	71	**1.8**
	Lee Highway - Farragut Square	3Y	AM Peak	68	**1.7**
	Columbia Pike - Farragut Square	16Y	AM Peak	68	**1.7**
	Ballston - Farragut Square	38B	PM Peak	67	**1.7**
	Lincolnia - North Fairlington	7Y	PM Peak	67	**1.6**
	Columbia Pike - Farragut Square	16Y	PM Peak	66	**1.6**
	Columbia Pike	16B	AM Peak	64	**1.6**
	Richmond Highway Express	REX	PM Peak	63	**1.6**
	Richmond Highway Express	REX	AM Peak	62	**1.6**

Performance Threshold	Max Load Factor
Below Threshold	< 0.3
Standards Compliant	0.3 - 0.5
Occasional Crowding	0.6 - 0.7
Recurring Crowding	0.8 - 0.9
Regular Crowding	1.0 - 1.3
Continuous Crowding	> 1.3

Highest passenger load = the average of all the highest max loads recorded by route, trip and time period

Passenger Loads:

40' Bus (standard size) accommodates 40 sitting and 69 with standing

60' Bus (articulated) accommodates 61 sitting and 112 with standing

* Route has articulated buses, allowing for passenger load above 100

Load Factor = highest passenger load divided by actual bus seats used

KPI: METRORAIL CUSTOMER ON-TIME PERFORMANCE [TARGET 75%]													
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	FYTD
FY 2016							70%	72%	78%	80%	69%	71%	N/A
FY 2017	71%	69%	64%	65%	61%	63%	66%	71%	70%	75%	76%	79%	68%
FY 2018	86%	89%	87%										88%

KPI: METRORAIL CUSTOMER ON-TIME PERFORMANCE BY LINE													
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	FYTD
Red Line	87%	88%	89%										88%
Blue Line	82%	87%	81%										83%
Orange Line	83%	87%	79%										83%
Green Line	92%	93%	94%										93%
Yellow Line	85%	92%	91%										89%
Silver Line	82%	88%	81%										84%

KPI: METRORAIL CUSTOMER ON-TIME PERFORMANCE BY TIME PERIOD													
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	FYTD
AM Rush (5AM-9:30AM)	87%	92%	90%										90%
Mid-day (9:30AM-3PM)	90%	90%	89%										89%
PM Rush (3PM-7PM)	89%	88%	87%										88%
Evening (7PM-9:30PM)	92%	92%	93%										92%
Late Night (9:30PM-12AM)	90%	92%	93%										92%
Weekend	72%	79%	77%										76%

KPI: RAIL INFRASTRUCTURE AVAILABILITY [PILOT KPI]													
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	FYTD
FY 2017							98%	97%	96%	96%	96%	95%	N/A
FY 2018	98%	95%	90%										95%

continued

KPI: GUIDEWAY CONDITION [TARGET 5%]													
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	FYTD
FY 2017	3%	2%	4%	6%	6%	6%	1%	0%	4%	2%	2%	5%	3%
FY 2018	0%	3%	10%										4%

TRAIN ON-TIME PERFORMANCE (HEADWAY ADHERENCE) [TARGET 91%]													
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	FYTD
FY 2016	84%	83%	79%	76%	80%	82%	78%	82%	86%	87%	80%	80%	82%
FY 2017	78%	76%	78%	80%	74%	76%	76%	82%	80%	84%	83%	82%	77%
FY 2018	90%	92%	89%										90%

TRAIN ON-TIME PERFORMANCE BY LINE (HEADWAY ADHERENCE)													
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	FYTD
Red Line	91%	92%	92%										92%
Blue Line	86%	89%	85%										87%
Orange Line	89%	90%	87%										89%
Green Line	93%	95%	96%										95%
Yellow Line	91%	94%	93%										93%
Silver Line	88%	91%	86%										89%

TRAIN ON-TIME PERFORMANCE BY TIME PERIOD (HEADWAY ADHERENCE)													
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	FYTD
AM Rush	85%	89%	86%										87%
Mid-day	94%	95%	93%										94%
PM Rush	88%	89%	87%										88%
Evening	94%	93%	96%										94%

RAIL FLEET RELIABILITY (RAIL MEAN DISTANCE BETWEEN DELAYS) [TARGET 75,000 MILES]													
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	FYTD
FY 2016	56,446	59,196	60,872	65,900	63,564	51,599	39,657	47,239	59,131	80,943	81,278	85,389	58,687
FY 2017	55,850	73,246	65,416	86,174	66,697	76,244	79,105	85,489	80,348	118,958	101,585	104,461	64,081
FY 2018	92,927	83,133	85,212										86,814

continued

RAIL FLEET RELIABILITY (RAIL MEAN DISTANCE BETWEEN DELAYS BY RAILCAR SERIES)													
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	FYTD
2000/3000 series	115,528	69,136	109,844										93,108
5000 series	43,257	48,454	44,038										45,270
6000 series	75,405	132,930	100,630										96,995
7000 series	147,371	116,557	87,191										111,018

RAIL FLEET RELIABILITY (RAIL MEAN DISTANCE BETWEEN FAILURE) [TARGET 6,500 MILES]													
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	FYTD
FY 2016	4,576	4,802	4,738	5,326	4,970	5,693	5,020	4,813	5,336	5,307	5,596	5,259	4,699
FY 2017	4,333	4,606	5,538	6,321	6,355	6,819	6,787	7,723	6,878	7,902	8,425	8,215	4,762
FY 2018	7,438	8,218	9,818										8,384

RAIL FLEET RELIABILITY (RAIL MEAN DISTANCE BETWEEN FAILURE BY RAILCAR SERIES)													
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	FYTD
2000/3000 series	8,169	7,731	10,461										8,635
5000 series	2,809	3,230	3,670										3,195
6000 series	8,062	12,085	11,724										10,210
7000 series	14,936	16,229	17,315										16,144

TRAINS IN SERVICE [TARGET 95%]													
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	FYTD
FY 2017			94%	96%	92%	99%	94%	98%	97%	97%	96%	97%	94%
FY 2018	98%	98%	98%										98%

continued

RAIL CROWDING [OPTIMAL PASSENGERS PER CAR (PPC) OF 100, WITH MINIMUM OF 80 AND MAXIMUM OF 120 PPC]

AM Rush Max Load Points		May-16	Jun-16	May-17	May-17
Gallery Place	Red	80	94	84	93
Dupont Circle		79	88	76	86
Pentagon	Blue	**101**	73	96	81
Rosslyn		92	94	**101**	98
L'Enfant Plaza		60	62	56	61
Court House	Orange	99	92	97	**108**
L'Enfant Plaza		67	69	56	64
Pentagon	Yellow	79	93	93	84
Waterfront	Green	81	78	82	79
Shaw-Howard		72	68	87	74
Rosslyn	Silver	85	**100**	**103**	**103**
L'Enfant Plaza		70	67	51	68
PM Rush Max Load Points					
Metro Center	Red	82	78	72	89
Farragut North		**113**	93	80	84
Rosslyn	Blue	100	**103**	100	98
Foggy Bottom-GWU		49	57	**117**	99
Smithsonian		81	90	46	59
Foggy Bottom-GWU	Orange	65	61	95	**102**
Smithsonian		79	87	68	70
L'Enfant Plaza	Yellow	89	73	91	89
L'Enfant Plaza	Green	59	64	86	81
Mt. Vernon Square		81	91	76	69
Foggy Bottom-GWU	Silver	61	68	90	**107**
L'Enfant Plaza		67	63	55	66

continued

ESCALATOR SYSTEM AVAILABILITY [TARGET 93%]													
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	FYTD
FY 2016	93%	93%	93%	93%	93%	93%	94%	93%	94%	94%	93%	93%	93%
FY 2017	93%	92%	93%	94%	94%	94%	95%	95%	96%	96%	96%	95%	93%
FY 2018	95%	94%	95%										95%

ELEVATOR SYSTEM AVAILABILITY [TARGET 97%]													
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	FYTD
FY 2016	97%	97%	96%	96%	96%	97%	97%	97%	97%	97%	97%	97%	97%
FY 2017	96%	97%	97%	97%	97%	97%	96%	97%	97%	97%	98%	97%	96%
FY 2018	97%	97%	97%										97%

KPI: CUSTOMER INJURY RATE (PER MILLION PASSENGERS) [TARGET ≤ 1.75]													
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	FYTD
FY 2016	0.81	2.53	1.70	2.05	1.37	1.35	3.29	2.22	1.75	2.13	1.91	2.15	1.65
FY 2017	1.78	1.79	2.01	1.73	1.68	2.63	2.14	2.59	2.17	1.41	2.19	1.71	1.86
FY 2018	1.61	1.87	2.49										1.99

*Includes Metrobus, Metrorail, rail transit facilities (stations, escalators and parking facilities) and MetroAccess customer injuries

FIRE AND SMOKE INCIDENTS													
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	FYTD
FY 2017	2	8	4	8	3	8	7	5	7	15	6	10	14
Non-Electrical	1	2	2	3	1	6	3	2	1	4	2	3	5
Cable	0	0	1	0	0	0	0	0	1	0	0	0	1
Arcing Insulator	1	6	1	5	2	2	4	3	5	11	4	7	8
FY 2018	15	8	9										32
Non-Electrical	5	2	4										11
Cable	1	1	0										2
Arcing Insulator	9	5	5										19

continued

RED SIGNAL OVERRUNS													
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	FYTD
FY 2017	4	2	1	1	1	1	2	1	1	1	0	0	7
FY 2018	0	0	1										1

BUS PEDESTRIAN STRIKES [PEDESTRIAN / CYCLIST STRIKES]													
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	FYTD
FY 2017	1	1	3	3	0	1	1	1	3	2	0	1	5
FY 2018	3	0	0										3

BUS COLLISION RATE [PER MILLION VEHICLE MILES]													
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	FYTD
FY 2017	52	60	61	69	56	61	53	54	60	58	58	55	60
FY 2018	58	63	57										59

KPI: CRIME RATE													
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	FYTD
FY 2016	4.7	5.5	6.2	6.9	5.4	4.7	6.1	4.4	4.3	4.1	6.1	5.0	5.5
FY 2017	6.3	6.2	5.4	4.9	4.5	4.9	4.5	3.8	3.5	4.2	4.6	4.5	6.0
FY 2018	4.6	4.8	5.2										4.8

KPI: PART I CRIMES [TARGET ≤ 1,750 PART I CRIMES]													
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	FYTD
FY 2016	144	153	172	199	135	119	129	109	122	114	161	137	469
FY 2017	160	163	140	126	107	111	110	87	92	107	120	119	463
FY 2018	113	122	127										362

continued

PART I CRIMES BY TYPE													
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	FYTD
Crimes Against Property	69	85	98										252
Larceny (Snatch/ Pickpocket)	12	21	11										44
Larceny (Other)	51	59	83										193
Burglary	0	0	0										0
Motor Vehicle Theft	6	4	3										13
Attempted M V Theft	0	1	1										2
Arson	0	0	0										0
Crimes Against Persons	44	37	29										110
Aggravated Assault	13	11	10										34
Rape	1	1	0										2
Robbery	30	25	19										74
FY 2018 Part1 Crimes	113	122	127										362
FY 2018 Homicides	0	0	0										0

* Homicides that occur on WMATA property are investigated by other law enforcement agencies. These cases are shown for public information; however, the cases are reported by the outside agency and are not included in MTPD crime statistics.

EMPLOYEE INJURY RATE (PER 200,000 HOURS) [TARGET ≤ 5.1]													
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	FYTD
FY 2016	5.1	6.1	3.7	4.9	4.3	3.7	6.2	5.4	4.4	5.7	5.1	4.9	5.0
FY 2017	6.2	5.3	6.1	5.7	4.3	6.0	4.5	4.4	7.7	7.1	6.6	7.0	5.8
FY 2018	7.3	6.6	7.7										7.2

continued

KPI: RIDERSHIP BY MODE [BUDGET FORECAST 341.5 MILLION]

		Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	FYTD
Rail	Forecast	15,529,935	15,886,945	14,994,420										46,411,300
	Actual	15,195,047	15,291,378	14,446,237										44,932,662
Bus	Forecast	9,942,000	10,481,000	10,060,100										30,483,000
	Actual	9,375,256	10,042,871	9,766,326										29,184,453
Access	Forecast	195,000	210,000	201,000										606,000
	Actual	186,699	206,014	191,051										583,764
Total	Forecast	25,666,935	26,577,945	25,255,420										77,500,300
	Actual	24,757,002	25,540,263	24,403,614										74,700,879

KPI: BUDGET MANAGEMENT [TARGET 0–2 % SURPLUS]

FY2018	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	FYTD
Expense Variance ($)	($7)	($25)	($27)										($27)
Revenue Variance ($)	($2)	($5)	($9)										($9)
Net Subsidy Variance ($)	($5)	($20)	($19)										($19)
Expense Variance (%)	-5%	-8%	-6%										-6%
Revenue Variance (%)	-2%	-4%	-4%										-4%
Net Subsidy Variance (%)	-6%	-13%	-8%										-8%
Surplus (+) / Deficit (-)	4%	7%	4%										4%

KPI: CAPITAL FUNDS INVESTED [TARGET 95% OF CAPITAL BUDGET]

	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	FYTD
FY 2016	1%	6%	16%	17%	25%	34%	38%	44%	55%	58%	66%	85%	16%
FY 2017	5%	14%	25%	33%	41%	51%	59%	66%	74%	82%	89%	99%	25%
FY 2018	5%	12%	18%										18%

*FY2017 includes capital budget amendment ($1.175 billion)

continued

VACANCY RATE [TARGET 5%]													
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	FYTD
FY 2016	7%	6%	7%	7%	7%	7%	7%	7%	7%	7%	7%	7%	7%
FY 2017	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	6%	7%	5%
FY 2018	7%	8%	8%										8%

OPERATIONS CRITICAL VACANCY RATE [TARGET 9%]													
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	FYTD
FY 2016							11%	11%	12%	12%	10%	11%	N/A
FY 2017	10%	10%	10%	8%	8%	8%	7%	7%	7%	8%	8%	11%	10%
FY 2018	13%	12%	13%										13%

WATER USAGE (GALLONS PER VEHICLE MILE) [TARGET 0.84]													
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	FYTD
FY 2016	1.21	1.30	1.47	0.97	0.57	0.52	0.70	0.73	0.60	0.69	0.64	0.94	1.32
FY 2017	1.37	1.29	1.56	1.05	0.61	0.50	0.69	0.52	0.64	0.66	0.67	1.13	1.40
FY 2018	1.25	1.39	1.39										1.35

ENERGY USAGE (BTU/VEHICLE MILE) [TARGET 39,399]													
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	FYTD
FY 2016	40,193	41,349	39,798	39,262	37,639	42,240	47,371	43,640	37,952	38,660	37,365	39,565	40,449
FY 2017	42,404	39,734	44,477	37,665	38,352	40,112	45,493	42,813	39,927	40,877	36,782	41,244	42,148
FY 2018	41,548	38,877	39,939										40,097

GREENHOUSE GAS EMISSIONS PER VEHICLE MILE [TARGET 4.00]													
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	FYTD
FY 2016	4.15	4.18	4.18	4.06	3.79	4.31	4.47	4.14	3.56	3.75	3.57	3.79	4.12
FY 2017	4.11	3.80	4.34	3.63	3.66	3.81	4.54	4.34	3.95	4.22	3.77	4.29	4.15
FY 2018	4.34	4.03	4.22										

continued

DBE AWARDS/COMMITMENTS FOR FFY17, PERIOD 1 (OCT 1, 2016 – MAR. 31 2017)									
	Total Dollars	Total Number	Total Dollars to DBEs	Total Number to DBEs	Total Dollars to DBEs/Race Conscious	Total Number to DBEs/Race Conscious	Total Dollars to DBEs/ Race Neutral	Total Number to DBEs/ Race Neutral	Percentage of Total Dollars to DBEs
Prime Contracts Awarded	$177,879,050	18	$2,340,175	4	$0	0	$2,340,175	4	1.32%
Subcontracts Awarded/ Committed	$13,557,898	8	$13,545,528	7	$13,545,528	7	$0	0	99.91%
Total			$15,885,703	11	$13,545,528	7	$2,340,175	4	8.93%

Key Performance Indicator (KPI) & Key Driver Definitions

KPI	How is it measured?	What does this mean and why is it key to our strategy?
QUALITY SERVICE		
Customer Satisfaction	Survey respondent rating Number of survey respondents with high satisfaction ÷ Total number of survey respondents	Surveying customers about the quality of Metro's service delivery provides a mechanism to continually identify those areas of the operation where actions to improve the service can maximize rider satisfaction. Customer satisfaction is defined as the percent of survey respondents who rated their last trip on Metrobus or Metrorail as "very satisfactory" or "satisfactory." The survey is conducted via phone with approximately 400 bus and 400 rail customers who have ridden Metro in the past 30 days. Results are summarized by quarter (e.g., January–March).
MetroAccess On-Time Performance	Adherence to Schedule Number of vehicle arrivals at the pick-up location within the 30 minute on-time widow ÷ Total trips delivered	This indicator illustrates how closely MetroAccess adheres to customer pick-up windows on a system-wide basis. Factors that effect on-time performance are traffic congestion, inclement weather, scheduling, vehicle reliability, and operational behavior. MetroAccess on-time performance is essential to delivering quality service to the customer.
Metrobus On-Time Performance	Adherence to Schedule Number of time points that arrived on time by route based on a window of 2 minutes early and 7 minutes late ÷ Total number of time points scheduled (by route)	This indicator illustrates how closely Metrobus adheres to published route schedules on a system-wide basis. Factors that effect on-time performance are traffic congestion, inclement weather, scheduling, vehicle reliability, and operational behavior. Bus on-time performance is essential to delivering quality service to the customer.
Bus Fleet Reliability	Mean Distance Between Failures (MDBF) The number of total miles traveled before a mechanical breakdown requiring the bus to be removed from service or deviate from the schedule	Mean Distance Between Failures is used to monitor trends in vehicle breakdowns that cause buses to go out of service and to plan corrective actions. Factors that influence bus fleet reliability include vehicle age, quality of maintenance program, original vehicle quality, and road conditions affected by inclement weather and road construction.
Bus Crowding	Ratio of bus seats filled Top load recorded on a route during a time period ÷ actual bus seat capacity	Bus crowding is a factor of bus customer satisfaction. This measure can inform decision making regarding bus service plans.
Metrorail Customer On-Time Performance	Percentage of customer journeys completed on time Number of journeys completed on time ÷ Total number of journeys	Rail Customer On-Time Performance (OTP) communicates the reliability of rail service, which is a key driver of customer satisfaction. OTP measures the percentage of customers who complete their journey within the maximum amount of time it should take per WMATA service standards. The maximum time is equal to the train run-time + a headway (scheduled train frequency) + several minutes to walk between the fare gates and platform. These standards vary by line, time of day, and day of the week. Actual journey time is calculated from the time a customer taps a SmarTrip® card to enter the system, to the time when the SmarTrip® card is tapped to exit. Factors that can effect OTP include: railcar availability, fare gate availability, elevator and escalator availability, infrastructure conditions, speed restrictions, single-tracking around scheduled track work, railcar delays (e.g., doors), or delays caused by sick passengers.

KPI	How is it measured?	What does this mean and why is it key to our strategy?
Rail Infrastructure Availability	Percentage of track available for customer travel during operating hours	Rail Infrastructure Availability is a key driver of customer on-time performance. Planned and unplanned maintenance of track, signaling, and traction power can result in single-tracking and/or speed restrictions that slow customer travel throughout the system. This measure includes both the duration and distance of restrictions. Single-tracking events reduce availability to zero for the portion of track impacted. Slow speed restrictions reduce availability of affected track segments by 85%, while medium restrictions reduce availability by 40%.
Guideway Condition (Federal Transit Administration Transit Asset Management Performance Measure)	Percentage of track segments with performance restrictions at 9:00 AM the first Wednesday of every month Number of track miles with performance restrictions ÷ 234 total miles	In 2016, the Federal Transit Administration (FTA) issued its Final Rule on Transit Asset Management, which requires transit properties to set targets and report performance on a variety of measures, including guideway condition. Guideway includes track, signals and systems. A performance restriction occurs when there is a speed restriction: the maximum train speed is set below the guideway design speed. Performance restrictions may result from a variety of causes, including defects, signaling issues, construction zones, and maintenance causes. FTA considers performance restrictions to be a proxy for both track condition and the underlying guideway condition.
Train On-Time Performance	Number of station stops delivered within the scheduled headway plus 2 minutes during rush (AM/PM) service ÷ Total station stops delivered Number of station stops delivered up to 150% of the scheduled headway during non-rush (midday and evening) ÷ Total station stops delivered	Train on-time performance measures the adherence to weekday headways, or the time customers wait between trains. Factors that can effect on-time performance include: infrastructure conditions, missed dispatches, railcar delays (e.g., doors), or delays caused by sick passengers. Station stops are tracked system-wide, with the exception of terminal and turn-back stations.
Rail Fleet Reliability	Mean Distance Between Delays (MDBD) Total railcar revenue miles ÷ Number of failures during revenue service resulting in delays of four or more minutes Mean Distance Between Failure (MDBF) Total railcar revenue miles ÷ Total number of failures occurring during revenue service	The number of miles traveled before a railcar experiences a failure. Some car failures result in inconvenience or discomfort, but do not always result in a delay of service (such as hot cars). Mean Distance Between Delay includes those failures that had an impact on customer on-time performance. Mean Distance Between Failure and Mean Distance Between Delay communicate the effectiveness of Metro's railcar maintenance and engineering program. Factors that influence railcar reliability are the age and design of the railcars, the amount the railcars are used, the frequency and quality of preventive maintenance, and the interaction between railcars and the track.
Trains in Service	Percentage of required trains that are in service at 8:15 AM and 5:00PM Number of Trains in service ÷ Total required trains	Trains in Service is a key driver of customer on-time performance and supports the ability to meet the Board standard for crowding. WMATA's base rail schedule requires 140 trains during rush periods. Fewer trains than required results in missed dispatches, which leads to longer wait times for customers and more crowded conditions. Key drivers of train availability include the size of the total fleet and the number of "spares", railcar reliability and average time to repair, operator availability, and balancing cars across rail yards to ensure that the right cars are in the right place at the right time.

KPI	How is it measured?	What does this mean and why is it key to our strategy?
Rail Crowding	Number of rail passengers per car Total passengers observed on-board trains passing through a station during a rush hour ÷ Actual number of cars passing through the same station during the rush hour Trained Metro observers are strategically placed around the system during its busiest times to monitor and report on crowding. Counts are taken at select stations where passenger loads are the highest and in the predominant flow direction of travel on one to two dates each month (from 6 AM to 10 AM and from 3 PM to 7 PM). In order to represent an average day, counts are normalized with rush ridership.	The Board of Directors has established Board standards of rail passengers per car to measure railcar crowding. Car crowding informs decision making regarding asset investments and scheduling. Additional Board standards have been set for: ▲ Hours of service—the Metrorail system is open to service customers ▲ Headway—scheduled time interval between trains during normal weekday service
Elevator and Escalator Availability	In-service percentage Hours in service ÷ Operating hours Hours in service = Operating hours – Hours out of service Operating hours = Operating hours per unit × number of units	Escalator/elevator availability is a key component of customer satisfaction with Metrorail service. This measure communicates system-wide escalator and elevator performance (at all stations over the course of the day) and will vary from an individual customer's experience. Availability is the percentage of time that Metrorail escalators or elevators in stations and parking garages are in service during operating hours. Customers access Metrorail stations via escalators to the train platform, while elevators provide an accessible path of travel for persons with disabilities, seniors, customers with strollers, and travelers carrying luggage. An out-of-service escalator requires walking up or down a stopped escalator, which can add to travel time and may make stations inaccessible to some customers. When an elevator is out of service, Metro is required to provide alternative services which may include shuttle bus service to another station.
SAFETY AND SECURITY		
Customer Injury Rate	Customer injury rate: Number of injuries ÷ (Number of passengers ÷ 1,000,000)	The customer injury rate is based on National Transit Database (NTD) Reporting criteria. It includes injury to any customer caused by some aspect of Metro's operation that requires immediate medical attention away from the scene of the injury. Customer safety is the highest priority for Metro and a key measure of quality service. Customers expect a safe and reliable ride each day. The customer injury rate is an indicator of how well the service is meeting this safety objective.
Crime	Reported Part I Crimes	Part I crimes reported to Metro Transit Police Department for Metrobus (on buses), Metrorail (on trains and in rail stations), or at Metro-owned parking lots in relation to Metro's monthly passenger trips. This measure provides an indicator of the perception of safety and security customers experience when traveling the Metro system. Increases or decreases in crime statistics can have a direct effect on whether customers feel safe in the system.

KPI	How is it measured?	What does this mean and why is it key to our strategy?
Employee Injury Rate	Employee injury rate: Number of injuries ÷ (Total work hours ÷ 200,000)	An employee injury is recorded when the injury is (a) work related; and, (b) one or more of the following happens to the employee: 1) receives medical treatment above first aid, 2) loses consciousness, 3) takes off days away from work, 4) is restricted in their ability to do their job, 5) is transferred to another job, 6) death. OSHA recordable injuries are a key indicator of how safe employees are in the workplace.
PEOPLE AND ASSETS		
Ridership	Total Metro ridership Metrorail passenger trips + Metrobus passenger boardings + MetroAccess passenger trips	Ridership is a measure of total service consumed and an indicator of value to the region. Drivers of this indicator include service quality and accessibility. Passenger trips are defined as follows: ▲ Metrorail reports passenger trips. A passenger trip is counted when a customer enters through a faregate. In an example where a customer transfers between two trains to complete their travel one trip is counted. ▲ Metrobus reports passenger boardings. A passenger boarding is counted at the farebox when a customer boards a Metrobus. In an example where a customer transfers between two Metrobuses to complete their travel two trips are counted. ▲ MetroAccess reports passenger trips. A fare paying passenger traveling from an origin to a destination is counted as one passenger trip. *For performance measures and target setting, Metro uses total ridership numbers including passengers on bus shuttles to more fully reflect total passengers served. Metro does not include bus shuttle passenger trips in its budget or published ridership forecasts.
Budget Management	Percentage surplus or deficit comparing actual revenues and subsidy to actual expenses (actual revenues + subsidy –actual expenses) ÷ actual expenses	This indicator tracks Metro's progress managing its operating revenues and expenses.
Capital Funds Invested	Percentage of capital budget spend Cumulative monthly capital expenditures ÷ fiscal year capital budget, including actual rollover from previous fiscal year	This indicator tracks spending progress of the Metro Capital Improvement Program.
Vacancy Rate	Percentage of budgeted positions that are vacant (Number of budgeted positions – number of employees in budgeted positions) ÷ number of budgeted positions	This measure indicates how well Metro is managing its human capital strategy to recruit new employees in a timely manner, in particular operations-critical positions. Factors influencing vacancy rate can include: recruitment activities, training schedules, availability of talent, promotions, retirements, among other factors.

KPI	How is it measured?	What does this mean and why is it key to our strategy?
Water Usage	Rate of gallons of water consumed per vehicle mile Total gallons of water consumed ÷ Total vehicle miles	This measure reflects the level of water consumption Metro uses to run its operations. Water consumption is a key area of Metro's Sustainability Initiative, which brings focus to Metro's efforts to provide stewardship of the environmental systems that support the region.
Energy Usage	Rate of British Thermal Units (BTUs) consumed per vehicle mile MBTU(Gasoline + Natural Gas + Compressed Natural Gas + Traction Electricity + Facility Electricity) × 1000 ÷ Total vehicles miles	This measure reflects the level of various types of energy Metro uses to power its operations. Energy consumption is a key area of Metro's Sustainability Initiative, which brings focus to Metro's efforts to provide stewardship of the environmental systems that support the region.
Greenhouse Gas Emissions	Rate of metric tons of CO_2 emitted per vehicle mile (CO_2 metric tons generated from gas, CNG and diesel used by Metro revenue and non-revenue vehicles + CO_2 metric tons generated from electricity and natural gas used by facilities and rail services) ÷ Total vehicle miles	Greenhouse Gas emissions reflect how Metro sources its energy used to power its operations, as well as the amount of energy it uses. Reducing Greenhouse Gas emissions is a key area of Metro's Sustainability Initiative, which brings focus to Metro's efforts to provide stewardship of the environmental systems that support the region.
Disadvantage Business Enterprise (DBE) Contracts	DBE Participation Rate (only considers federally-funded contracts): Total contract dollars committed to DBEs ÷ Total contract dollars awarded to all Vendors (DBEs and Non-DBEs)	FTA DOT's DBE Program seeks to ensure nondiscrimination in the award and administration of DOT-assisted contracts. DBE Participation Rate provides visibility into how well WMATA is doing to ensure that DBEs are awarded a specified percentage (target) of contracted work at WMATA. Transit vehicle purchases may not be considered in the calculation.

Appendix I - 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.
Proposed 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 J - 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