# SAFETY, SERVICE AND FINANCIAL RESPONSIBILITY

# FY2017 APPROVED BUDGET EFFECTIVE JULY 1, 2016





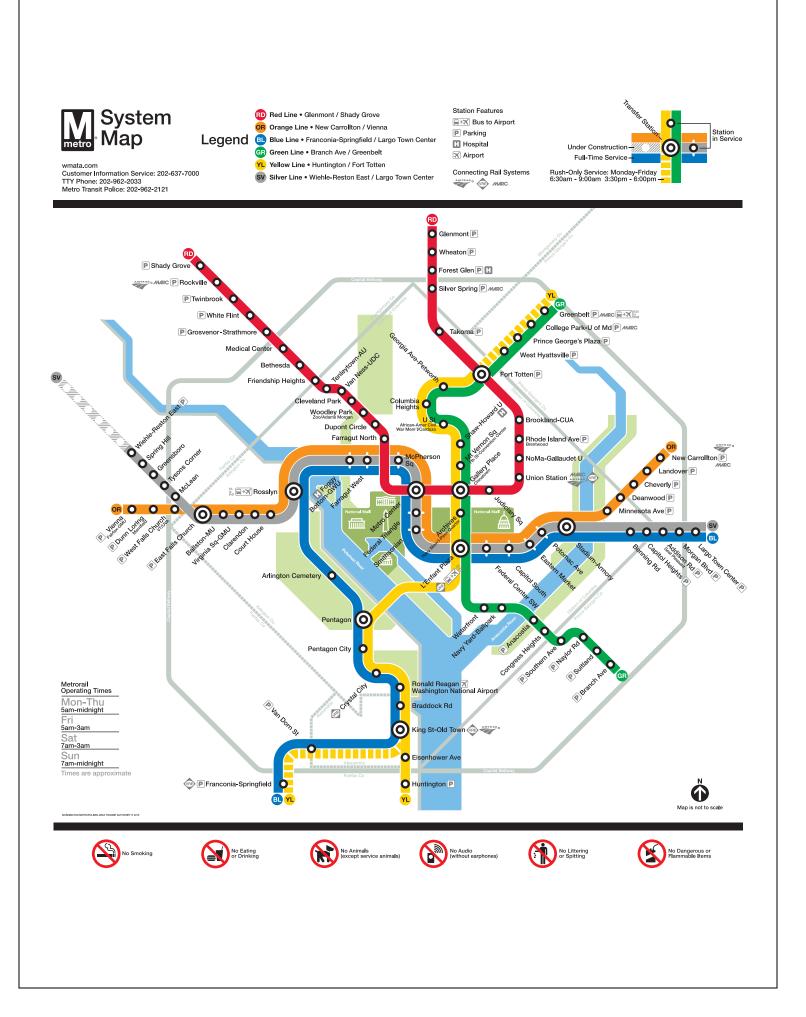
WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY



# Fiscal Year 2017 Budget

### **Table of Contents**

General Manager's Message	1
WMATA Board of Directors	3
Chapter 1 - Introduction to WMATA	7
Chapter 2 - FY2017 Approved Budget	19
Chapter 3 - FY2017 Operating Budget	31
Chapter 4 - FY2017 Capital Budget	81
Appendix A - Capital Improvement Plan	91
Appendix B - Board Budget Resolutions	195
Appendix C - Human Capital Summary	223
Appendix D - Budget Process	227
Appendix E - Financial Standards	231
Appendix F - Debt Service	
Appendix G - Operating Statistics	239
Appendix H - Vital Signs Report	
Appendix I - Glossary of Terms	279
Appendix J - Glossary of Acronyms and Abbreviations	287

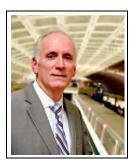




Fiscal Year 2017 Budget

Focusing on the Customer: Prioritizing Safety, Service Reliability, and Financial Responsibility

#### General Manager's Message



As I reach out across the region in my new role as WMATA's Chief Executive, I am privileged to meet and hear from our many, diverse stakeholders: WMATA riders, employees and union leaders, our jurisdictional partners and funders,

oversight authorities, community leaders, and so many others.

It is clear that our region expects and deserves a world class transit system with the highest safety culture. The system must also provide frequent, reliable service to customers and be supported by adequate funding and sound financial management. Delivering on these expectations are my top priorities.

This budget is a good beginning, that will be refined going forward as we reexamine WMATA's challenges, resources and management in the context of the region's needs. Our vision and business plan will incorporate the result of an ongoing efficiency analysis and will build upon the hard work of our employees. The FY2017 budget provides a foundation for future actions that reinforce my core priorities of safety first, service reliability, and responsible fiscal management.

The FY2017 budget funds important safety investments, including compliance with 91 corrective actions required by the Federal Transit Administration's (FTA) Safety Management Inspection (SMI) report, as well as National (NTSB) Safety Transportation Board recommended projects. Other key safety investments include the installation of a new rail radio system and continuation of WMATA's fatigue management system for safety sensitive

positions.

Very importantly, the budget refocuses on regaining customer confidence with actions that will improve service reliability, as well as attract more riders. One key action is a 15-minute "grace period" so riders who quickly enter and exit a station, particularly during a service disruption, will not be charged. A new pass is designed to attract more college students during off-peak times, and current rail riders will find that existing Metrorail passes will be more attractive with new, unlimited access to Metrobus at no additional charge.

For Metrorail, we will continue our railcar modernization with new 7000 series railcars in FY2017, which will greatly improve reliability and the customer experience. We will also upgrade infrastructure at WMATA's Rail Operations Control Center and launch a modern customer contact center to better engage customers through digital media. Our Customer Accountability Report (CARe) will help restore public trust by showcasing our progress in meeting these safety, service reliability and fiscal accountability initiatives.

Finally, the FY2017 budget is balanced without raising fares for customers, reducing service, or increasing support from jurisdictions. I look forward to working with the Board, our customers and our funding partners to provide safe and reliable service for the region.

Paul J. Wiedefeld General Manager/Chief Executive Officer THIS PAGE INTENTIONALLY LEFT BLANK



#### **WMATA 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 of 2015 representing the District of Columbia. Mr. Evans has served on the Council of the District of Columbia (Ward 2) since 1991.



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#### Keturah D. Harley, First Vice Chair

Appointed to the Board as a Principal Director in April of 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 of 2015 representing the Commonwealth of Virginia. Since April 2010, Mr. Corcoran has served as President & CEO of the Fairfax County Chamber of Commerce.



#### **Mortimer L. Downey**

Appointed to the Board in January of 2010 as the first Principal Director representing the federal government. Mr. Downey served as the Deputy Secretary of Transportation from 1993 to 2001. Since 2001, he has been a transportation consultant, working on a wide variety of institutional, financial and organizational issues.



#### **Corbett A. Price**

Appointed to the Board as a Principal Director in March of 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 in June of 2013 as a Principal Director 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. Ms. Hudgins served as Chair in both 2011 and 2012. She originally joined the Board in January of 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.



#### **Harriet Tregoning**

Appointed to the Board as a Principal Director in November of 2014 representing the federal government. Ms. Tregoning is currently the Principal Assistant Secretary for the Office of Community Planning and Development at the US Department of Housing and Urban Development (HUD). She recently led HUD's Office of Economic Resilience. She is also the former director of the District of Columbia's Office of Planning.



#### **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 January of 2016 representing Prince George's County, Maryland. Mr. Augustine is a multichannel marketing, sales, analytics and customer relationship executive in the direct marketing sector with specialty in higher education, non-profit, and healthcare at Intra Mail Network.



#### **Christian Dorsey**

Appointed to the Board as an Alternate Director in January of 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).



#### Anthony R. Giancola, P.E.

Appointed to the Board as an Alternate Director in April of 2011 representing the federal government. Previously, Mr. Giancola was appointed in February of 2007 as an Alternate Director representing the District of Columbia. From 1993 to 2011, he served as the Executive Director of the National Association of County Engineers.



#### Leif A. Dormsjo

Appointed to the Board as an Alternate Director in March of 2015 representing the District of Columbia. In the same month, Mr. Dormsjo was confirmed the Director of the District Department of Transportation (DDOT) after serving as an Alternate Director. He has served as Deputy Secretary of the Maryland Department of Transportation (MDOT) since 2012.



#### **Kathy Porter**

Appointed to the Board as an Alternate Director in January of 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 of 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 of 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.

\* As of approval dates - March 24, 2016 & April 28, 2016

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# Chapter 1 - Introduction to WMATA



Rhode Island Ave Brentwood Metro Station



## WMATA Profile

#### History in Brief

WMATA was created in 1967 by an interstate compact as a tri-jurisdiction operation between Maryland, Virginia and the District of Columbia. Construction of the Metrorail system began in 1969 and the first phase of Metrorail operation began in 1976.

WMATA added a second transit service to its network in 1973 when, under direction from the U.S. Congress, it acquired four area bus systems and created Metrobus.

In 1994, WMATA added a third transit service when it began providing MetroAccess, a paratransit service for people with disabilities unable to use fixed route transit service.

WMATA completed the originally planned 103-mile Metrorail system in early 2001. In 2004, WMATA expanded the system, opening the Blue Line extension to Largo Town Center as well as the New York Ave-Florida Ave-Gallaudet U station (now NoMa-Gallaudet U station) on the Red Line. The expansion increased the Metrorail system to 86 stations and 106 miles.

In March 2009, the Dulles Transit Partners (DTP), under the direction of the Metropolitan Washington Airports Authority (MWAA), started construction on the Silver Line, a 23-mile rail extension in Fairfax and Loudoun counties in Virginia. Funded by a full-funding grant agreement, toll revenues, and other revenues from funding partners, the first phase of 11.6 miles and five new stations extending service to Reston, Virginia, opened July 26, 2014. 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 2019. Revenue service is expected to begin in FY2020.

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

#### WMATA Facts Worth Noting

WMATA maintains the second largest heavy rail system, the sixth largest bus system and the fifth largest paratransit service in the nation.

WMATA's service area size is approximately 1,500 square miles with a population of approximately four million people.

WMATA's transit zone consists of the District of Columbia, the suburban Maryland counties of Montgomery and Prince George's and the Northern Virginia counties of Arlington, Fairfax and Loudoun and the cities of Alexandria, Fairfax and Falls Church.

Known as "America's Transit System," average weekday passenger trips on Metrorail, Metrobus, and MetroAccess total approximately 1.1 million.

More than half of Metrorail stations serve federal facilities, and over a third of Metrorail trips on an average weekday are taken by federal employees.

> WMATA has spurred over \$235.0 billion of economic development at or adjacent to WMATA real estate assets.

#### Metrorail

The Metrorail system is a rapid transit system that consists of 117 route miles, 91 passenger stations and a fleet of over 1,100 rail cars. Service is operated 5 AM to midnight Monday through Thursday, 5 AM to 3 AM on Fridays, 7 AM to 3 AM on Saturdays, and 7 AM to midnight on Sundays. In FY2017, Metrorail is projected to provide approximately 203.5 million passenger trips. 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.

Metrorail service is currently operated over 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. All Metrorail stations and railcars are accessible to disabled passengers.

The system is equipped with communication systems that facilitate the flow of information to and from the passenger. The system 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 WMATA. Public address systems on all trains and platforms facilitate communications from Metrorail train operators and station managers. Also, all stations are equipped with digital signs that show next train arrival times, system status and time of day. 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 and landings and in all elevators. The radio infrastructure renewal and cellular communications project initiated in FY2016 will upgrade WMATA to a 700 MHz radio system and provide cellular capability throughout the tunnels.

#### **Sequence of Metrorail Openings**

The first Metrorail line opened was the Red Line consisting of 4.5 miles from Farragut North to Rhode Island Avenue. By July 1977, the Blue and Orange Lines were added with service between National Airport and

Stadium-Armory. This added 11.8 miles and 17 new stations to WMATA'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 along with the opening of the NoMa-Gallaudet Station on the Red Line. The table below provides a list of all openings.

Sequence of MetroRail	Openings
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Line	Segment	Stations	Miles	Date
Red	Farragut North to Rhode island Ave	5	4.5	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	New York Avenue	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

#### **Vertical Transportation**

# WMATA is the single largest vertical transportation operator in North America.

Metrorail's design places high reliance on vertical mobility through the utilization of elevators and escalators. Customers access Metrorail via escalators to the train platform, while elevators provide an accessible path of travel for persons with disabilities, seniors, customers with strollers, travelers carrying luggage and other riders. WMATA operates more than 900 vertical transport facilities (613 escalators and 313 elevators) and delivers over 3 million trips each weekday. This includes the five new stations on the Silver line (27 escalators and 28 elevators) which began service on July 26, 2014. 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 operates bus service on 175 lines with 299 route variations covering over 280 linear miles of services throughout ten jurisdictions in the WMATA region. WMATA utilizes 11,051 bus stops supported by 2,554 shelters owned by 15 separate agencies. All buses are accessible to people with disabilities and bike racks are available for use on all buses. Currently, the fleet is comprised of 1,548 buses to meet peak weekday service requirements of 1,294 buses with varying sizes and capacities and to support maintenance of the fleet.

# In FY2017, approximately 136 million trips are projected to be taken on Metrobus.

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. In addition, security cameras are installed on all WMATA buses. The entire bus fleet is equipped with two-way radio links to the operations control center, emergency radio silent alarms, and automatic vehicle locators.

#### **MetroAccess**

The Department of Access Services 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 as a "safety net" 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, using a fleet of 675 vehicles. In 2013, MetroAccess transitioned to a new business model in which service was unbundled from a single-contractor operation. Three contractors operate the van service, while separate contractors manage the Operations Control Center and Quality Assurance functions. The new model has given WMATA more agility and control in managing the service with greater efficiency and lower cost.

MetroAccess, the nation's fifth largest paratransit service, provides over two million trips each year. Demand for this type of service is increasing, as the population of people with disabilities is growing in the region and nationwide. For this reason, it is critical for WMATA to accommodate as many customers as possible on its fixed-route services, and thanks to WMATA's free ride benefit, over 2.2 million fixed-route trips are taken by MetroAccess customers each year.

For those who have not used fixed-route transit, Access Services provides travel training to assist customers with disabilities in navigating the system and taking full advantage of the many accessibility and safety features. MetroAccess partners with Metrobus and Metrorail to provide group orientations and helps organizations become more self-sufficient in serving their clients through Trainthe-Trainer workshops. These popular workshops educate organizations on how to provide travel training to their unique clientele. This not only helps organizations assist their clients to become more independent, but also serves as a force multiplier for our travel training team. Additionally, Access Services is partnering with the jurisdictions to improve the accessibility of bus stops in the region, further enhancing the customer's ability to make use of the fixed-route system.

> To keep MetroAccess sustainable for future years, Access Services has embarked on a campaign to improve regional coordination of specialized transportation services, recognizing that the most efficient and costeffective ways to deliver specialized transportation are through alternatives to ADA paratransit.

Access Services developed pilot projects with jurisdictions to explore and advance these alternatives. The first pilot was launched in partnership with the State of Maryland in Montgomery County and lasted from October 2013 until June 2015, and reduced the state's costs for human service agency clients who would have otherwise used MetroAccess. A second pilot in Maryland was conducted in Prince George's County ending in early 2016; State of Maryland officials are reviewing the results.

In October 2014, the Transport DC pilot was launched in the District of Columbia using taxis to provide trips for MetroAccess customers who live and travel in the District. Preliminary results have been positive, providing over 48,000 trips as an alternative to MetroAccess in the first year. Given the inevitable increases in ridership that come with an increasing population of senior citizens and people with disabilities, MetroAccess will be able to remain sustainable only by partnering with human services agencies and other transportation providers.



## 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 Office of Inspector General (OIG), the Office of Internal Compliance and Control (OICC) and advisory entities. Each entity's oversight responsibility is described below:

#### Federal Transit Administration

The Federal Transit Administration is an agency within the United States Department of Transportation that provides financial and technical assistance to local public transit systems.

The Federal government, through the 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 (TOC), which was originally created by state-level agencies in Virginia, Maryland and the District of Columbia to jointly oversee rail safety and security at 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 WMATA 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.

#### Office of Quality and Internal Compliance Operations

The Office of Quality and Internal Compliance Operations (QICO) provides independent review of WMATA operational processes and assets, promotes the implementation of quality improvement initiatives and action plans that are data driven and results-centric with

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

#### **Office of Internal Compliance & Control**

The Office of Internal Compliance & Control (OICC) of WMATA assists in the design and monitoring of financial management controls to assure broad organizational compliance with business processes and procedure through internal control guidance and training, as well as valueadded assessments of financial reporting and operational risks. The OICC partners with departments to review and evaluate business processes' efficiency and effectiveness.

#### Advisors

WMATA has three primary advisory organizations: the Riders' Advisory Council (RAC), the Accessibility Advisory Committee (AAC), and the Jurisdictional Coordinating Committee (JCC). These advisory entities focus on specific issues as described below:

#### Riders' Advisory Council

On September 22, 2005, the WMATA Board established a Riders' Advisory Council. The Council allows WMATA customers input on bus, rail and paratransit service. The 21-member council includes six representatives from Maryland, Virginia, and the District of Columbia, two atlarge members, and the chair of WMATA's Accessibility Advisory Committee.

#### Accessibility Advisory Committee

WMATA's Accessibility Advisory Committee 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.

#### Jurisdictional Coordinating Committee

The Jurisdictional 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 WMATA staff. Meeting agendas are established by WMATA staff and the JCC chairman and include items referred by the Board or WMATA 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, and the region is home to almost six million people and over three million jobs.

In FY2017, region-wide ridership on Metrorail, Metrobus and MetroAccess is projected at approximately 342 million trips.

As the primary transit operator providing service across jurisdictional boundaries, WMATA is an integral member of the regional transportation planning process. Article VI of the WMATA Compact gives WMATA the power to adopt a Mass Transit Plan for the WMATA service zone and directs WMATA to participate in the region's comprehensive transportation planning continuous. process. WMATA'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. WMATA 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.

WMATA coordinates with its regional partners to determine transit-based priorities and projects. The WMATA Board of Directors, composed of members from the Compact jurisdictions, helps determine those priorities and provides policy direction. The Jurisdictional Coordinating Committee (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 (TDM) Marketing, and Human Services Subcommittee.

WMATA coordinates with jurisdictional partners in multiple venues. The Northern Virginia Transportation Authority (NVTA) is responsible for developing a Northern Virginia Regional Transportation Plan, allocating and transportation funds providing interagency coordination in Northern Virginia. The Northern Virginia Transportation Commission (NVTC) coordinates transit finance and operations in Northern Virginia. WMATA works with both NVTA and NVTC on important transit funding and corridor development initiatives to enhance public transit service and ensure integration of transit in highway investments. WMATA also works with Department of Transportation (DOT) and planning staffs in the District of Columbia, Maryland, and Virginia on important local plans and project developments 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 WMATA totals 3.9 million people across four counties (Montgomery and Prince George's in Maryland, Fairfax and Arlington in Virginia), three independent cities (Alexandria, Falls Church, and Fairfax in Virginia), and one federal district. This constitutes the core of the Washington Metropolitan area, the ninth largest metropolitan area of the country.

Based on the 2011 American Community Survey (ACS), the demographic profile of the Washington Metropolitan area is as follows:

- 48.2 percent of the population is non-Hispanic white
- 25.3 percent is black or African American
- 14.1 percent is Hispanic or Latino
- 9.3 percent is Asian
- 3.1 percent is Mixed-Other

#### Economy

WMATA's operations are directly influenced by the economic conditions of the District of Columbia (DC) and the surrounding jurisdictions of Maryland and Virginia.

Overall trends in WMATA's transit ridership are correlated with population and employment growth in DC and the region. Over the past two to three years, the region's economy has underperformed compared to other metro areas in the country as a result of the fiscal drag from



reduced federal government spending and employment, including the impacts of sequestration, drawdown of overseas military engagements, and the retirement of older federal employees. The current economic underperformance of the region is having an impact on more than just transit ridership. Office and commercial vacancy rates, local jurisdictional tax revenues, and overall incomes in the region have also been affected.

Strengths and weaknesses: The long-term outlook for population growth in both DC and the region as a whole remains positive, particularly as revitalized downtown neighborhoods continue to draw young professionals. The region boasts a highly educated workforce that commands above-average salaries, and employment continues to grow in non-government sectors such as technology, healthcare and education as the region becomes a hub for the east coast of the United States. DC also benefits from a steady supply of tourists to the nation's capital, as well as convention and business visitors. While residential construction has moderated after several years of rapid growth, particularly in the multifamily segment, the real estate market overall remains strong. The region's weaknesses include relatively high business and regulatory costs as well as income inequality and a high cost of living, but the greatest risk currently facing the region is the reliance on the federal government.

**Reliance on federal government**: The economies of the District of Columbia and the Washington region remain heavily dependent on federal government spending. Although the region performed well in the years immediately after the 2007-09 financial crisis and recession, the region's economic picture since 2012 has clouded as a result of sequestration and repeated federal budget crises and shutdowns. The reliance on the federal government is playing out in a number of related dimensions for WMATA:

- Overall federal employment: One of the primary reasons for creating the Metrorail system in the 1970s was to provide commuting options for federal employees and contractors, particularly from park-and-ride locations outside of the downtown core. This has remained a primary peak-hour market served by Metrorail, but as those federal employee and contractor jobs have declined, ridership has also been negatively impacted.
- *Federal transit benefit*: Given WMATA's relatively high rail fares, the monthly transit benefit offered by many employers in the region is important in reducing the out-of-pocket cost of commuting. When the transit benefit was reduced in 2014, this negatively impacted Metrorail ridership by changing some riders' mode of travel decisions.

As a result of recent action by Congress and the President, the federal transit benefit has now returned to full parity with the parking benefit at \$255/month.

This is a positive change for WMATA; however, WMATA ridership is trending below FY2015 levels and is expected to remain depressed until reliability concerns are consistently addressed. Therefore, not all of the ridership that was lost previously due to the benefit reduction will return immediately.

• *Telecommuting*: Telecommuting and alternative work schedules continue to increase at both public and private sector firms in the Washington region. The federal government is playing a significant role in this shift to telework. GSA and OPM have the mandate of providing government services more effectively, including a reduction in real estate costs. One way to lower such costs is by renovating government-owned facilities to reduce the square footage per employee, building shared work environments, and increasing employee telecommuting. These changes are impacting the core commuting market for WMATA.



## **Executive Summary**

WMATA's \$2.8 billion total approved budget for FY2017 – consisting of the Operating, Capital and Reimbursable budgets – funds transit services that provide more than 1.1 million trips each weekday.

This budget enables WMATA to continue its vital safety and state of good repair rebuilding effort, enhance service delivery for its customers, and constrain cost growth through effective management.

The net operating portion of WMATA's overall budget is \$1.75 billion, which provides for the personnel, supplies, fuel and propulsion power, and services needed to operate Metrobus, Metrorail, and MetroAccess. Funding for the operating budget comes primarily from passenger fares and contributions from WMATA's state and local government partners.

The approved FY2017 capital budget of \$950 million provides for the assets and infrastructure to support Metrobus, Metrorail, and MetroAccess service. Funding for the capital budget comes from federal grants, WMATA's state and local government partners, and debt. The Capital Improvement Program (CIP) also includes an approved investment of 748 new 7000-series railcars, enough to replace all 1000, 4000 and 5000-series cars and expand the size of the WMATA fleet by 156 cars. The additional cars support the Silver Line extension and provide an additional 28 cars that are currently planned to be used to increase service along the Red Line.

The reimbursable portion of WMATA's overall budget is \$86.2 million for both operating and capital, which provides for personnel and services needed for unique projects requested on behalf of WMATA's jurisdictions and outside partners, including the DC Circulator and support for the construction of the Silver Line Phase II. The approved operating reimbursable budget is \$34.2 million and the capital reimbursable budget is \$52.0 million.

Priorities for the FY2017 budget include business initiatives to achieve the Board's strategic goals. Most importantly, the approved budget includes no fare increase, no service reductions, and no increases in jurisdictional operating subsidy.

#### **Budget Highlights**

The \$1.75 billion operating budget is funded with passenger fares and parking (48 percent), State and Local Government subsidy contributions (49 percent) and other revenue sources (three percent). The Operating budget

supports Metrobus, Metrorail, and MetroAccess operations across the District of Columbia, Maryland, and Virginia.

The operating expense budget represents a \$68.7 million or 3.8 percent decrease over FY2016 budget levels. The majority of the decrease is due to reduced expenses in the operating budget for FTA eligible preventive maintenance and heavy rail overhaul labor and parts expense. These activities are continuing, but will now be funded as part of the CIP. The decrease is partially offset by contractually obligated wage adjustments as well as an increase in the paratransit contract.

Safety Management Inspection (SMI) requirements: WMATA expended approximately \$2.7 million in FY2016 operating funds to begin addressing FTA's SMI requirements. This amount will increase to approximately \$12 million in FY2017, with 62 new positions required across 3 major categories:

- Metrorail training and recertification including refresher training, emergency response formal review and emergency response training (17 positions)
- Rail system-wide maintenance including preventive maintenance and inspection testing as well as increased staffing for automatic train control (35 positions)
- Bus operational testing and compliance resources for pre-trip inspections and the bus operator performance program (10 positions)

*Customer and employee safety and security improvements:* WMATA Transit Police will work throughout the system to further increase safety as well as curtail incidents of bus and rail fare evasion at twelve targeted stations.

*Better pass products:* New Metrorail pass products are intended to encourage ridership, particularly in the off-peak periods, and generate incremental revenue.

- The University Pass (UPass) will provide unlimited riding privileges on both Metrobus and Metrorail at discounted rates to full-time students at accredited colleges. Under a pilot program, WMATA, in collaboration with the staff of a local university, is implementing a pass which provides students unlimited rides on Metro rail and bus. University students represent an untapped partnership, with 20 colleges and approximately 225,000 students in the region who can bring additional ridership.
- The Metro Rail/Bus combo passes will provide a 7-day short-trip rail pass combined with a 7-day bus pass at a discounted price.



• The 'name your own price' monthly pass pilot will allow customers unlimited access to the Metrorail system for at a price determined by each customer's 'normal' daily commute, paid as a monthly subscription.

Fare policy change: In response to customer feedback, Metrorail will now offer a credit if a customer enters and exits the same rail station within a 15 minute window.

WMATA will implement the Board efficiency work-plan findings with a cost reduction of \$10 million in FY2017, as well as administrative expense reductions of \$2 million in addition to reductions already implemented in FY2016.

WMATA will also maximize non-fare revenues through an additional \$5 million in advertising revenues. This incremental revenue is the result of actions taken by the Board to expand Metro's advertising inventory (particularly digital screens and vehicle wraps) and to allow alcohol advertising.

The \$950 million CIP budget is focused on the implementation of federal recommendations and requirements for safety improvements, the rebuilding of the Metro system, and improving the effectiveness of the current rail and bus networks. Significant investments planned for FY2017 include, but are not limited to:

• NTSB Recommendations and SMI Requirements will address safety related investments including a replacement of the generation-two track circuits on the rail system, as well as the development of safety measurement system to track hazordous incidents and accidents to identify system root cause deficiencies.

- Radio & Cellular Infrastructure Renewal project includes plans for completion of the design work for the above ground elements of the new 700 mhz radio system and complete installation of cable travs along the Red Line in FY2017.
- Railcar replacement will continue in FY2017 with the replacement of more than half of the three hundred 1000-series railcars with the new 7000-series.
- Bus and Access vehicle replacement project will advance the rehabilitation and replacement of the bus fleet as well as the procurement of MetroAccess vehicles.
- The Track and Structures Rehabilitation program will continue to renew and replace crossties, running rail, fasteners, switches, and insulators as part of the effort to maintain a state of good repair on the system, resulting in the prevention of service delays and speed restriction.
- The Rail Power System Rehabilitation program will address the replacement of power system components through inspections to identify defective and/or used components such as cabling, track circuits, junction boxes, switchgear, and transformers throughout the rail systems and yards.
- The Replacement of Bus Garages with new modern facilities at Andrews Federal Campus and Cinder Bed Road
- The Escalator and Elevator Rehabilitation and Replacement program will continue with the replacement of twenty two escalators and rehabilitation of another ten escalators and fifteen elevators.

The FY2017 budget assumes a staffing requirement of 13,032 positions, consisting of 11,568 operating positions, 1,420 capital positions and 44 positions funded by reimbursable projects.

Summary of Budgeted Positions							
	FY2015	FY2016	FY2017				
	Approved	Approved	Approved				
	Budget	Budget	Budget	Change			
Total Positions	12,905	12,995	13,032	37			

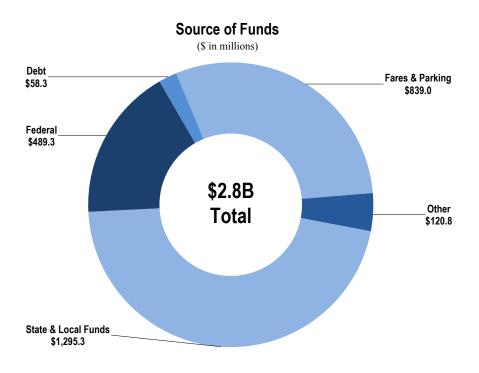
#### Summary of Rudgatad Pasitia



#### Summary of Funds by Source

(Dollars in Thousands)	FY2016 Approved	FY2017 Approved
Operating Budget		
Passenger Fares & Parking	\$859.0	\$839.0
State and Local Funds <sup>1</sup>	\$866.5	\$866.5
Business Revenues	\$45.0	\$47.0
Other Sources	\$34.0	\$14.0
Subtotal	\$1,804.5	\$1,766.5
Reimbursable Budget		
State and Local Funds	\$26.0	\$37.1
Other Sources	\$95.0	\$49.1
Subtotal	\$121.0	\$86.2
Capital Budget		
Federal Formula/Other Grants	\$455.7	\$317.3
Federal Dedicated Funds (PRIIA)	\$193.6	\$172.0
State and Local Funds	\$476.0	\$391.7
Other Sources	\$39.9	\$10.7
Planned Long-Term Financing	\$0.0	\$58.3
Subtotal	\$1,165.2	\$950.0
Grand Total	\$3,090.7	\$2,802.7

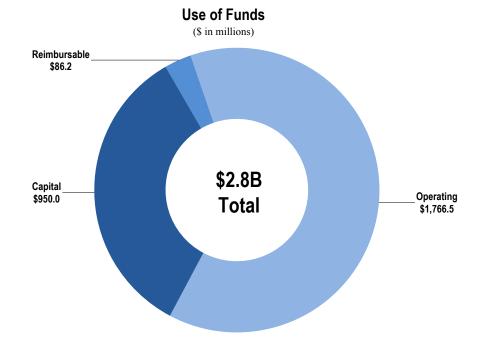
1 Includes Net Subsidy and contributions for FY2016 and FY2017 Debt Service



#### Summary of Expenditures by Program

(Dollars in Thousands)	FY2016 Approved	FY2017 Approved
Operating Budget		
Metrobus	\$634.3	\$653.3
Metrorail	\$1,058.5	\$972.5
MetroAccess	\$121.2	\$119.6
Subtotal	\$1,814.0	\$1,745.3
Debt Service	\$21.2	\$21.2
Preventive Maintenance Credit <sup>1</sup>	(\$30.7)	\$0.0
Subtotal	\$1,804.5	\$1,766.5
Reimbursable Budget		
Operating Reimbursable Projects	\$47.3	\$34.2
Capital Reimbursable Projects <sup>2</sup>	\$73.7	\$52.0
Subtotal	\$121.0	\$86.2
Capital Budget		
Capital Improvement Program	\$1,165.2	\$950.0
Subtotal	\$1,165.2	\$950.0
Grand Total	\$3,090.7	\$2,802.7

FY2017 Preventive Maintenance expenses are included Capital Improvement Program
 For the purposes of this table, Capital Reimbursable Project amounts reflect total forecasted expenditures for FY2017. Per WMATA Board policy, however reimbursable project budgets are managed on an obligation basis.





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# Chapter 2 - FY2017 Approved Budget



8000 Series Hybrid Metrobus



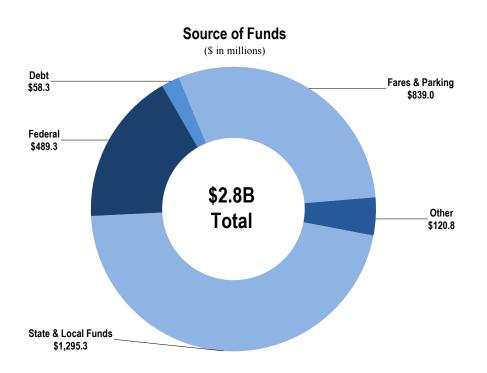
# Approved FY2017 Budget

WMATA's FY2017 combined budget totals \$2.8 billion, consisting of the operating and debt service (\$1.77 billion), capital (\$950 million), and reimbursable (\$86 million) budgets. The total funding for the budget is comprised of the following sources:

- Passenger fares and parking fees of \$839.0 million
- State and local funding of \$1.29 billion, consisting of
  - \$866.5 million for operating subsidy (including debt service),
  - \$37.1 million for reimbursable projects, and
  - \$391.7 million in state/local funding for the capital program, including federal formula and PRIIA

match, system performance funds, and other state and local contributions

- Federal funding of \$500.0 million, consisting of \$317.3 million in formula grants, \$172.0 million in Passenger Rail Investment and Improvement Act (PRIIA) funding, and \$10.7 million in resiliency and other federal grant sources.
- Planned long-term financing/degbt for the capital program of \$58.3 million, and
- Other funding, including advertising, joint development, fiber optic revenues, reimbursable project funding, and other sources totaling \$110.0 million.





#### **Operating Revenue**

The total operating revenue budget for FY2017 is \$900.0 million. Due to lower ridership trends on both bus and rail, the passenger revenue estimate (including transit fares and parking fees) is \$20.0 million less than the FY2016 approved budget.

Passenger fares and parking fees of \$839.0 million make up over 93 percent of the total revenue budget.

Non-passenger business revenues from advertising, joint development and the fiber optic leases are estimated at \$47.0 million, as well as \$14.0 million of other miscellaneous revenues, including projected revenues from land sales and reimbursements from the State of Maryland for the new Takoma-Langley Transit Center. Other revenues were higher in FY2016 as a result of a one-time use of funds from the now-closed Transit Infrastructure Investment Fund (TIIF) to support the operating budget.

	<b>Operating</b> (\$ in M					
(\$ in Millions)	FY2014 Actual <sup>3</sup>	FY2015 Actual	FY2016 Approved	FY2017 Approved	Variance to \$ Chlange	FY2016 % Change
Passenger Fares <sup>1</sup>	\$754.1	\$793.3	\$810.0	\$792.0	(\$18.1)	-3%
Parking	\$46.6	\$46.5	\$49.0	\$47.1	(\$1.9)	-4%
Advertising	\$19.8	\$22.4	\$20.5	\$23.5	\$3.0	-15%
Joint Development	\$7.4	\$6.2	\$8.0	\$7.0	(\$1.0)	-13%
Fiber Optics	\$15.5	\$15.4	\$16.5	\$16.5	\$0	0%
Other Nontransit Sources <sup>2</sup>	\$13.3	\$23.3	\$34.0	\$14.0	(\$20.0)	-59%
Total Revenue	\$856.7	\$907.2	\$938.0	\$900.0	(\$38.0)	-4%

<sup>1</sup> Includes DC school subsidy and Anacostia programs

<sup>2</sup> Interest, employee parking, bicycle lockers, vending machines, Neutral Host, ATMs, antennas, car sharing, other. FY2016 also includes one-time usage of \$27million of Transit infrastructure Investment Fund (TIIF) revenue to support Metrorail operating expenses

<sup>3</sup> FY2014 reflects audited financial statement.

#### **Ridership and Passenger Revenue**

The approved FY2017 budget uses the FY2016 approved ridership projection as a baseline, modified for external factors that affect passenger trip-making as well as anticipated ridership impacts of policy decisions regarding fares and service. Total rail ridership is projected at 203.5 million trips, a decline of 6.4 million or 3.0 percent compared to the FY2016 budget Total bus ridership is

projected at 135.6 million, a decline of 4.5 million or 3.2 percent compared to FY2016. These projections reflect a continuation of the lower ridership performance seen to date in FY2016. MetroAccess ridership, by contrast, is expected to continue to grow, increasing to 2.42 million in FY2017, an increase of 3.6 percent over the FY2016 budget.

#### **Ridership by Service**

	Actual	Actual	Budgeted	Budgeted	Variance to FY2016	
(trips in thousands) <sup>1</sup>	2014	2015	2016	2017	# Chg.	% Chg.
Metrorail	204,067	206,396	209,900	203,500	(6,400)	-3.0%
Metrobus	134,408	132,902	140,100	135,600	(4,500)	-3.2%
MetroAccess	2,126	2,238	2,335	2,420	85	3.6%
Total	340,601	341,536	352,335	341,520	(10,815)	-3.1%

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.



External factors impacting revenue and ridership include projected growth in employment in the District of Columbia and the region, population growth rates, and other economic factors.

WMATA uses data from a variety of sources, including economic projections from Moody's Analytics, as key inputs into the assessment of current and future ridership. Two of the best indicators for forecasting ridership trends in the past have been population and employment expectations for the District of Columbia. However, the changing trip-making behavior that has been evident in the post-recession environment has proven challenging to forecast, particularly with respect to telecommuting and the emergence of alternative travel options, as discussed in the next section.

WMATA's most recent system-wide fare increases were implemented in FY2015, and WMATA would have normally considered fare changes for FY2017 in keeping with the Board's policy of assessing fare changes on a biennial basis.

> Given recent ridership declines and challenges with customer satisfaction, this budget includes no broad-based fare increases.

WMATA is introducing new fare products aimed at retaining customers and encouraging additional trips.

#### Metrorail

Projected Metrorail passenger fare revenue for FY2017 (including fares related to the DC Student Subsidy program) is \$621.0 million, a decrease of \$14.9 million or 2.3 percent below the approved FY2016 budget level. Through the first nine months of FY2016, ridership on Metrorail has been consistently lower than the same period of FY2015, and this budget reflects a projected continuation of that trend.



In addition to external challenges that are outlined below, the opening of the Silver Line and reduced service reliability – with a concurrent drop in customer satisfaction – present a significant challenge for WMATA. The decline in ridership in FY2016 compared to the prior year appears to be due in part to customer concerns over service quality and reliability, including a series of safety-related incidents Metrorail experienced in 2015. In addition, rail on-time performance, which measures how evenly-spaced the trains are, has been consistently below target, impacting travel times and customer crowding.

- Federal employment in the region (both direct employees and contractors) continues to stagnate, as demonstrated by employment data provided by Moody's Analytics. This decline is due to a number of causes, including overall fiscal constraints, an increasing number of retirements (as the Baby Boom generation reaches retirement age), and the drawdown of military engagements abroad. Federal employees have always been a key market segment for Metrorail, and the economic impact of this lack of growth is reflected in WMATA's ridership.
- Beginning in the fall of 2014, gas prices dropped to levels not seen since 2009-10 just after the financial crisis and recession. As of early 2016, the national average price for regular gas has remained just slightly above \$2.00 per gallon.

All else equal, lower gas prices make driving a more attractive transportation option.

- There are a number of other market-based factors that adversely impact rail ridership. These include telecommuting and alternative work schedules, which are heavily promoted by both private sector employers and federal departments and agencies (ridership on Mondays and Fridays in particular shows the impact of these policies), and mode shifts to other non-single occupancy vehicle/non-Metrorail modes including carsharing.
- On a positive note, the monthly transit benefit was increased by Congress effective January 2016. The parking and transit benefit are now both set at \$255 per month, where previously the transit benefit was only \$130 per month. The increased benefit will help reduce the out-of-pocket cost of commuting by transit, particularly for suburban commuters making longerdistance trips and those who park-and-ride to access the Metrorail system. The recent action by the District of Columbia requiring all employers with 20 or more employees to offer transit benefits will also help reduce out-of-pocket travel costs for some riders.



The increase to the monthly transit benefit is expected to positively impact ridership, as same riders will now find it more economical to commute by Metrorail.

• Recent changes to the District of Columbia Student Subsidy program are also having a positive impact on Metrorail ridership and on WMATA's overall revenues. In the summer of 2015, the Council of the District of Columbia approved a new "Kids Ride Free on Rail" program to complement the existing "Kids Ride Free on Bus" program. Working cooperatively with District Department of Transportation (DDOT) and District of Columbia Public Schools (DCPS), WMATA rolled out this new program in time for the start of the 2015/2016 school year. Students can now make unlimited trips on Metrorail (within the District of Columbia), and the District of Columbia compensates WMATA for the trips. This program is expected to continue, with some improvements, in FY2017.

#### Metrobus

The Metrobus passenger revenue budget for FY2017 is \$161.0 million, a decrease of \$4.6 million or 2.8 percent over the approved FY2016 budget. Metrobus ridership and revenue performance in the years following the 2009/2010 recession was generally strong, as passengers responded positively to the combination of low fares and high quality service (e.g., new bus fleet, improved reliability and on-time performance). Growth in demand for Metrobus has been particularly strong in certain corridors such as 14th Street, 16th Street, and Georgia Avenue in the District of Columbia, where adding capacity and improving travel time have been major initiatives. In addition, the Kids Ride Free program for District of Columbia students continues to be successful, onboarding approximately 23,000 student rides on an average weekday.



However, bus ridership dipped in the fourth quarter of FY2015, and continued to trend downward into FY2016. This decline has a number of potential causes:

- Rail's reliability and service challenges are spilling over to bus. Morning bus-to-rail transfers are down and the heaviest losses have been concentrated at Wiehle, New Carrollton, Vienna, and Pentagon, indicating that bus is losing some trips from commuters reacting to the challenges on rail.
- Average bus speeds have steadily declined in recent years and continue to drop, which impacts the quality of service. Many factors are contributing to this trend, particularly increased traffic congestion, but there are opportunities to improve the customer experience, including investments in Traffic Signal Priority (TSP).
- Finally, ridership is also trending downward at other bus operations across the region, indicating a correlation to broader socioeconomic conditions rather than being specific to WMATA. WMATA continues to work with our partner jurisdictions to understand and address the causes of these declines.

As a result of these challenges, the FY2017 budget assumes a three percent reduction in projected bus ridership and revenue from FY2016.

#### MetroAccess

MetroAccess registrations and ridership are projected to increase in FY2017, continuing the current trend dating back to FY2014. MetroAccess forecasted passenger revenue for FY2017 is \$10.0 million, an increase of \$1.5 million over the FY2016 approved budget (though only an increase of \$0.9 million over FY2015 actual revenue).



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



Approximately 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 remainder 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 certain eligible MetroAccess trips onto taxicabs. The TransportDC program was started in October 2014, and over the past year has grown to serve more than 10,000 trips per month.

#### Parking

Total parking revenue for FY2017 is projected at \$47.1 million, a decline of \$1.9 million compared to the approved FY2016 level. Overall parking utilization to date in FY2016 has declined to 73 percent in conjunction with the declines seen in Metrorail ridership. Parking utilization continues to vary substantially by location across the region, with the highest utilization in Montgomery County (78 percent), moderate utilization in the District of Columbia and Northern Virginia (75 percent), and the lowest utilization in Prince George's County (67 percent). Parking usage in Northern Virginia along the Orange Line has shifted substantially as a result of the opening of the Silver Line and the addition of 2,300 spaces at the new parking facility at the Wiehle-Reston East station, which is not owned by WMATA. Notably, utilization has dropped at West Falls Church from an average of 97 percent prior to the opening of the Silver Line to 55 percent through the first nine months of FY2016.



#### **New Fare Products**

As part of WMATA's effort to better serve customers and encourage ridership, the budget includes a number of changes to its fare products in order to encourage ridership.

- *Credit for entry/exit at the same station*: WMATA has instituted a 15-minute "grace period" whereby any customer who enters and exits at the same Metrorail station within that period will have the fare credited back to his or her SmarTrip® card.
- University Pass: WMATA is working in cooperation with universities in the Washington region to offer a new University Pass aimed at students. The University Pass would offer 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 WMATA while reducing the need for parking facilities on university campuses. The University Pass program requires 100 percent student participation, and each student will receive a semester or annual pass that offers unlimited rides on Metrobus and Metrorail (though not MetroAccess). WMATA is working with interested universities on implementation issues. The incremental ridership and revenue from the University Pass will vary significantly depending on the particular campuses that choose to participate, given their location and the transportation options available to students.
- *SelectPass pilot*: WMATA implemented a pilot for a new SelectPass monthly product in the spring of 2016.

The new monthly pass allows 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 "name their own price", based on their normal commute trip, making this pass customizable for each individual's travel needs and budget – any trip with a fare equal to or less than the normal commute trip is covered, and any occasional longer trip just requires payment of the fare difference from stored value on the SmarTrip<sup>®</sup> card.
- Customers can choose to extend their transit access by making their pass qualify for unlimited bus trips in addition to Metrorail trips.
- The pass begins and ends on the first of every calendar month, and conveniently auto-renew, allowing subscribers to no longer worry about having enough value on their cards and instead "set it and forget it".

• Simplification of rail passes and expansion of combo rail/bus passes: While WMATA's 7-day unlimited bus pass is a popular product, the 1-day, 7-day, and 28-day rail passes are relatively under-utilized. To encourage ridership, WMATA will be considering further changes to Metro's suite of rail passes following the completion of the SelectPass pilot. In addition to simplifying the pass offerings, combination rail/bus pass offerings will be expanded in order to stimulate intermodal rail/bus trips as well as off-peak travel. The incremental revenue and ridership associated with these combo passes is expected to be modest in the near term.

No net additional revenue from these products is included in the FY2017 budget.

#### Non-Passenger Revenue

#### Advertising

Total advertising revenue in FY2017 is projected at \$23.5 million, an increase of \$3.0 million over the FY2016 budget. A new multi-year advertising contract commenced in FY2016, and the Board's recent actions approving an expansion of the advertising inventory (including more digital advertising) and approving the advertising of alcohol are projected to provide additional revenue growth in FY2017 and beyond. These policy actions, combined with organic growth, are expected to more than offset the loss of revenue associated with the Board's enactment of a permanent ban on the sale of issue-oriented advertising, which was about 5 percent of annual advertising revenue.



#### Joint Development

The FY2017 Joint Development revenues allocated to the operating budget are \$7.0 million. These revenues tend to grow moderately over time as leases are renegotiated. However, there is limited opportunity for increases in this revenue category since current Board policy dictates that revenues from new joint development leases or joint development property sales go into the Capital Improvement Program (CIP).

#### Fiber Optics

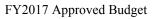
The WMATA Fiber Optic Program, initiated in September 1986, has allowed for the installation, operation, and maintenance of a fiber optic-based telecommunication network that utilizes excess capacity within the Metro right-of-way. WMATA also receives a number of fibers for its own use as part of the compensation package. For FY2017, fiber optic revenue is projected at \$16.5 million, unchanged from the FY2016 budget.

#### **Other Revenue**

Other revenue in the FY2017 budget includes vending machines, ATM revenue, cellular telephone agreements. employee parking, bike locker fees, car sharing revenue, and antenna revenue. Previously, insurance subrogation collections were included in this account, but these are now counted as a credit against expenses rather than revenue. These combined miscellaneous revenue sources are expected to contribute \$14.0 million to FY2017 nonpassenger revenues, a decrease of \$20.0 million from the FY2016 budget. The major change in this category is that the one-time revenues of \$27.0 million from the nowclosed Transit Infrastructure Investment Fund (TIIF), which were used to support Metrorail expenses in FY2016, are no longer available. However, additional revenue is from land sale projected proceeds and from reimbursements from the State of Maryland for the new Takoma-Langley Transit Center.



	<b>Operating Budget</b>	Revenues			
(dollars in thousands)	Actual FY2014	Actual FY2015	Approved Budget FY2016	Approved Budget FY2017	Variance
MetroBus					
Passenger	141,421	145,691	156,835	152,120	(4,716)
Other Passenger	8,404	9,480	8,725	8,825	100
Parking	0	410	0	0	(
Advertising	13,297	14,956	13,695	15,699	2,004
Joint Development	0	0	0	0	(
Fiber Optics	0	0	0	0	(
Other	4,478	5,569	2,080	3,080	1,000
Interest	31	17	0	0	(
Subtotal	\$167,631	\$176,123	\$181,335	\$179,724	(\$1,611)
MetroRail					
Passenger	593,324	626,965	632,133	612,800	(19,333)
Other Passenger	3,410	2,090	3,818	8,218	4,400
Parking	46,614	46,103	49,000	47,103	(1,897
Advertising	6,549	7,466	6,805	7,801	996
Joint Development	7,360	6,161	8,000	7,000	(1,000)
Fiber Optics	15,467	15,441	16,500	16,500	(
Other	9,009	17,754	31,909	10,909	(21,000)
Interest	(181)	6	0	0	(
Subtotal	\$681,551	\$721,986	\$748,164	\$710,330	(\$37,834)
MetroAccess					
Passenger	7,542	9,045	8,500	9,972	1,472
Other Passenger	0	0	0	0	(
Parking	0	0	0	0	(
Advertising	0	0	0	0	(
Joint Development	0	0	0	0	(
Fiber Optics	0	0	0	0	(
Other	(1)	0	0	0	(
Interest	0	0	0	0	(
Subtotal	\$7,542	\$9,045	\$8,500	\$9,972	\$1,472
Total					
Passenger	742,288	781,701	797,468	774,891	(22,577)
Other Passenger	11,814	11,570	12,543	17,043	4,500
Parking	46,614	46,513	49,000	47,103	(1,897)
Advertising	19,846	22,422	20,500	23,500	3,000
Joint Development	7,360	6,161	8,000	7,000	(1,000
Fiber Optics	15,467	15,441	16,500	16,500	(
Other	13,487	23,323	33,989	13,989	(20,000)
Interest	(151)	24	0	0	(
Grand Total	\$856,873	\$907,154	\$938,000	\$900,026	(\$37,974)



#### FY2017 Approved Operating Subsidy

The FY2017 approved jurisdictional operating funding is \$866.5 million – the same level that was approved for the FY2016 budget (including debt service). This includes:

• FY2017 net operating subsidy for Metrobus, Metrorail, and MetroAccess of \$845 million, which is flat from FY2016, primarily as a result of the approved change to fund additional eligible preventive maintenance (PM) expenses with FTA grants in the capital budget.

#### Jurisdictional Operating Subsidy Dollars in Millions

	Approved 2014	Approved 2015	Approved 2016	Approved 2017	<b>\$</b> Variance	% Change
Net Subsdiy <sup>1</sup>	\$732.5	\$778.1	\$845.3	\$845.3	\$0	0%
Total Subsidy <sup>2</sup>	\$734.9	\$779.3	\$866.5	\$866.5	\$0	0%

1 Excluding debt service and applications of prior year surpluses

2 Including debt service and applications of prior year surpluses



28

			-		-				
	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	\$413,763,677	\$176,670,157	\$59,668,512	\$69,946,030	\$18,161,604	\$29,746,444	\$626,513	\$57,456,540	\$1,487,877
Non-Regional Bus Subsidy	\$59,792,785	\$22,613,774	\$8,269,740	\$20,581,924	\$1,662,718	\$918,044	_	\$5,746,584	
Subtotal	\$473,556,461	\$199,283,931	\$67,938,252	\$90,527,955	\$19,824,323	\$30,664,488	\$626,513	\$63,203,124	\$1,487,877
Percent of Total	100.0%	42.1%	14.3%	19.1%	4.2%	6.5%	0.1%	13.3%	0.3%
Metrorail Operating Subsidy									
Base Allocation	\$254,976,548	\$86,769,898	\$47,113,246	\$41,627,970	\$12,030,985	\$24,920,366	\$823,670	\$40,920,914	\$769,500
Max Fare Subsidy	\$7,196,860	\$688,421	\$3,202,953	\$1,461,533	\$293,205	\$186,710	\$60,408	\$1,265,260	\$38,368
Subtotal	\$262,173,408	\$87,458,319	\$50,316,199	\$43,089,504	\$12,324,190	\$25,107,076	\$884,077	\$42,186,173	\$807,868
Percent of Total	100.0%	33.4%	19.2%	16.4%	4.7%	9.6%	0.3%	16.1%	0.3%
MetroAccess Operating Subsidy									
MetroAccess Operating Subsidy	\$109,591,179	\$25,715,043	\$21,767,046	\$46,809,201	\$836,386	\$823,079	\$300,465	\$13,262,069	\$77,892
Subtotal	\$109,591,179	\$25,715,043	\$21,767,046	\$46,809,201	\$836,386	\$823,079	\$300,465	\$13,262,069	\$77,892
Percent of Total	100.0%	23.5%	19.9%	42.7%	0.8%	0.8%	0.3%	12.1%	0.1%
Net Operating Subsidy	\$845,321,049	\$312,457,294	\$140,021,497	\$180,426,659	\$32,984,898	\$56,594,643	\$1,811,055	\$118,651,366	\$2,373,637
Percent of Total	100.0%	37.0%	16.6%	21.3%	3.9%	6.7%	0.2%	14.0%	0.3%
Debt Service									
Metro Matters Debt Service	\$21,177,444	\$10,673,432	\$4,944,933	\$5,506,136	_	_	_	—	\$52,943
Total Debt Service	\$21,177,444	\$10,673,432	\$4,944,933	\$5,506,136	\$0	\$0	\$0	\$0	\$52,943
Jurisdictional Operating Funding	\$866,498,493	\$323,130,726	\$144,966,430	\$185,932,795	\$32,984,898	\$56,594,643	\$1,811,055	\$118,651,366	\$2,426,580

#### FY2017 Approved Capital Funding

WMATA's FY2017-2022 Capital Improvement Program (CIP) financial plan relies on a forecasted investment of \$6.0 billion from the federal government, state and local government partners, planned long-term financing and other sources. Within the \$6.0 billion six-year plan:

- \$2.8 billion comes from federal funding
- State and local contributions total \$2.2 billion
- Planned long-term financing during the period totals \$957.7 million

A more detailed discussion of the capital funding sources is included in Chapter 4 of this publication.

#### FY2017-2022 Approved Capital Improvement Program

(dollars in millions)	FY2017 Budget	FY2018 Plan	FY2019 Plan	FY2020 Plan	FY2021 Plan	FY2022 Plan	6 Year Total
Federal Formula Programs	\$317.3	\$304.0	\$304.0	\$304.0	\$304.0	\$304.0	\$1,837.3
Federal PRIIA	172.0	150.0	150.0	150.0	150.0	150.0	922.0
Resiliency Grant	7.1	6.9	0.0	0.0	0.0	0.0	14.1
Other Federal Grants	3.6	5.5	6.7	4.4	4.0	4.0	28.3
Subtotal Federal	500.1	466.5	460.7	458.4	458.0	458.0	2,801.7
Match to Federal Formula	79.3	76.0	76.0	76.0	76.0	76.0	459.3
System Performance	117.2	125.9	137.7	135.4	143.5	150.6	810.4
State and Local PRIIA	172.0	150.0	150.0	150.0	150.0	150.0	922.0
Match to Resiliency Grant	2.4	2.3	0.0	0.0	0.0	0.0	4.7
Rail Power System Upgrades	8.4	5.1	0.0	0.0	0.0	0.0	13.5
Other State and Local	12.4	14.4	1.5	0.9	0.8	0.8	30.7
Subtotal State and Local	391.7	373.7	365.2	362.3	370.3	377.4	2,240.6
Planned Long-Term Financing	58.3	388.5	245.0	144.9	35.6	85.4	957.7
Subtotal Financing	58.3	388.5	245.0	144.9	35.6	85.4	957.7
Total	\$950.0	\$1,228.7	\$1,070.9	\$965.6	\$863.9	\$920.9	\$6,000.0



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# Chapter 3 - FY2017 Operating Budget



Sarbanes Transit Center - Silver Spring Station

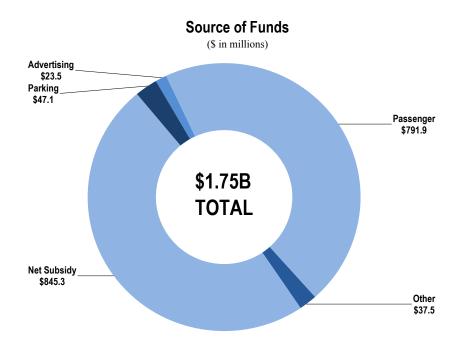


#### FY2017 Operating Budget

The Operating Budget funds the costs of operating and maintaining Metrobus, Metrorail and MetroAccess. In total, the operating budget is \$1.75 billion, a 3.8 percent decrease from the FY2016 budget.

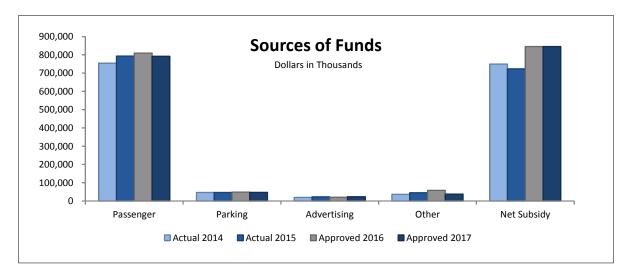
#### Sources of Funds

- The largest source of supplemental funding is from the net local subsidy of \$845.3 million or 48.4 percent of total expenses.
- The second largest source of funding comes from passenger fare revenue at \$791.9 million, or 45.4 percent, from Metrobus, Metrorail and MetroAccess.
- The remaining \$108.1 million or 6.2 percent comes from parking, advertising, fiber optic leases and other revenues.



#### FY2014-FY2017

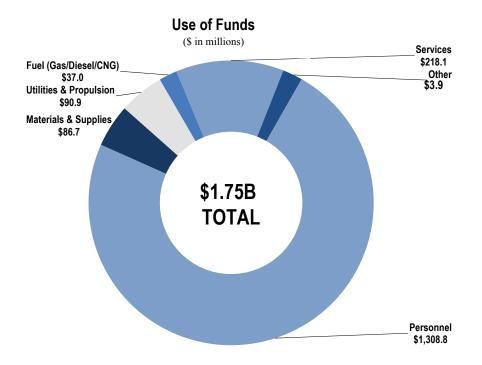
- Over the period from FY2014 to FY2017, passenger fares have remained the primary source of revenue, growing by \$37.8 million or 5.0 percent.
- Net local subsidy remains flat to budget at \$845.3 million from FY2016 to FY2017.





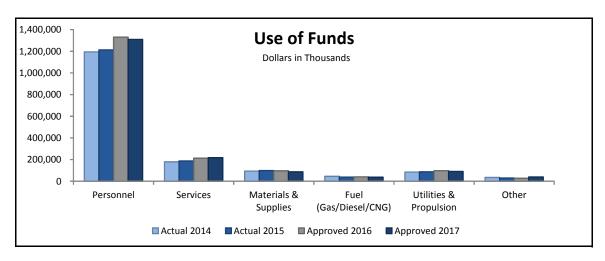
### **Uses of Funds**

The largest operating budget expenditure category is Personnel at \$1.3 billion or 75 percent, followed by Services, with expenses totaling \$218.1 million or 12.5 percent.



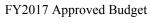
#### FY2014-2017

- FY2017 operating personnel budget is \$1.3 billion, a decrease of \$21.6 million or 1.6 percent over FY2016. This decrease is primarily driven by the transfer of eligible preventive maintenance activities from the Operating budget to the Capital Improvement Program (CIP). The decrease is offset by increases for FTA required safety corrective actions, fiscal impacts associated with current collective bargaining agreements and the impact of WMATA's updated method for allocating indirect costs.
- Fringe Benefits decreased by \$13.5 million, 3.1 percent, mostly due to reduction in pension contributions and the elimination of the budget for Other Post Employment Benefits (OPEB) trust contributions.
- FY2017 service expenses for the operating budget are \$218.1 million, an increase of \$4.8 million, or 2.3 percent over FY2016. This increase is due primarily to projected growth in the Paratransit service contract costs from increasing ridership





<b>Operating Budget</b> Revenue and Expenses					
(Dollars in Thousands)	Actual FY2014 <sup>1</sup>	Actual FY2015	Approved Budget FY2016	Approved Budget FY2017	Variance
Revenues					
Passenger	\$742,288	\$781,701	\$797,468	\$774,891	(\$22,577)
Other Passenger	11,814	11,570	12,543	17,043	4,500
Parking	46,614	46,513	49,000	47,103	(1,897)
Advertising	19,846	22,422	20,500	23,500	3,000
Joint Development	7,360	6,161	8,000	7,000	(1,000)
Fiber Optics	15,467	15,441	16,500	16,500	0
Other	13,487	23,323	33,989	13,989	(20,000)
Interest	(151)	24	0	0	0
Total Revenues	\$856,723	\$907,154	\$938,000	\$900,026	(\$37,974)
Expenses					
Personnel	\$1,193,494	\$1,212,346	\$1,330,379	\$1,308,762	(\$21,617)
Services	179,235	187,352	213,250	218,086	4,836
Materials & Supplies	93,920	98,889	95,936	86,723	(9,213)
Fuel (Gas/Diesel/CNG)	45,555	38,339	41,297	36,963	(4,334)
Utilities & Propulsion	84,321	87,328	97,783	90,924	(6,859)
Casualty & Liability	34,046	28,332	24,305	34,895	10,591
Leases & Rentals	5,769	6,183	6,796	6,725	(71)
Miscellaneous	961	2,447	4,282	5,269	987
Capital Allocation	0	0	0	(43,000)	(43,000)
Total Expenses	\$1,637,301	\$1,661,216	\$1,814,028	\$1,745,347	(\$68,681)
Gross Subsidy	\$780,578	\$754,062	\$876,028	\$845,321	(\$30,707)
Preventive Maintenance	(\$30,700)	(\$30,700)	(\$30,700)	\$0	\$30,700
Net Subsidy	\$749,878	\$723,362	\$845,328	\$845,321	(\$7)
Cost Recovery Ratio	52.3%	54.6%	51.7%	51.6%	





		Expense Budg rity Wide	get			
	Actual 2014 <sup>1</sup>	Actual 2015	Approved 2016	Approved 2017	\$ Variance	% Change
Salaries	\$255,792	\$261,919	\$292,731	\$308,545	\$15,814	5%
Full-Time Salaries	242,528	250,371	286,020	319,773	33,753	
Salary Lapse	0	0	(7,243)	(25,087)	(17,844)	
Overtime Salaries	13,264	11,548	13,955	13,859	(96)	
Wages	\$549,649	\$543,458	\$607,096	\$583,195	(\$23,901)	-4%
Operator/StaMgr Wages	222,517	243,400	256,605	251,440	(5,165)	
Operator/Sta Mgr Overtime	45,626	41,175	43,503	41,439	(2,064)	
Full-Time Wages	262,317	242,511	296,422	278,884	(17,538)	
Wage Lapse	0	0	(9,773)	(10,240)	(467)	
Overtime Wages	19,190	16,372	20,339	21,672	1,333	
Total Salaries and Wages	\$805,441	\$805,378	\$899,827	\$891,740	(\$8,087)	-1%
Fringes	\$388,053	\$406,969	\$430,552	\$417,022	(\$13,530)	-3%
Fringe Health	184	(683)	173,282	180,611	7,329	
Fringe Pension	0	0	149,543	137,045	(12,499)	
Other Fringe Benefits	369,938	385,376	83,333	73,796	(9,537)	
Workman Compensation Total Personnel Cost	17,930	22,277	24,393	25,570	1,176	20/
	\$1,193,494	\$1,212,346	\$1,330,379	\$1,308,762	(\$21,617)	-2%
Services Management Fee	\$179,235	\$187,352	\$213,250	\$218,086	\$4,836	2%
Management Fee Professional & Technical	129	143	166	428	262	
Temporary Help	17,259	21,588	28,861	44,008	15,147	
Contract Maintenance	2,112	3,286	2,706	3,324	618	
Custodial Services	43,377 25	39,583 46	48,774 83	45,757 85	(3,017)	
Paratransit	85,276	92,826	92,957	92,704	(253)	
Services - Other	31,056	29,820	39,703	31,781	(7,922)	
						100/
Materials & Supplies Fuels and Lubricants	<b>\$93,920</b>	<b>\$98,889</b>	<b>\$95,936</b>	\$86,723	(\$9,213)	-10%
Tires	2,508	2,241	6,929	2,541	(4,388)	
Materials & Supplies - Other	5,725 85,687	5,821 90,827	6,915 82,092	5,886 78,296	(1,030) (3,795)	
						100/
Fuel (Gas/Diesel/CNG) Diesel Fuel	\$45,555	\$38,339	<b>\$41,297</b>	\$36,963	(\$4,334)	-10%
Gasoline	29,535	27,049	26,784	22,130	(4,654)	
Clean Natural Gas	12,781 3,238	9,844 1,447	15,106 (593)	12,061 2,773	(3,045) 3,365	
Utilities & Propulsion Electricity	\$84,321	<b>\$87,328</b>	<b>\$97,783</b>	<b>\$90,924</b>	(\$6,859)	-7%
Propulsion	27,583	27,574	31,372	29,643	(1,729)	
Utilities - Other	48,218	51,305	55,383	50,850	(4,532)	
	8,519	8,449	11,029	10,431	(598)	
Casualty & Liability	\$34,046	\$28,332	\$24,305	\$34,895	\$10,591	44%
Insurance	16,158	15,243	17,419	22,347	4,928	
Claims	17,888	13,089	6,885	12,548	5,663	
Leases	\$5,769	\$6,183	\$6,796	\$6,725	(\$71)	-1%
Property	2,046	2,021	2,610	2,239	(370)	
Equipment	3,723	4,162	4,186	4,485	299	
Miscellaneous	\$961	\$2,447	\$4,282	(\$37,731)	(\$42,013)	-981%
Dues and Subscriptions	315	381	483	514	31	
Conferences and Meetings	142	99	243	335	93	
Business Travel/Public Hearings	380	307	727	415	(312)	
Interview & Relocatoin	834	1,077	729	1,752	1,023	
Advertising	2,970	2,702	2,472	2,796	324	
Other Deineburgerente	1,015	554	2,905	865	(2,040)	
Reimbursments	(4,695)	(2,673)	(3,277)	(1,408)	1,869	
Constal Allocation		<u></u>	~	(12 000)	(12 000)	
Capital Allocation Total Non-Personnel Cost	0	0	0	(43,000)	(43,000)	100/
Capital Allocation Total Non-Personnel Cost Total Cost		0 \$448,870 \$1,661,216	0 \$483,649 \$1,814,028	(43,000) <b>\$436,586</b> <b>\$1,745,347</b>	(43,000) (\$47,063) (\$68,681)	-10% -4%



#### **Operating Expense by Mode** Authority Wide

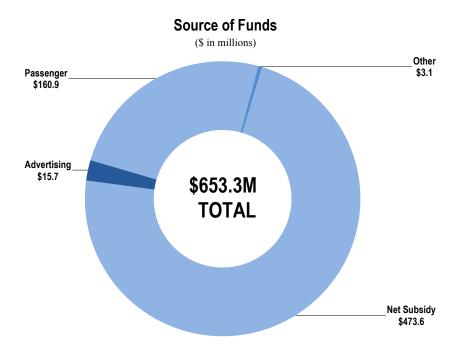
	Tuttonty whee			
	Approved			
	Budget	BUS	RAIL	ACCESS
(Dollars in Thousands)	FY2017	FY2017	FY2017	FY2017
Salaries	\$308,545	\$102,465	\$199,230	\$6,850
Full-Time Salaries	319,773	108,773	203,930	7,070
Salary Lapse Overtime Salaries	(25,087)	(8,226)	(16,611)	(250)
	13,859	1,918	11,911	30
Wages	\$583,195	\$258,026	\$323,906	\$1,262
Operator/Sta Mgr Wages	251,440	151,291	100,149	0
Operator/Sta Mgr Overtime Full-Time Wages	41,439	26,157	15,282	0
Wage Lapse	278,884 (10,240)	75,115 (1,966)	202,547 (8,260)	1,221 (15)
Overtime Wages	21,672	7,429	14,187	56
Total Salaries and Wages	\$891,740	\$360,491	\$523,137	\$8,113
Fringes	\$417,022	\$168,525	\$244,531	\$3,966
Fringe Health	180,611	73,023	105,963	1,625
Fringe Pension	137,045	55,409	80,403	1,023
Other Fringe Benefits	73,796	30,152	43,010	634
Workman Compensation	25,570	9,941	15,155	474
Total Personnel Cost	\$1,308,762	\$529,015	\$767,668	\$12,078
Services	\$218,086	\$44,734	\$75,346	\$98,006
Management Fee	428	0	428	0
Professional & Technical	44,008	12,536	28,068	3,404
Temporary Help	3,324	1,274	1,988	62
Contract Maintenance	45,757	19,029	26,336	392
Custodial Services	85	85	0	0
Paratransit	92,704	0	0	92,704
Services - Other	31,781	11,812	18,525	1,444
Materials & Supplies	\$86,723	\$37,429	\$48,978	\$315
Fuels and Lubricants	2,541	1,794	747	0
Tires	5,886	5,585	300	0
Materials & Supplies - Other	78,296	30,050	47,930	315
Fuel (Gas/Diesel/CNG)	\$36,963	\$25,927	\$3,449	\$7,588
Diesel Fuel	22,130	21,677	454	0
Gasoline Clean Natural Gas	12,061	1,477	2,995	7,588
	2,773	2,773	0	0
Utilities & Propulsion	\$90,924	\$15,361	\$74,800	\$763
Electricity	29,643	11,501	17,554	587
Propulsion Utilities - Other	50,850		50,850	0
	10,431	3,860	6,395	176
Casualty & Liability	\$34,895	\$13,547	\$20,682	\$667
Insurance Claims	22,347	8,678	13,241	428
	12,548	4,869	7,441	238
Leases	\$6,725	\$2,045	\$3,838	\$842
Property	2,239	575	913	752
Equipment	4,485	1,470	2,926	89
Miscellaneous	(\$37,731)	(\$14,777)	(\$22,257)	(\$697)
Dues and Subscriptions	514	196	307	11
Conferences and Meetings Business Travel/Public Hearings	335 415	111 122	213 269	11 24
Interview & Relocatoin	415 1,752	681	1,039	24 33
Advertising	2,796	1,073	1,670	53 53
Other	2,790	317	534	13
Reimbursments	(1,408)	(593)	(790)	(25)
Capital Allocation	(43,000)	(16,684)	(25,499)	(817)
Total Non-Personnel Cost	\$436,586	\$124,265	\$204,836	\$107,485
Total Cost	\$1,745,347	\$653,281	\$972,504	\$119,563
	\$1,10,0 F	<i><i><i>vvvyvvvvvvvvvvvvv</i></i></i>	<i></i>	4119,000



## **Operating Budget by Mode: Metrobus**

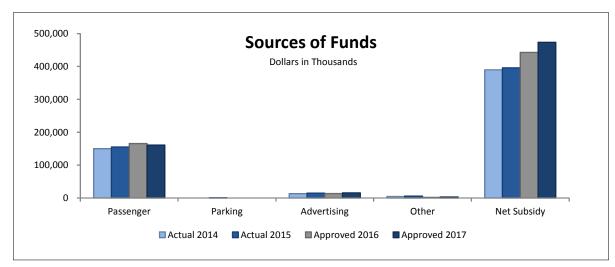
#### Sources of Funds

- Metrobus sources of funds consist of system revenue (primarily passenger fares and advertising) and subsidy funding from WMATA's jurisdictional partners.
- Total Metrobus revenue in FY2017 is projected at \$179.7 million. The largest revenue component is passenger revenues, which includes fares and passes, estimated at \$160.9 million. This is a decrease of \$4.6 million over the FY2016 budget. The decline in passenger revenue is based on the FY2017 budgeted ridership, which is 4.5 million passenger trips less than FY2016 budget levels.
- Advertising revenue attributed to Metrobus is projected to generate \$15.7 million. This amount is \$2.0 million higher than the FY2016 budget.
- Other Revenue, which includes rental revenue, third-party reimbursements, and other miscellaneous sources, will contribute \$3.1 million in FY2017.



#### FY2014-2017

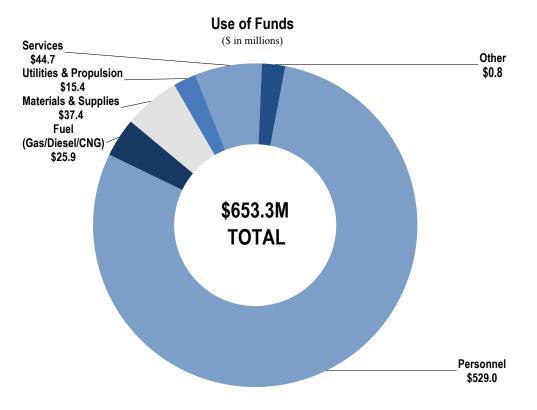
• Net local subsidy for Metrobus is budgeted to grow by \$31.0 million or 7.0 percent to \$473.6 million from FY2016 to FY2017.





### Uses of Funds

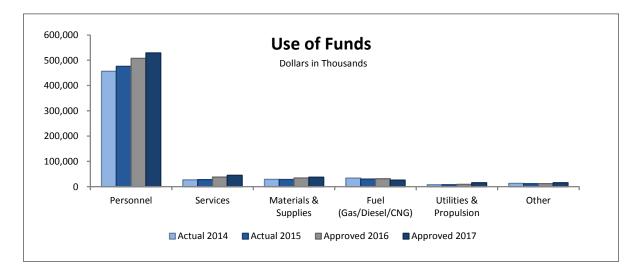
- Total personnel expenses make up the largest portion of the Metrobus budget. For FY2017, personnel costs are estimated at \$529.0 million or 81.0 percent of the Metrobus budget, which represents an increase of \$21.3 million over the FY2016 budget. This increase reflects committed wage and benefit growth, additional staffing for the FTA mandated safety corrective actions, and the revised method for allocation of indirect costs. These increases have been partially offset by the transfer of preventive maintenance costs to the CIP.
- Services are budgeted at \$44.7 million, which is \$7.2 million greater than the FY2016 budget. The increase reflects projected contract cost escalations associated with camera maintenance and voice technology solution services in support of Metrobus.
- Energy costs, which include diesel, Clean Natural Gas (CNG), gasoline, and utilities, are budgeted at \$41.3 million. This amount is \$1.2 million greater than FY2016 budget. This increase is offset by service level reductions of 4.5 million trips and lower fuel costs.
- Materials and Supplies are budgeted at \$37.4 million, which is \$3.0 million more than the FY2016 budget
- Other budgeted expenses for Metrobus total \$0.8 million, compared to \$14.5 million in the FY2016 budget





### FY2014-2017

- Personnel costs grew by \$19.4 million or 4.2 percent from FY2014 to FY2015 and are projected to grow by \$21.3 million or 4.2 percent from FY2016 to FY2017, primarily due to contractually obligated wage and benefit increases.
- Services increased by \$1.0 million or 3.9 percent from FY2014 to FY2015 and are projected to increase by \$7.2 million or 19.0 percent from FY2016 to FY2017.
- Materials and Supplies decreased by \$0.7 million or 2.4 percent from FY2014 to FY2015 and are projected to increase by \$3.0 million or 8.7 percent from FY2016 to FY2017.
- Fuel and utility costs decreased by \$4.0 million or 9.7 percent from FY2014 to FY2015 and are projected to increase by \$1.2 million or 3.0 percent from FY2016 to FY2017.
- Other expenses decreased by \$13.7 million from FY2016 to FY2017 due to the updated cost allocation methodology.





Metrobus Revenue and Expense					
(Dollars in Thousands)	Actual FY2014 <sup>1</sup>	Actual FY2015	Approved Budget FY2016	Approved Budget FY2017	Variance
Revenues					
Passenger	141,421	145,691	156,835	152,120	(4,716)
Other Passenger	8,404	9,480	8,725	8,825	100
Parking	0	410	0	0	0
Advertising	13,297	14,956	13,695	15,699	2,004
Joint Development	0	0	0	0	0
Fiber Optics	0	0	0	0	0
Other	4,478	5,569	2,080	3,080	1,000
Interest	31	17	0	0	0
Total Revenues	\$167,631	\$176,123	\$181,335	\$179,724	(\$1,611)
Expenses					
Personnel	456,392	475,746	507,695	529,015	21,321
Services	26,967	28,009	37,582	44,734	7,152
Materials & Supplies	28,853	28,169	34,447	37,429	2,982
Fuel (Gas/Diesel/CNG)	33,790	29,813	31,131	25,927	(5,204)
Utilities & Propulsion	7,821	7,773	8,948	15,361	6,413
Casualty & Liability	13,196	10,855	9,421	13,547	4,126
Leases & Rentals	1,204	1,262	2,250	2,045	(205)
Miscellaneous	(230)	773	2,841	1,907	(934)
Capital Allocation	0	0	0	(16,684)	(16,684)
Total Expenses	\$567,993	\$582,399	\$634,314	\$653,281	\$18,967
Gross Subsidy	\$400,362	\$406,276	\$452,978	\$473,556	\$20,578
Preventive Maintenance	(10,438)	(10,438)	(10,438)	0	10,438
Net Subsidy	\$389,924	\$395,838	\$442,540	\$473,556	\$31,016
Cost Recovery Ratio	29.5%	30.2%	28.6%	27.5%	



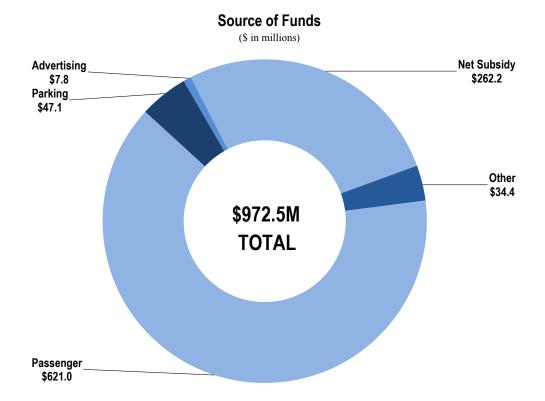
	Operating E	<b>xpense Budg</b> trobus	jet			
	Actual 2014 <sup>1</sup>	Actual 2015	Approved 2016	Approved 2017	\$ Variance	% Change
Salaries	\$67,366	\$71,054	\$81,075	\$102,465	\$21,390	26%
Full-Time Salaries	65,553	69,507	80,209	108,773	28,564	
Salary Lapse	0	0	(2,284)	(8,226)	(5,942)	
Overtime Salaries	1,813	1,546	3,150	1,918	(1,232)	
Wages	\$239,938	\$242,537	\$260,150	\$258,026	(\$2,123)	-1%
Operator/StaMgr Wages	145,092	159,768	160,390	151,291	(9,099)	
Operator/Sta Mgr Overtime	30,593	24,627	24,350	26,157	1,807	
Full-Time Wages	58,832	53,309	71,127	75,115	3,988	
Wage Lapse	0	0	(2,544)	(1,966)	578	
Overtime Wages	5,421	4,833	6,827	7,429	603	
Total Salaries and Wages	\$307,304	\$313,591	\$341,224	\$360,491	\$19,266	6%
Fringes	\$149,088	\$162,155	\$166,470	\$168,525	\$2,054	1%
Fringe Health	54	(251)	68,053	73,023	4,970	
Fringe Pension	0	0	56,709	55,409	(1,300)	
Other Fringe Benefits	141,576	153,500	31,996	30,152	(1,843)	
Workman Compensation	7,458	8,906	9,713	9,941	228	10
Total Personnel Cost	\$456,392	\$475,746	\$507,695	\$529,015	\$21,321	4%
Services	\$26,967	\$28,009	\$37,582	\$44,734	\$7,152	19%
Professional & Technical	6,156	6,991	7,363	12,536	5,172	
Temporary Help	95	382	847	1,274	427	
Contract Maintenance	15,493	16,715	19,379	19,029	(350)	
Custodial Services	25	46	83	85	2	
Paratransit	2	29	0	0	0	
Services - Other	5,195	3,848	9,911	11,812	1,901	
Materials & Supplies	\$28,853	\$28,169	\$34,447	\$37,429	\$2,982	9%
Fuels and Lubricants	1,931	1,546	3,640	1,794	(1,846)	
Tires	5,540	5,695	6,662	5,585	(1,077)	
Materials & Supplies - Other	21,383	20,927	24,145	30,050	5,905	
Fuel (Gas/Diesel/CNG)	\$33,790	\$29,813	\$31,131	\$25,927	(\$5,204)	-17%
Diesel Fuel	29,139	27,046	26,784	21,677	(5,108)	
Gasoline	1,503	1,320	1,403	1,477	74	
Clean Natural Gas	3,149	1,447	2,943	2,773	(171)	
Utilities & Propulsion	\$7,821	\$7,773	\$8,948	\$15,361	\$6,413	72%
Electricity	4,043	4,065	5,586	11,501	5,915	
Propulsion	0	1,133	0	0	0	
Utilities - Other	3,777	2,576	3,361	3,860	499	
Casualty & Liability	\$13,196	\$10,855	\$9,421	\$13,547	\$4,126	44%
Insurance	6,262	5,840	6,752	8,678	1,926	
Claims	6,933	5,015	2,669	4,869	2,200	
Leases	\$1,204	\$1,262	\$2,250	\$2,045	(\$205)	-9%
Property	421	380	789	575	(215)	
Equipment	783	882	1,460	1,470	10	
Miscellaneous	(\$230)	\$773	\$2,841	(\$14,777)	(\$17,618)	-620%
Dues and Subscriptions	121	146	186	196	10	0207
Conferences and Meetings	36	36	78	111	33	
Business Travel/Public Hearings	95	74	182	122	(60)	
Interview & Relocatoin	323	409	379	681	301	
Advertising	1,209	1,640	1,265	1,073	(193)	
Other	175	59	1,069	317	(752)	
Reimbursments	(2,189)	(1,590)	(320)	(593)	(273)	
Capital Allocation	0	0	0	(16,684)	0	
Total Non-Personnel Cost	\$111,601	\$106,653	\$126,619	\$124,265	(\$2,354)	-2%
					,	



## Operating Budget by Mode: Metrorail

#### Sources of Funds

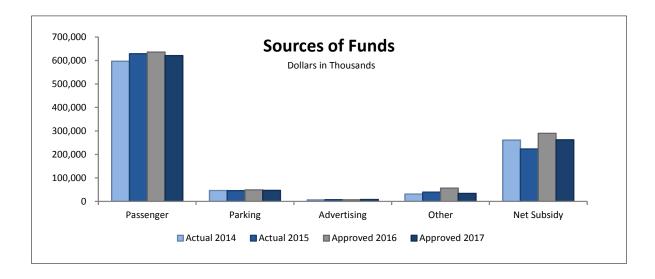
- Metrorail sources of funds consist of system revenue (primarily passenger and parking fees and subsidy funding from WMATA's jurisdictional partners.
- Total Metrorail revenue in FY2017 is projected at \$710.3M. The largest component is passenger revenues, which includes fares and passes, estimated at \$621 million. This represents a decrease of \$14.9 million from the FY2016 budget. The decline in passenger revenue is based on the FY2017 budgeted ridership, which is 6.4 million passenger trips less than FY2016 budget levels
- Parking revenue from Metrorail garages and surface lots are projected to contribute \$47.1 million in revenue. This amount is \$1.9 million lower than the FY2016 budget due to declining ridership.
- Advertising revenue attributed to Metrorail is projected to generate \$7.8 million in FY2017. This amount is \$1.0 million higher than the FY2016 budget.
- Other Revenue, which includes Joint Development, Fiber Optics, and other miscellaneous revenue sources, is projected to contribute \$34.4 million in FY2017. This is a decrease of \$22.0 million from FY2016 primarily due to the one-time usage of revenue from the Transit Infrastructure Investment Fund (TIIF).





## FY2014-2017

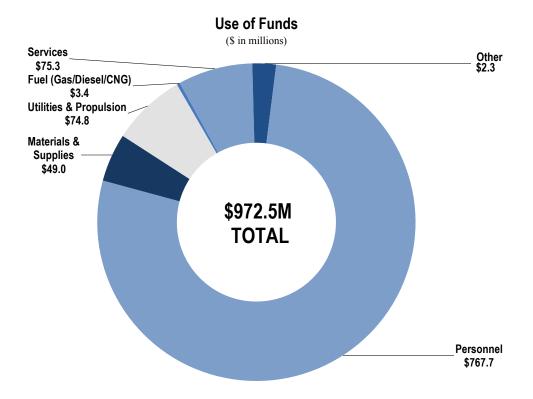
• The projected net local subsidy for FY2017 is \$262.2 million, a decrease of \$27.9 million from the FY2016 budget.





### **Uses of Funds**

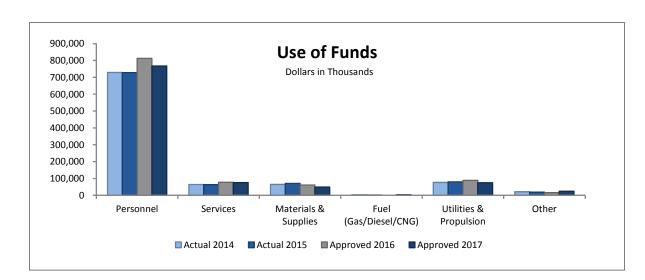
- Total personnel expenses make up the largest portion of the Metrorail budget. For FY2017, personnel costs are estimated at \$767.7 million, or 78.9 percent of the Metrorail budget, which represents a decrease of \$45.2 million from the FY2016 budget. This decrease is mostly due to the transfer of eligible preventive maintenance costs to the capital budget, offset by contractually obligated wage increases and additional staffing for FTA required safety corrective actions. WMATA's revised method for the allocation of indirect costs impacts both personnel and nonpersonnel costs.
- Services are budgeted at \$75.3 million, which is \$1.8 million lower than the FY2016 budget. The reduction represents budgeted efficiencies within various services in support of Metrorail.
- Materials and Supplies are budgeted at \$49.0 million, which is \$12.3 million lower than the FY2016 budget. This decrease is primarily driven by the proposed transfer of preventive maintenance activities from the Operating Budget to the Capital Improvement Program (CIP).
- Energy costs including, fuel, propulsion and utilities, and are budgeted at \$78.2 million. This amount is \$10.0 million lower than the FY2016 budget. This decrease is primarily due to reductions in projected consumption.
- Other budgeted expenses for Metrorail total \$2.3 million, compared to \$19.0 million in the FY2016 budget.





### FY2014-2017

- Personnel costs declined by \$1.4 million or 0.2 percent from FY2014 to FY2015 and are projected to decrease by \$45.2 million or 5.6 percent from FY2016 to FY2017, primarily related to a change in the funding source eligible preventive maintenance expenses.
- Services decreased by \$0.9 million or 1.5 percent from FY2014 to FY2015 and are projected to decrease by \$1.8 million or 2.4 percent from FY2016 to FY2017.
- Materials and Supplies increased by \$5.6 million or 8.6 percent from FY2014 to FY2015, and are projected to decrease by \$12.3 million or 20.0 percent from FY2016 to FY2017 mainly due to the shift of certain railcar parts to the capital budget.





Metrorail Revenue and Expense					
(Dollars in Thousands)	Actual FY2014 <sup>1</sup>	Actual FY2015	Approved Budget FY2016	Approved Budget FY2017	Variance
Revenues					
Passenger	593,324	626,965	632,133	612,800	(19,333)
Other Passenger	3,410	2,090	3,818	8,218	4,400
Parking	46,614	46,103	49,000	47,103	(1,897)
Advertising	6,549	7,466	6,805	7,801	996
Joint Development	7,360	6,161	8,000	7,000	(1,000)
Fiber Optics	15,467	15,441	16,500	16,500	0
Other	9,009	17,754	31,909	10,909	(21,000)
Interest	(181)	6	0	0	0
Total Revenues	\$681,551	\$721,986	\$748,164	\$710,330	(\$37,834)
Expenses					
Personnel	729,176	727,798	812,880	767,668	(45,212)
Services	64,120	63,178	77,181	75,346	(1,836)
Materials & Supplies	64,928	70,535	61,251	48,978	(12,273)
Fuel (Gas/Diesel/CNG)	3,262	1,703	(533)	3,449	3,982
Utilities & Propulsion	76,430	79,487	88,737	74,800	(13,937)
Casualty & Liability	20,216	16,926	14,429	20,682	6,253
Leases & Rentals	3,842	4,151	3,253	3,838	586
Miscellaneous	1,165	1,615	1,316	3,242	1,926
Capital Allocation	0	0	0	(25,499)	(25,499)
Total Expenses	\$963,139	\$965,392	\$1,058,513	\$972,504	(\$86,009)
Gross Subsidy	\$281,588	\$243,406	\$310,349	\$262,173	(\$48,175)
Preventive Maintenance	(20,262)	(20,262)	(20,262)	0	20,262
Net Subsidy	\$261,326	\$223,144	\$290,087	\$262,173	(\$27,913)
Cost Recovery Ratio	70.7%	74.8%	70.7%	73.0%	



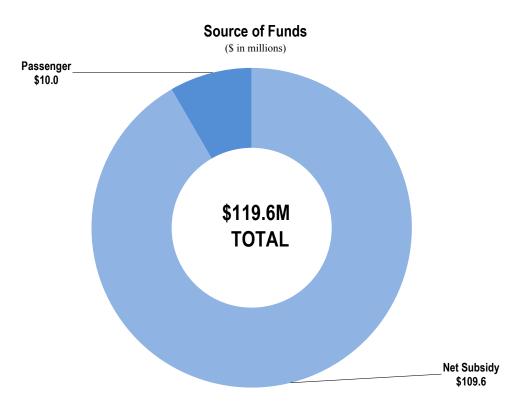
	<b>Operating E</b>	<b>xpense Budg</b> trorail	get			
	Actual 2014 <sup>1</sup>	Actual 2015	Approved 2016	Approved 2017	\$ Variance	% Change
Salaries	\$183,106	\$185,186	\$205,117	\$199,230	(\$5,886)	-3%
Full-Time Salaries	171,675	175,202	199,277	203,930	4,653	
Salary Lapse	0	0	(4,836)	(16,611)	(11,775)	
Overtime Salaries	11,431	9,984	10,676	11,911	1,235	
Wages	\$309,859	\$300,686	\$346,755	\$323,906	(\$22,849)	-7%
Operator/Sta Mgr Wages	77,680	83,632	96,215	100,149	3,934	
Operator/Sta Mgr Overtime	15,033	16,548	19,153	15,282	(3,871)	
Full-Time Wages	203,382	188,967	225,108	202,547	(22,560)	
Wage Lapse Overtime Wages	0	0	(7,225)	(8,260)	(1,034)	
Total Salaries and Wages	13,763 <b>\$492,965</b>	11,537 <b>\$485,871</b>	13,504 <b>\$551,872</b>	14,187 <b>\$523,137</b>	<u>683</u> (\$28,735)	-5%
Fringes Fringe Health	\$236,212	<b>\$241,926</b>	<b>\$261,008</b>	\$244,531	(\$16,477)	-6%
Fringe Pension	128 0	(430)	103,887	105,963	2,077	
Other Fringe Benefits	225,874	228,993	91,716 50,741	80,403 43,010	(11,313) (7,731)	
Workman Compensation	10,209	13,363	14,664	15,155	491	
Total Personnel Cost	\$729,176	\$727,798	\$812,880	\$767,668	(\$45,212)	-6%
Services	\$64,120	\$63,178	\$77,181	\$75,346	(\$1,836)	-2%
Management Fee	<b>304,120</b> 129	143	160	\$7 <b>3,340</b> 428	268	-2 /0
Professional & Technical	9,736	12,353	17,790	28,068	10,278	
Temporary Help	2,013	2,885	1,855	1,988	134	
Contract Maintenance	27,588	22,550	28,997	26,336	(2,661)	
Custodial Services	0	1	0	20,000	(1,001)	
Services - Other	24,654	25,246	28,379	18,525	(9,854)	
Materials & Supplies	\$64,928	\$70,535	\$61,251	\$48,978	(\$12,273)	-20%
Fuels and Lubricants	578	694	3,290	747	(012,273) (2,542)	2070
Tires	186	125	253	300	48	
Materials & Supplies - Other	64,164	69,715	57,708	47,930	(9,778)	
Fuel (Gas/Diesel/CNG)	\$3,262	\$1,703	(\$533)	\$3,449	\$3,982	-747%
Diesel Fuel	397	3	(\$555)	454	0	/4//
Gasoline	2,776	1,700	3,003	2,995	(8)	
Clean Natural Gas	89	0	(3,536)	0	3,536	
Utilities & Propulsion	\$76,430	\$79,487	\$88,737	\$74,800	(\$13,937)	-16%
Electricity	23,499	23,477	25,745	17,554	(\$,191)	10/1
Propulsion	48,218	50,172	55,383	50,850	(4,532)	
Utilities - Other	4,713	5,838	7,609	6,395	(1,214)	
Casualty & Liability	\$20,216	\$16,926	\$14,429	\$20,682	\$6,253	43%
Insurance	9,594	9,106	10,341	13,241	2,900	10 / (
Claims	10,622	7,820	4,089	7,441	3,353	
Leases	\$3,842	\$4,151	\$3,253	\$3,838	\$586	18%
Property	942	913	670	913	242	10/0
Equipment	2,900	3,238	2,582	2,926	344	
Miscellaneous	\$1,165	\$1,615	\$1,316	(\$22,257)	(\$23,573)	-1,791%
Dues and Subscriptions	188	227	287	(322,237)	(\$23,373)	-1,77170
Conferences and Meetings	100	56	152	213	61	
Business Travel/Public Hearings	269	218	512	269	(243)	
Interview & Relocatoin	495	645	325	1,039	714	
Advertising	1,754	1,058	1,202	1,670	468	
Other	840	494	1,795	534	(1,260)	
Reimbursments	(2,481)	(1,082)	(2,957)	(790)	2,167	
Capital Allocation	0	0	0	(25,499)	0	
Total Non-Personnel Cost	\$233,962	\$237,595	\$245,633	\$204,836	(\$40,797)	-17%
Total Cost	\$963,139	\$965,392	\$1,058,513	\$972,504	(\$86,009)	-8%



## **Operating Budget by Mode: MetroAccess**

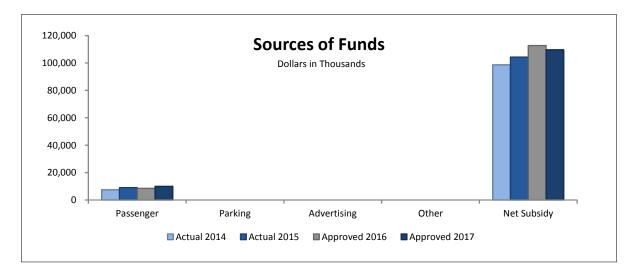
#### Sources of Funds

• MetroAccess sources of funds include passenger revenue and net subsidy from WMATA's jurisdictional partners. MetroAccess passenger revenues are projected at \$10.0 million. This represents a growth of \$1.5 million or 17.3 percent over the FY2016 approved budget. The growth in fare revenue is tied to a projected ridership increase of one hundred thousand trips in FY2017.



#### FY2014-2017

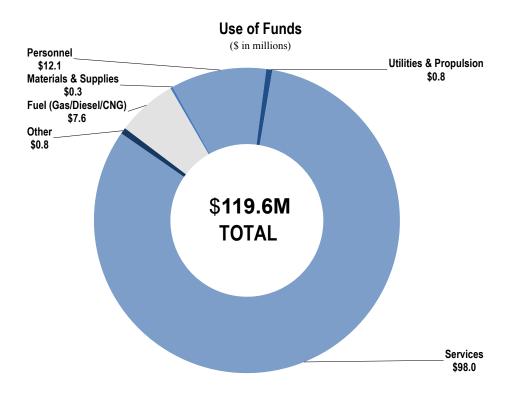
• Net local subsidy is projected to decrease by \$3.1 million or 2.8 percent from FY2016 to FY2017





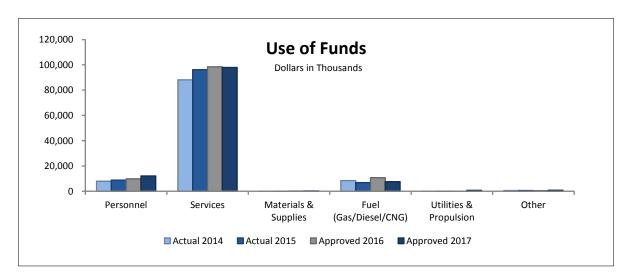
#### **Uses of Funds**

- Paratransit services accounts for 81.9 percent of the total MetroAccess Approved budget. For FY2017, paratransit services cost is estimated at \$98.0 million and is similar to the FY2016 budget.
- Personnel costs are budgeted at \$12.1 million, which is a \$2.3 million increase to the FY2016 budget.



### FY2014-2017

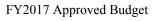
- Paratransit service contract expenses decreased by \$0.5 million between the FY2016 and FY2017 Budgets. This decrease is primarily attributed to WMATA's facilitation of non ADA service options.
- Other expenses, consisting primarily of fuel, total \$9.5 million, a decrease of \$3.4 million compared to the FY2016 budget.





(Dollars in Thousands)	Actual FY2014 <sup>1</sup>	Actual FY2015	Approved Budget FY2016	Approved Budget FY2017	Variance
Revenues					
Passenger	7,542	9,045	8,500	9,972	1,472
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	(1)	0	0	0	0
Interest	0	0	0	0	0
Total Revenues	\$7,542	\$9,045	\$8,500	\$9,972	\$1,472
Expenses					
Personnel	7,926	8,802	9,805	12,078	2,274
Services	88,148	96,166	98,487	98,006	(480)
Materials & Supplies	140	185	238	315	78
Fuel (Gas/Diesel/CNG)	8,502	6,824	10,700	7,588	(3,112)
Utilities & Propulsion	70	67	99	763	665
Casualty & Liability	634	552	454	667	212
Leases & Rentals	723	770	1,294	842	(452)
Miscellaneous	26	58	126	120	(5)
Capital Allocation	0	0	0	(817)	(817)
Total Expenses	\$106,170	\$113,424	\$121,201	\$119,563	(\$1,639)
Gross Subsidy	\$98,628	\$104,380	\$112,701	\$109,591	(\$3,110)
Preventive Maintenance	0	0	0	0	0
Net Subsidy	\$98,628	\$104,380	\$112,701	\$109,591	(\$3,110)
Cost Recovery Ratio	7.1%	8.0%	7.0%	8.3%	

MetroAccess



	<b>Operating E</b> Metro	xpense Budg	et			
	Actual 2014 <sup>1</sup>	Actual 2015	Approved 2016	Approved 2017	<b>\$</b> Variance	% Change
Salaries	\$5,320	\$5,680	\$6,540	\$6,850	\$310	5%
Full-Time Salaries	5,300	5,662	6,534	7,070	537	
Salary Lapse	0	0	(123)	(250)	(127)	
Overtime Salaries	20	18	129	30	(99)	
Wages	(\$147)	\$235	\$191	\$1,262	\$1,071	559%
Operator/Sta Mgr Wages	(255)	0	0	0	0	
Full-Time Wages	102	234	187	1,221	1,034	
Wage Lapse	0	0	(4)	(15)	(11)	
Overtime Wages	5	2	8	56	47	
Total Salaries and Wages	\$5,173	\$5,915	\$6,731	\$8,113	\$1,381	21%
Fringes	\$2,753	\$2,887	\$3,073	\$3,966	\$892	29%
Fringe Health	1	(3)	1,342	1,625	283	
Fringe Pension	0	Ó	1,119	1,233	114	
Other Fringe Benefits	2,489	2,883	596	634	37	
Workman Compensation	263	7	16	474	458	
Total Personnel Cost	\$7,926	\$8,802	\$9,805	\$12,078	\$2,274	23%
Services	\$88,148	\$96,166	\$98,487	\$98,006	(\$480)	0%
Management Fee	0	0	6	0	(6)	
Professional & Technical	1,367	2,245	3,708	3,404	(304)	
Temporary Help	4	19	5	62	57	
Contract Maintenance	296	318	398	392	(6)	
Paratransit	85,274	92,797	92,957	92,704	(253)	
Services - Other	1,207	786	1,413	1,444	32	
Materials & Supplies	\$140	\$185	\$238	\$315	\$78	33%
Fuels and Lubricants	0	0	0	0	0	
Materials & Supplies - Other	140	185	238	315	78	
Fuel (Gas/Diesel/CNG)	\$8,502	\$6,824	\$10,700	\$7,588	(\$3,112)	-29%
Gasoline	8,502	6,824	10,700	7,588	(3,112)	-29/0
	-	-				< <b></b>
Utilities & Propulsion	\$70	\$67	\$99	\$763	\$665	672%
Electricity Utilities - Other	41	32	40	587	547	
Ounties - Other	29	35	59	176	117	
Casualty & Liability	\$634	\$552	\$454	\$667	\$212	47%
Insurance	301	297	326	428	102	
Claims	333	255	128	238	110	
Leases	\$723	\$770	\$1,294	\$842	(\$452)	-35%
Property	683	728	1,150	752	(398)	
Equipment	40	42	144	89	(54)	
Miscellaneous	\$26	\$58	\$126	(\$697)	(\$822)	-655%
Dues and Subscriptions	6	9	9	11	2	
Conferences and Meetings	6	7	12	11	(1)	
Business Travel/Public Hearings	17	16	33	24	(9)	
Interview & Relocatoin	16	23	25	33	8	
Advertising	6	4	4	53	49	
Other	0	0	41	13	(28)	
Reimbursments	(25)	0	0	(25)	Ó	
Capital Allocation	0	0	0	(817)	0	
Total Non-Personnel Cost	\$98,244	\$104,622	\$111,397	\$107,485	(\$3,912)	-4%

## **Reimbursable Operating Budget**

Reimbursable projects are those unique services, programs, or projects for which separate funding has been arranged with a jurisdiction or third-party entity. The Operating Budget presented to this point does not include these amounts.

Reimbursable Operating Projects						
(dollars in Thousands)	FY2015 Approved Budget	FY2016 Approved Budget	FY2017 Approved Budget	Change		
State & Local Funding						
DC Circulator <sup>1</sup>	\$19,460	\$23,030	\$22,791	(\$239)		
Federal Grant Funding						
Safety & Security grants	\$17,160	\$5,706	\$4,701	(\$1,005)		
Takoma/Langley Park Transit Center	_	\$533	(	(\$533)		
Bus Bridges/Transit Works	\$1,383	\$1,383	\$600	(\$783)		
Other Sources of Funding						
DC Circulator - Passenger fare revenue	\$3,394	\$3,613	\$3,316	(\$297)		
Neutral Host agreement with Carrier team	\$6,172	\$6,349		(\$6,349)		
Joint Development & Adjacent Construction projects	\$6,418	\$6,709	\$2,788	(\$3,921)		
Total Expenditures	\$53,987	\$47,323	\$34,196	(\$13,127)		

1 Local Funding equals expenditures less passenger revenue

### **DC Circulator**

The DC Circulator operates as a partnership between the District Department of Transportation, WMATA and DC Surface Transit Inc. WMATA serves as the contract manager, verifying provisions of service and providing technical advice. The cost for operating and managing the contract service is fully reimbursed by the District of Columbia.



### Safety and Security Grants

WMATA 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. These grants provide funding for capital and operational security activities. Such funding enhances the ability of the Metro Transit Police Department to detect and deter potential attacks of terrorism through increased visibility, unpredictable presence, identification of areas for critical infrastructure hardening, and employee and public awareness. The existing grants are scheduled to be implemented through the end of FY2017. As new Congressional appropriations become available, WMATA will actively pursue new funding to further enhance security activities.



## Joint Development and Adjacent Construction Projects

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

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

Expenditures are reimbursed by the private or jurisdiction entity.

To achieve these objectives, JDAC performs the following:

• JDAC reviews adjacent projects to determine if there are impacts to WMATA interests

- JDAC acts similar to the development review and permitting offices of the jurisdictions
- Provides coordination with Owner/Developer/ Contractor (ODC), agencies, jurisdictions, property owners, consultants, developers, utilities and/or anyone who has an impact on WMATA property, facilities and/ or operations
- Prepares Project Agreements in conjunction with Real Estate and Station Area Planning (LAND) and General Counsel (COUN)
- Provides coordination/oversight for all aspects of a project including design, safety, operations, constructibility, assuring compliance with WMATA 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 WMATA

#### **Operating Cost by Department**

Reimbursable Budget

	Reinibursable Budget			
(Dollars in Thousands)	TOTAL	MTPD	BUS	DGMO
Salaries	\$4,091	\$2,314	\$339	\$1,438
Full-Time Salaries	3,991	2,314	287	1,391
Overtime Salaries	100	0	52	48
Wages	\$360	\$0	\$115	\$245
Overtime Wages	360	0	115	245
Total Salaries and Wages	\$4,452	\$2,314	\$454	\$1,684
Fringes	\$1,931	\$1,003	\$197	\$731
Fringe Health	899	467	92	340
Fringe Pension	682	354	70	258
Other Fringe Benefits	344	178	35	130
Workman Compensation	6	3	1	2
Total Personnel Cost	\$6,382	\$3,317	\$651	\$2,414
Services	\$23,686	\$0	\$23,600	\$86
Professional & Technical	80	0	0	80
Contract Maintenance	23,309	0	23,309	0
Services - Other	297	0	290	7
Materials & Supplies	\$303	\$0	\$192	\$111
Materials & Supplies - Other	303	0	192	111
Fuel (Gas/Diesel/CNG)	\$2,264	\$0	\$2,264	\$0
Diesel Fuel	1,904	0	1,904	0
Clean Natural Gas	360	0	360	0
Utilities & Propulsion	\$0	\$0	\$0	\$0
Utilities - Other	0	0	0	0
Casualty & Liability	\$0	<b>\$0</b>	<b>\$0</b>	\$0
Leases	\$0	<b>\$0</b>	\$0	\$0
Miscellaneous	\$1,560	\$1,384	\$0	\$176
Other	1,560	1,384	0	176
Capital Allocation	0	0	0	0
Total Non-Personnel Cost	\$27,813	\$1,384	\$26,055	\$374
Total Cost	\$34,196	\$4,701	\$26,706	\$2,788



# WMATA's Business Planning Process

The following information in this chapter summarizes the budgeted resources necessary to deliver committed actions in support of the Authority's Strategic Goals and in fulfillment of the GM/CEO's Business Plan.

> WMATA's Business Planning process provides the framework for aligning employees' day-to-day activities with organizational business plans which in turn support the GM/CEO business plan.

The business plans are structured and oriented to the department level with one-to-three year horizons and annual assessments. The approved FY2017 operating and capital budgets allocate resources to key business plan priorities including:

- Build and maintain a premier safety culture and system
  - NTSB recommendations and Safety Management Initiatives (SMI) requirements
  - Employee Fatigue Management plan
  - o Confidential Close Call Reporting system
  - Safety and Security Awareness and Response
- Meet or exceed customer expectations by consistently delivering quality service
  - Customer Care Program
  - Fare Payments Program
  - Metrobus Service Improvements of a State of Good Operations, Priority Corridor Network and Better Bus Initiatives
  - Metrorail Service Improvements, including 7000 Series Railcar Delivery and Acceptance Testing, Automatic Train Control, and Escalator and Elevator Rehabilitation



- Ensure financial stability and invest in our people and assets
  - Financial Management Reforms
  - Capital Funding Agreement
  - Human Capital Plan
  - Transit Asset Management
  - o Collaborative Risk Management
- Improve Regional Mobility and Connect Communities
  - o Silver Line Phase II Preparation
  - Metroway Bus Rapid Transit Expansion
  - Bus Stop and Pathways Accessibility
  - Momentum Advancement Metro 2025
  - Connect Greater Washington The Regional Transit System Plan



The GM/CEO's Business Plan includes Key Performance Indicators (KPI) that monitor results and define success through targets. The Board of Directors tracks the agency's KPIs on a quarterly basis and evaluates the GM/CEO at year end based on Metro's performance results.

> Customers and stakeholders can monitor WMATA's performance at www.wmata.com/ about\_metro/scorecard/

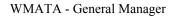
The department highlights in this chapter reflect the efforts and accomplishments of the departments in support of the authority-wide strategic goals and the GM/CEO's business plan.



	General
Board Secretary	Fair Practices
Inspector General	A ssurance Quality & Performance
	Safety & Environmental Management
WMATA Board of Directors	Chief Operating Officer Services Services Parking Parking Police Services Services Services Services Police Police
	Chief Financial Officer
	Engineer
	External Relations
	Internal Business Operations

M metro

WMATA Organizational Chart



## **General Manager and Chief Executive Officer**

#### Responsibilities

The General Manager/Chief Executive Officer is responsible for the safe and reliable operation of the nation's second largest rail transit system, sixth largest bus network and fourth busiest paratransit service. At the direction of the GM/CEO, a budgeted workforce of more than 13,000 works to provide more than one million passenger trips a day. The GM/CEO provides strategic guidance to meet the travel needs of those living and visiting the National Capital Region, and ensures that WMATA continues to play a role in sustaining the region's economic vitality.

In FY2017, WMATA continues its focus on safety and security, service reliability and financial reform. The Authority is working diligently to address safety reviews and implement recommendations made in the previous year by oversight partners, including the National Transportation Safety Board (NTSB) and Federal Transit Administration (FTA). Improvements to safety and infrastructure are critical to improving the service and reliability that Metro customers expect and to build and maintain ridership. Metro also will continue working to achieve state of good repair and provide transparent information on Metro's performance.

WMATA is committed to improving day to day train and bus service reliability, along with other customer facing improvements in stations, on trains and buses.

> An Authority-wide customer care initiative is underway, serving as a framework to deliver better service for every point in the customer's journey.

Further, WMATA remains committed to improving financial management, ensuring compliance with FTA-Financial Management Oversight regulations and putting processes and procedures in place to strengthen the organization's financial foundation.

To continue the path of improvement, the GM/CEO's Business Plan focuses WMATA's operating budget, capital program and business actions on the goals and strategies established in the Strategic Plan.

#### FY2017 Business Plan

Success depends on setting priorities and developing immediate, midterm, and longer range horizons with a realistic change schedule so that the organization's full focus can be brought to bear on issues in order of importance. To begin the change, WMATA is undertaking a portfolio of initiatives that, in the near term, deliver fundamentals in key areas to regain trust from riders and local governments. In the mid-term, the actions build on the stronger foundation to achieve best in class status in the U.S. This includes not only work internally, but partnering with regional thought leaders on governance and funding. While working on long-term initiatives such as Silver Line phase two, WMATA will look to innovation and new technologies that put this region in league with some of the world's best transit systems.

To restore public confidence, initiatives will be transparent, and progress will be made visible. Stakeholders will be able to track progress through the Customer Accountability Report (CARe), an online tool to understand and monitor WMATA's actions. The aim of CARe is to be more transparent as an agency and increase overall stakeholder confidence in the areas of safety, service reliability and fiscal accountability. As specific actions are developed, funded, and scheduled, they will be added to the inventory.

#### Customer Accountability Report (CARe)

The GM/CEO's business plan centers on actions to address the following CARe priorities:

- Improve safety and security and restore public trust
- Improve reliability and overall customer experience
- Alter fiscal trajectory and renew jurisdictional confidence

An initial set of actions has been developed to begin the process for achieving these priorities. Actions will be taken in every department as part of WMATA's business plan to make these initiatives successful and to ensure accountability. Individual action items are outlined under the FY2017 plan of the department leading the campaign to successfully implement it.



## **Office of Inspector General**

#### Responsibilities

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. investigations, and reviews of WMATA programs and operations to promote economy, efficiency and effectiveness, as well as to prevent and detect fraud, waste and abuse in such programs and operations.

The Inspector General provides advice to the Board of Directors and General Manager to assist in achieving the highest levels of program and operational performance in WMATA.

#### FY2017 Business Plan

- OIG's audit component will conduct risk-based performance audits and evaluations to promote economy, efficiency and effectiveness of WMATA programs, operations, and activities.
- Perform reviews and analyses of contractor proposals to determine reasonableness of cost/pricing information.
- Supervise WMATA's annual independent audit of financial accounts, conducted by external auditors, to facilitate timely reporting to bondholders.

- OIG's investigation component will handle/issue confidential reports of investigations involving fraud, waste, abuse, and gross mismanagement.
- Administer the OIG Hotline and WMATA's Whistleblower/Retaliation Policy.
- Lead the coordination of investigations with outside agencies and/or the MTPD.

- OIG's audit component completed seven performancerelated audits and made value-added recommendations.
- Reviewed five contractor proposals for reasonableness of cost/pricing information and suggested \$1.1 million in net adjustments to the Office of Procurement for use in contract negotiations. In addition, the office issued 18 attestation reports for billing rate and pre-award reviews.
- Successfully supervised Metro's annual independent audit of financial accounts.
- OIG's investigative component handled the review, referral or subsequent investigations of more than 260 complaints of the OIG Hotline.
- Issued 17 confidential reports of investigations involving fraud, waste and abuse.
- Handled eight whistleblower cases providing confidential and timely reports to the Whistleblower Panel.



## Board Corporate Secretary

### Responsibilities

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 WMATA's strategic plan.

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

The Board Secretary's Office works proactively with the General Manager and his staff to carry out the policies, goals and initiatives of the WMATA Board; and serves as liaison between the Board, the agency and its advisory bodies and riders.

Other responsibilities include the coordination, review and distribution of WMATA Board materials; recording and maintaining official records of 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.

### FY2017 Business Plan

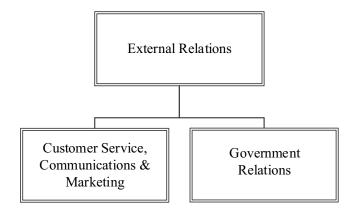
• Continue acting as a vital bridge between the Board, executive leadership and the public

- Facilitate continued Board efficiency and Governance best practices, including updating the Board Bylaws, Procedures and Code of Ethics in coordination with Counsel (COUN)
- Continue support of and make recommendations regarding Board initiatives and policies
- Ensure Compact requirements are met, including the implementation of the Public Participation Plan

- Provided support to the Board for recruitment and hiring of the GM/CEO
- Successful completion of four Compact public hearings
- Facilitated Board member review of FMO responses
- Worked with COUN on revising the Board's Code of Ethics and Board Procedures
- Worked with COUN on revising RAC Bylaws
- Conducted extensive outreach campaign to recruit eight new RAC members
- Continued support of online public access to Board Resolutions and Board materials
- Provided joint Committee Coordination with COUN for Governance



## **External Relations**



#### Responsibilities

In support of WMATA's business priorities and objectives, the Department of External Relations was established to build and maintain strong relationships with WMATA's many stakeholders and partners, including its customers, the region's elected officials, business and community groups, and the Authority's own Board of Directors.

Key priorities of the department include working with funding jurisdictions and congress to ensure needed operating and capital support; maintaining communications with customers and community groups; engaging all stakeholders in building support for WMATA's business goals and objectives; informing the public through media relations; 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; communicating with employees; building and encouraging future ridership through marketing and maintaining ongoing relations with the regional business community.

External Relations integrates the efforts of several functional areas for the purpose of developing a comprehensive program to strengthen WMATA's position.

### FY2017 Business Plan

• 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 build public awareness of WMATA's value and its impact on the lives of people in the Washington Metropolitan area.
- Work with Congress, the Administration, federal agencies and national organizations to advocate for WMATA.
- Keep stakeholders informed of WMATA's progress to reform financial management and improve safety, including implementing FTA Safety Management Inspections (SMI) Corrective Action Plans (CAPs), and recommendations of other oversight organizations.



#### **CARe Action Plan**

In support of the General Manager's action plan to improve reliability and overall customer experience:

• Introduce volunteers to provide customer information at entrances to key stations. Volunteers will assist visitors and infrequent riders at fare machines during periods of high tourist activity, including the summer periods.



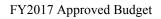
• Improve customer complaint resolution using social media.

### New To FY2017

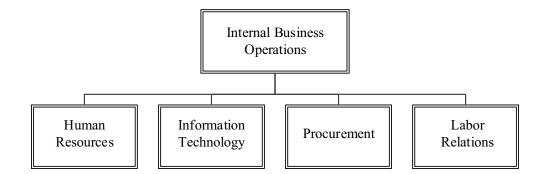
- Attract riders through improved communications focused on bus marketing campaigns, new pass products and SmartBenefit account growth.
- Improve passenger communications by delivering real time information via the Rail Operations Control Center, launching of an enhanced website and development of a new mobile app and launching of Metro TV program on YouTube and public TV stations.
- Implement FTA-mandated Public Participation Plan to ensure inclusive strategies around feedback for planned projects.
- Grow the online customer community to expand the voice of the customer in decision making.

- Continued support for funding decision making with business leaders, officials and community organizations.
- Provided leadership on Authority-wide internal initiatives: Talent Management Council, Employee Engagement Action Plan, Collaborative Risk Management, Facilities Management Board, etc.
- Led the updating or development of Policy Instructions, including those on Fatigue Management, Drug & Alcohol Testing, Capital Program Policy, Sustainability and a series of IT policies.
- Provided on-going support for NTSB L'Enfant Plaza Investigation and follow up through communications of actions to elected leaders, customers, staff, and other stakeholders.

- Led coordination with external stakeholders in support of response to complying with FTA safety rule makings, including development of policy safety goals in MAP-21.
- Worked with Congressional delegation in support of \$150 million in PRIIA funding and more than \$300 million in federal formula funding. Legislation included an extension of the PRIIA wireless deadline.
- Served on the regional Street Smart Pedestrian & Bicycle Safety campaign advisory committee, ensuring that bus safety messages are included in the campaign and that safety ad placement addresses Metro riding audiences.
- Increased social media followers by 10 percent across all channels.
- Contributed to rider injury reduction in target stations with 10 prevention events.
- Seamlessly implemented Public Participation Plan (PPP) throughout WMATA; significantly increased internal and external stakeholder engagement around service.
- Produced award-winning marketing campaigns Metroway and Silver Line.
- Increased SmartBenefits enrollment, adding 65 new companies. Developed new business tool for station managers to monitor repairs; launched customer service employee recognition program.
- Ensured development and subsequent communication of policies to support the safety program.



## **Internal Business Operations**



#### Responsibilities

Internal Business Operations (IBOP), a newly established office, provides leadership, direction and support to offices throughout the Authority, delivering high quality services and promoting principles and practices of fairness and merit. The Department implements and supports information management solutions, provides acquisition services in support of transportation needs and manages unionized employment situations.

*Efficient operations promotes WMATA's goals of reducing costs and improving customer satisfaction.* 

#### FY2017 Business Plan

- Design and implement proactive sourcing and recruitment strategies in support of WMATA's workforce requirements
- Develop, implement and provide information technology and telecommunication services in support of WMATA's strategic goals and objectives
- Promote fair and open competition, procure quality goods and services and meet the needs of our customers while maintaining public trust and integrity
- Represent the Authority and conduct of all labor relations between WMATA and the labor unions representing the employees of WMATA

#### **CARe Action Plan**

In support of the General Manager's action plan to improve reliability and overall customer experience:

- Develop mobile app for easier access to bus and rail departures and trip planning
- Provide real-time train location data for use by thirdparty developers

Internal Business Operations is committed to altering the fiscal trajectory and renewing jurisdictional confidence:

- Develop framework for collective bargaining agreements that respects workforce, is more responsive to customers, and delivers enhanced cost efficiencies
- Improve employee accountability by requiring annual performance evaluations for every WMATA employee
- Tighten controls on professional service contracts to improve hourly rates

### New To FY2017

- Timekeeping Automation improvements to ensure auditability and accuracy in the recording of labor hours on grants
- Completion of the Rail Station Wireless Program
- Enhancements to Metro's public website www.wmata.com including personalization for saving itineraries and preferences
- Establish a Service Oriented Architecture (SOA) Centre of Excellence to research technological advancements, best practices and effective governance policies.

- Designed and currently piloting MetroLead, WMATA's leadership development program
- Developed new course catalog for professional development
- Awarded Military Friendly Employer designation for the second consecutive year
- Expanded proactive sourcing strategies to individuals with disabilities
- Designed and deployed workplace bullying awareness training



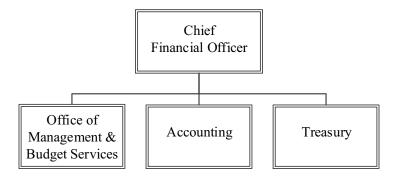
- Created the Radio Outage Display System (RODS) to provide information concerning radio outages or poor reception areas with WMATA's rail system
- Integrated a Bus System data mart correlating bus ridership and fare box data to assist with detection and prevention of fare evasion
- Developed, deployed and enhanced Bus Mobile Apps Bus Stop Editor & Ridechecker
- Completed the deployment of wireless networking capabilities in 32 of 95 rail stations for WMATA's operational use.
- Increased WMATA's communication systems' backup battery power capacity to maintain the communication system during a major power outage.

- Replaced the Rail Yard Tower and Block houses analog recording system with a new IP recording system.
- Deployed a new network timing architecture that will provide consistent time for all WMATA operational systems.
- Redesigned the Authority's public website, www.wmata.com to ensure compatibility across multiple devices and to enable customer interaction and communication
- Implemented the Contract Lifecycle Management (CLM) system
- Automated the Procurement Requisition workflow process through the PeopleSoft Financials module





## **Financial Operations**



#### Responsibilities

The Department of Financial Operations facilitates planning, coordination, allocation and management of the Authority's financial resources, programs and priorities to ensure the agency's fiscal integrity and financial condition.

> Financial Operations provides timely, accurate and effective financial services to customers while fostering accountability and open communication amongst stakeholders

#### FY2017 Business Plan

The Department of Financial Operations business plan is focused on the following:

- Supporting implementation of WMATA Strategic Plan by aligning resources with actions and strategies to deliver the Mission and Goals of the Strategic Plan
- Assisting departments in meeting their objectives by allocating and monitoring the Authority's financial resources, processing financial transactions and preparing business analyses in support of efficient and effective operations
- Producing the annual operating budget, the six year Capital Improvement Plan (CIP), and formulation of the long range operating plan
- Ensuring compliance with all federal grant regulations
- Managing WMATA's liquidity, investment portfolio and revenue collections
- Administering the Authority's fare media sales and distribution
- Maintaining the Authority's banking relationship and rating score
- Delivering timely audits, producing accurate financial reports and issuing on-time payments

#### **CARe Action Plan**

Financial Operations is focused on altering the fiscal trajectory of the Authority and renewing jurisdictional confidence through:

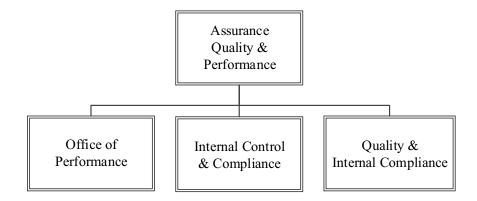
- Upgrades to WMATA's financial management system to deliver accurate data that will ensure timely financial reporting and informed decision making
- Evaluation of opportunities to further reduce costs through improved management of workman's compensation claims
- Assessment of public-private partnerships to optimize revenue through outsourcing of parking management
- Market analysis for the sale and relocation of WMATA's headquarters building

As part of WMATA's transparency and customer service initiatives, Financial Operations is committed to improving overall customer experience through implementation of a grace period for customers that enter and exit the same station within 15 minutes.

- Developed an authority-wide policy for financial management risks and controls
- Maintained a cumulative success rate of 99.25 percent for federal grant reimbursement requests
- Awarded \$665 million in federal grants
- Successfully received \$498 million federal grant reimbursements
- Trained 517 staff engaged in grants related activities on Allowable Costs Requirements and Internal Controls
- Hedged 75.0 percent of budgeted diesel fuel consumption for FY2016 at \$1.97/gallon
- Initiated the implementation of automated budget books
- Managed a procurement and position freeze process in response to the changing environment



## Assurance, Quality and Performance



## Responsibilities

Assurance, Quality and Performance (AQAP) brings together three offices to provide the GM/CEO with an independent evaluation and assurance that the agency is meeting its established objectives. The Office of Performance (CPO) aligns WMATA in achieving its strategic goals by measuring and publicly reporting results via a set of Key Performance Indicators (KPI's). The Office of Internal Control and Compliance (OICC) is responsible for conducting assessments and reviews to monitor organization-wide adherence to financial management and administrative controls. The Office of Quality and Internal Compliance (QICO) conducts assessments of operations and engineering processes to ensure compliance with established procedures and policies, and works with these groups to ensure assets are properly maintained.

> AQAP works with GM/CEO, senior management and departments to facilitate data-driven decision making and provide compliance oversight.

CPO 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 which helps prioritize decision making on actions to improve. Products and services include performance reporting (Vital Signs, GM/CEO reports), target-setting (KPI's, new MAP-21 measures), industry benchmarking, business plan development, and collaborative risk management (CRM) program development. OICC conducts reviews to ensure compliance with applicable federal regulations necessary to preserve federal grant eligibility and monitors FTA's financial management oversight (FMO) and other financial management findings to ensure complete implementation of corrective action plans. OICC supports management in ensuring that financial management-related risks across WMATA are mitigated to an acceptable level. OICC also provides internal control guidance and training, and partners with departments to review and evaluate financial and administrative business process efficiency and effectiveness.

QICO provides quality control and assurance, partnering with operations and engineering departments to review and evaluate business process efficiency and effectiveness and champion quality improvements within those departments. QICO supports asset management practices across the Authority to ensure compliance with FTA regulations and that data are used to inform maintenance planning and capital budget decisions. QICO is also responsible for ensuring that WMATA submits all corrective action plans to external agencies such as FTA and NTSB in a timely manner, and maintains a tracker so that the public can monitor progress.

### FY2017 Business Plan

The AQAP business plan focuses on conducting risk-based assessments of internal business/financial operations, engineering and transit operations to ensure established objectives are met and compliance with processes, policies, and regulations.

AQAP will work collaboratively with all departments to strengthen internal controls, implement quality improvements, and improve data integrity. In addition,



there will be a continued effort to turn data into performance information that can be used by managers to improve decision making and resource allocation. For example, CPO is working to augment Vital Signs with new/improved KPIs such as customer travel time and enhanced graphical displays so that external audiences understand Metro's performance and actions being taken. OICO will work with the engineering and maintenance areas responsible for WMATA's transit assets to produce a standardized inventory of WMATA's assets including assessments of asset conditions. This will help WMATA produce an updated Capital Needs Inventory for the next Capital Funding Agreement with our member jurisdictions, as well as support the Authority's compliance efforts for pending FTA Transit Asset Management requirements instituted by the Moving Ahead for Progress in the 21st Century (MAP-21) legislation.

### **CARe Action Plan**

AQAP is responsible for tracking the status of the General Manager/Chief Executive Officer's Customer Accountability Report (CARe) action plan and providing regular updates to the public. In addition, AQAP directly contributes the following actions:

- Support the online FTA corrective action tracker established to track over 700 actions being taken to meet all FTA safety recommendations.
- Maintain an online tracking of actions being taken to meet all NTSB recommendations.
- Implement a railcar program to provide working trains to reduce delays and offloads.
- Close out FTA corrective actions as identified in the Financial Management Oversight (FMO) Report from June 2014.

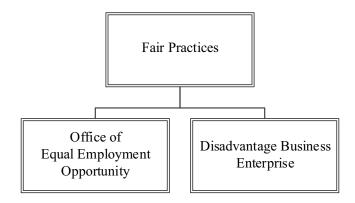
#### FY2016 Major Accomplishments

• Vital Signs received industry recognition as a best practice in communicating information to support data driven decision making [Transportation Research Board (TRB) Special Task Force on Data for Decisions and Performance Measures].

- Initiated a cross-department effort to conduct an asset management and condition assessment inventory.
- Substantially completed asset data collection using the FTA's Transit Economics Requirements Model (TERM-LITE) in preparation for compliance with MAP-21.
- Coordinated WMATA's 30-day and 90-day responses to the Federal Transit Administration's Safety Management Inspection (SMI) of rail and bus systems.
- Developed the Corrective Action Plans (CAPs) addressing the 54 safety and 91 related required actions from FTA's SMI. All CAPs identified specific actions to be performed, milestone schedules, and action owners.
- Initiated the verification and inspection of FTA's SMI actionable items to ensure that all are completed.
- Coordinated WMATA management's responses to FTA's FMO Testing and Validation Plan. All action items and related deliverables were submitted on time to FTA.
- Completed audit readiness reviews in advance of FTA's FMO Testing and Validation plan.
- Initiated effort to adopt the COSO Framework for financial management controls and a comprehensive assessment of financial management related risks.
- Developed an authority-wide policy for financial risks and controls.
- Trained 517 staff engaged in grants-related activities on Allowable Costs Requirements and Internal Controls.
- Completed assessment of WMATA maintenance and inspection of jumper cables, with recommendations to improve.
- TRB Executive Committee selected CPO/PLAN paper, 'Transit Travel Time Reliability: Shifting the Focus from Vehicles to Customers," as the winner of the William W. Millar Award for the best paper in the area of public transportation.
- Submitted FTA SMI Corrective Action Plans.



## **Fair Practices**



#### Responsibilities

The newly created Department of Fair Practices governs WMATA's comprehensive Equal Employment Opportunity (OEEO) Program and the Disadvantage Business Enterprise (DBE) Program. The department's focus includes equal employment opportunity, the Americans with Disabilities Act (ADA) program, education and training, cultural/ethnic diversity programs, and affirmative action planning and implementation.

> The Department of Fair Practices ensures nondiscrimination and equal opportunity within all programs and activities conducted by WMATA and ensures equitable access to departmental employment, services, contracting and other opportunities.



### FY2017 Business Plan

- Continue partnering with the General Counsel to ensure that all requests for accommodations are handled in accordance with Equal Employment Opportunity policies and practices.
- Maintain a proactive approach that identifies and utilizes DBEs in line with established goals.
- Provide tailored diversity awareness training to various departments to increase cultural awareness and provide an understanding of activities that should be avoided to prevent Civil Rights violations.
- Decrease the number of underutilized job groups by establishing targets to meet WMATA's affirmative action goals.
- Partner with Procurement to ensure non-discrimination in the execution of contracts and to promote positive external customer relations.
- Diversify the DBE database so that DBEs can be competitive in areas most likely to have projected opportunities.

- Partnered with Department of BUS for Title VI training of all bus operators.
- Conducted comprehensive diversity & inclusion events.
- Expanded Community Based Organization (CBO) platform to include the disabled.



## **General Counsel**

### Responsibilities

The department of General Counsel (COUN) protects the Authority's legal interests. The General Counsel also serves individually as legal advisor to the Authority and is the Ethics Officer for WMATA's Board of Directors. The Office of General Counsel provides legal and strategic advice for business transactions and policy initiatives, partners with senior managers to develop agreements with third parties, provides procurement advice, assists with real estate and joint development activities, represents the Authority in trials and appeals, and provides advice on risk and representational matters.

> The Office of General Counsel (COUN) is responsible for planning, directing and providing the legal services for the Authority, and supervising outside counsel when specialized legal expertise is required.

Among other activities, COUN provides legal advice to the Board of Directors, General Manager, and other senior managers; defends WMATA in litigation and pursues claims on WMATA's behalf; interprets WMATA's Compact; administers WMATA's Public Access to Records and Privacy Policy programs; and counsels WMATA's employees on a wide range of general law matters.

### FY2017 Business Plan

- Lead the development of funding agreements for the next Capital Improvement Program and lines of credit.
- Continue implementation and re-drafting of new procurement policies and procedures.
- Continue to work closely with OMBS on updates to the Grants Management Manual.

- Continue to work with HR on review and update of WMATA position descriptions and the Personnel Policies and Procedures Manual.
- Update governance documents, including the Board Member Code of Ethics, By-laws, and procedures.
- Draft and negotiate legal documents related to the Purple Line and Phase 2 of the Silver Line.
- Continue to represent the Authority in litigation and administrative proceedings.

- Policy review and update
  - COUN provided substantial input and guidance in reviewing, drafting, and updating the following policies: background screening, drug & alcohol testing, procurement, records management, whistleblower, and direct pay, special agreement & settlement authority.
  - COUN was, and continues to be, heavily involved in the HR-sponsored position description and policy re-write initiatives.
  - COUN assisted in the development of a commodity hedging policy.
- Training
  - COUN actively participated in the development and implementation of a variety of training initiatives, including EEO, MTPD cadets, whistleblower, GINA, and PARP.
- Litigation
  - COUN handled all of the Authority's litigation, with the exception of those cases which are covered by insurance or that involve areas of law in which in-house attorneys have limited experience.



## Safety & Environmental Management

#### Responsibilities

The Department of Safety & Environmental Management (SAFE) ensures that WMATA's Bus, Rail, and Access systems and other facilities are operationally safe and environmentally sound for all our employees, customers and surrounding communities. The overall goal is always zero accidents, injuries and fatalities.

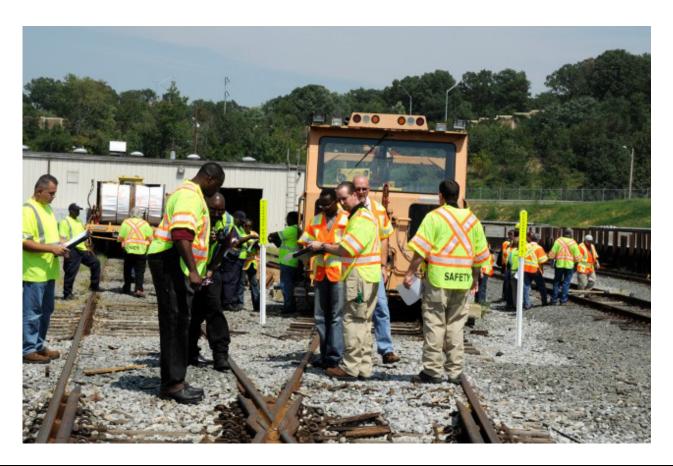
SAFE in collaboration with all other departments is promoting a corporate safety culture involving all levels, from the Board of Directors to every employee regardless of position or location.

SAFE is responsible for the management and/or compliance of policies and procedures in 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, corporate safety programs, and corporate quality assurance.

#### FY2017 Business Plan

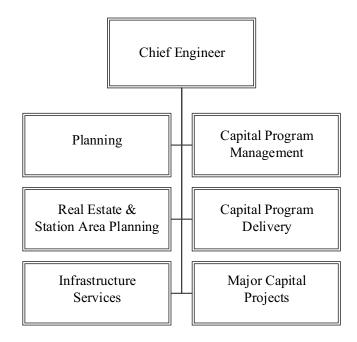
- Continuous positive improvement in the safety culture of our customers and employees.
- Documenting and closure of open Corrective Action Plans (CAPs)/Accident Reports.
- Ongoing implementation of FTA Safety Management System (MAP21) to improve and strengthen Metro's safety culture.
- Support rehabilitation/state of good repair of system .

- Transitioned from Tri-State Oversight Committee to Federal Transportation Administration WMATA Safety Oversight
- Continued documenting and closing all CAPs, regardless of source. Closed 25 of 29 NTSB recommendations, and approximately 95 CAPs.
- Expanded Close Call Confidential Reporting to include Bus Service.





# Engineering



#### Responsibilities

The Department of Engineering strives to provide a safe and reliable system through comprehensive engineering, inspection, maintenance and rehabilitation programs that enhance the condition of the Metrorail system, railcars, and Metrobus. The Engineering department is comprised of the following offices: Chief Engineer Infrastructure (CENI), Office of Planning (PLAN), Real Estate and Station Area Planning (LAND), Capital Program Management, Capital Program Delivery (CPDO), and Major Capital Projects (MCAP).

#### FY2017 Business Plan

The Engineering's business plan is designed to help WMATA make progress towards the Authority's strategic goals, with specific actions to implement the GM/CEO's priorities and positively influencing the following measures:

- Employee Injury Rate
- Customer Injury Rate
- Rail On-Time Performance
- Average Persons per Car
- Customer Commendation/Complaint Rate
- ADA Compliance
- Operating Budget Compliance

#### Action Plan to support the CARe report

- Improve safety, security, and restore public trust
  - Begin installing new Metro and public safety radio systems, including cabling for mobile phone service in tunnels
  - Initiate an outside expert to review radio design and look for opportunities to accelerate
  - Publish schedule detailing when tunnel segments are activated for telecom providers to offer mobile services
- Improve reliability and overall customer experience
  - Contract an outside expert to review current maintenance backlog and state of good repair plan. Recommend new strategies to minimize overall adverse impacts to customers including a review of work schedules for weekends, trade-offs with late night service and temporary shut downs
  - Develop new software to improve train prediction information for displays and internet applications
  - Improve station environment for customers (i.e. platform lighting, signage)
- Alter fiscal trajectory and renew jurisdictional confidence
  - Pilot "Name Your Own Price Pass"



- Realign delivery of capital projects online and routinely update the status
- Analyze upside potential for sale of Metro Headquarters building

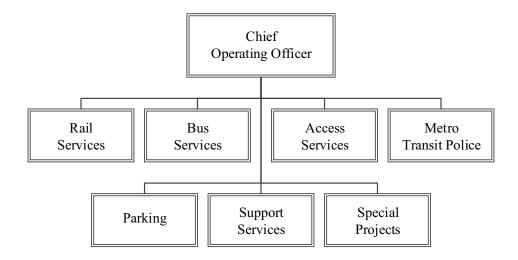
#### FY2016 Major Accomplishments

- CENI worked with SMNT Power to purchase and install 50 multipurpose relays on existing traction power line-ups
- Assembled Request for Proposal packages for both a facilities and a systems General Engineering Consultant Contract
- Completed and published communications standard drawings
- Developed Corrective Action Plans and submitted documentation to close five NTSB findings related to the L'Enfant Plaza incident
- CENI developed corrective action plans for FTA findings
- CENI submitted documentation to close four Internal Safety and Security Audit(ISSA) findings
- Completed construction of the MTPD District II Training Facility, which includes firing range and 152 parking slots
- MCAP awarded the Design-Build contract for construction of the Southern Avenue Bus Garage replacement (new location: Andrews Federal Center)
- LAND closed on the sale of the Anacostia property to DC and Capitol Heights parcel

- Issued two new Joint Development solicitations (Fort Totten & College Park)
- Executed Joint Development Term sheets for Brookland, Navy Yard chiller site, Grosvenor and Capitol Heights
- Executed a Joint Development Agreement at New Carrollton
- LAND collected approximately \$6 million in ongoing lease revenues
- PLAN initiated wayside regenerative braking study that will evaluate and quantify benefits from wayside energy storage to reduce customer impacts and risk during construction and provide emergency power to trains for evacuation purposes
- Prepared regular blog posts on PlanItMetro to inform members of the public of the effects of internal and external policy and operations on system operations, performance and ridership
- Developed transit service and infrastructure expansion guidelines for future proposals for service and infrastructure expansion
- PLAN finished the draft ConnectGreaterWashington plan, including a retail-friendly map of the plan and an assessment of costs, benefits and return on investment of the proposed transit network



# **Chief Operating Officer**



The Chief Operating Officer (COO) is a newly established office and part of the new GM/CEO restructure/ realignment. The department of Chief Operating Officer (COO) consists of Rail Services (RAIL), Bus Services (BUS), Access Services (ACCS), Metro Transit Police (MTPD), Parking (PARK), Support Services (which includes Plant Maintenance, Elevators/Escalators and Supply Chain) and the newly created office of Special Projects.

The seven organizations that comprise the COO department have business plans that articulate their responsibilities and strategic action plans directed towards implementing the GM/CEO's priorities of improving safety, system reliability, security and the overall customer experience.



# **Rail Services**

#### Responsibilities

The Office of Rail Services strives daily to provide our customers with a safe, courteous and reliable transit experience that demonstrates our renewed commitment to the mission of the Authority and to the region's riding public. The Office of Rail Transportation (RTRA) provides rail service across 117 miles of track and 91 stations, 40 of which are in Washington, D.C., 26 in Maryland and 25 in Virginia.

The Office is comprised of Intermodal Strategic Planning (IPLN), Rail Transportation (RTRA), Car Maintenance (CMNT), Chief Engineer Vehicles (CENV), Systems Maintenance (SMNT), Track and Structures (TRST), and Operation Management Services (OPMS). RTRA is responsible for all facets of rail operations including station operations (ROSO), train operations (RTTO), rail operations control center (ROCC) including maintenance operations center (MOC), training (ROQT), and planning/ scheduling (ROSC).

Rail Services' FY2017 Business Plan includes addressing

- Rail operator training with additional rail training instructor positions
- FTA Safety management Inspection findings. (R-1-2-a, R 1-12-a, R-2-18-b and R-2-17-c)

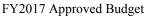
#### Action Plan to support the CARe report

- Improve train operator response to passenger intercom calls
- Implement rail service reliability plan to reduce excessive waiting and crowding
- Introduce platform attendants at key transfer stations
- Implement a railcar program to provide working trains to reduce delays and offloads
- Strengthen command center operations to improve emergency planning and service recovery
- Ensure timely and quality delivery of 7000 Series railcars
- Determine 'ownership responsibility' for each Metrorail line



#### **FY2016 Accomplishments**

- Implemented speed restrictions and increased inspections to address and correct wide gauge areas
- Replaced more than 28,644 fasteners, 10,664 cross ties, 3,017 insulators, 9.40 miles of running rail, 22 turnouts, 5.86 miles of third rail, 1,533 roadway safety signs and 1,298 linear feet of deck joints. Rehabilitated more than 8,196 linear feet of grout pads, 21,399 linear feet of drainage and 265 linear feet of floating slab
- Revised Station Standard Operating Procedures to improve station operations performance (last updated in 2003)
- Revised the Station Manager's job description to incorporate enhanced customer service essential functions.
- Operated Red Line 8-car trains in ATO during the morning and evening rush, Monday through Friday
- Created a Radio Outage Display to depict all Authority and Public Safety Radio System UHF radio outages
- Created a web-based portal for local jurisdiction first responders to report issues with the Public Safety Radio System Distributed Antenna System located in Metrorail tunnel system and underground stations
- Developed new job-aid on standard baseline announcements and train delay announcements to keep customers better informed on service delivery
- Issued new station manager uniforms so customers can more readily identify staff.
- Placed 100 of the 116 new 7000 Series railcars that were delivered into revenue service as pf April 4, 2016





## **Bus Services**

#### Responsibilities

Bus Services is committed to being an indispensable element of the Washington metropolitan area by ensuring the safest, cleanest, most reliable, cost effective and responsive bus service, by promoting regional mobility and by contributing to the social, economic and environmental well-being of the community.

> Bus Services is the transportation provider for more than 132 million customers each year, and is responsible for the operation, maintenance, and scheduling of Metrobus routes in the District of Columbia, Virginia, and Maryland.

Metrobus is responsible for approximately 1,548 buses, 299 routes, 175 lines and 4,173 employees. Additionally, Bus Services handles the maintenance of Metro's 1,499 service vehicles and 753 pieces of equipment, and manages the DC Circulator Contract (a reimbursable project).

#### FY2017 Business Plan

The Department of Bus Services has three offices: Bus Transportation (BTRA), Bus Maintenance (BMNT), and Bus Planning, Scheduling, and Customer Facilities (BPLN). Each office's business plan details how Bus Services' day-to-day actions help WMATA make progress towards the agency's strategic goals.

Below are examples of specific actions outlined in the Bus Services business plans:

- Reduce Employee Injury rate through the use of proactive safety programs, investigation into all cases of injury and counseling of employees with multiple injuries.
- Minimize customer injuries through continuous training, service adjustments to maintain schedules and working with jurisdictions to improve traffic conditions.
- Continue improvement of the Priority Corridor Network (PCN) corridors and other services, remaining within budget to continue to improve on-time performance (OTP) to reach Metro's goal of 79 percent OTP.
- Be fiscally responsible, maintain operating expenses within budget and continue a high level of expenditure of capital funds to support the overall goals of improving customer service.

- Continue customer communication efforts with bus operators to improve their skills, reduce complaints and minimize assaults.
- Work proactively with Human Resources to fill vacancies to minimize overtime and to ensure that all work elements are done in a timely fashion.

Bus Services' business plans focus on actions for the provision of safe, efficient and reliable service.



#### **CARe Action Plan for Bus Services**

- Improve personal safety and security for bus operators
- Improve bus fleet reliability
- Partner with regional and state DOTs to introduce traffic signal prioritization in key bus priority corridors to reduce travel times

#### New to FY2017

- Manage completion of five year non-revenue vehicle procurement (FY2017-2021) with the delivery of 177 vehicles by the end of FY2017; ensuring long-term capital replacement program adherence.
- Implement the rollout of the new yard management/ dispatching function at Bladensburg division to enhance on-time dispatch of revenue fleet, with the remaining eight bus divisions to be completed by the end of CY2016.
- Reduce Greenhouse Gas (GHG) emissions for bus revenue fleet in FY's16/17/18 with tracking based on three measures of intensity against a 2009 baseline, including GHG emissions per vehicle mile, GHG emissions per passenger mile and GHG emissions per revenue hour as measured through CO2e displacements.



• Introduce first 40-foot battery powered bus manufactured by New Flyer in the summer of CY2016. Pilot program operated out of the western division to evaluate the feasibility of this technology to be used in our operating profile (this is a zero emissions vehicle).

#### FY2016 Major Accomplishments

- Continued success with State of Good Operations (SOGO) program to better connect communities through enhanced bus service, improving on time performance, reliability, and customer satisfaction, within budgeted resources.
- Added new hybrid-technology buses with low floors for better access.
- Improved Bus On-Time Performance to over 78 percent in FY2016. Bus Fleet Reliability, measured by Mean Distance between Failures, improved to 6,853 in FY2016.
- Expended over 7,414 hours of technical training for staff
- Safety
  - Two percent (2%) reduction in OSHA reportable injuries
  - Installed an additional 58 Operator barriers bringing Metro to 236 in the system
  - Completed third party Metrobus passenger hazard assessment of bus interior passenger safety features

- Third party assessment of Chevrons to reduce rear end collisions
- Developed and awarded a contract to have a third party assessment of fire risk on all new bus fleets
- Installed 343 MGM eStroke brake monitors, this monitors brake over stroke and dragging brake conditions.
- Service Quality
  - Conducted post-delivery first article inspections for three new bus deliveries: 21 60' Hybrid Electrics, 164 40' CNGs, and 110 40' hybrid electrics
  - Completed 71 midlife overhauls
  - Introduced and managed in excess of 16 fleet reliability campaigns performed by both internal and external staff
  - Implemented increased contract bus cleaning by performing two major cleanings per month at the intercity bus divisions
- Environmental Sustainability
  - Completed 181 refrigerant conversions (R22 to R407c)
  - Completed installation of 91 electric fan conversions



# **Access Services**

#### Responsibilities

The Department of Access Services (ACCS) ensures that WMATA provides safe, reliable and accessible transit service to people with disabilities and demonstrates leadership in the coordination of regional resources to meet the demand for specialized transportation.

Through its three offices (ADA Policy & Planning, Eligibility Certification & Outreach, and MetroAccess Service), ACCS ensures the continuous improvement of all Metro's accessible services and facilities.

ACCS is responsible for:

- MetroAccess service delivery
- Metro accessibility policy leadership
- Ensuring ADA and FTA compliance
- Accessibility planning and design support
- Accessibility Advisory Committee staffing and support
- Customer eligibility determination for MetroAccess and Reduced (Half) Fare Program
- Outreach and travel training to provide the most independent travel choices to customers with disabilities

#### FY2017 Business Plan

ACCS is developing and implementing longterm policy and operational strategies that support decreased use of, and more efficient delivery of, paratransit services; and greater use of paratransit alternatives.

The ACCS Business Plan is centered on three strategic objectives:

- All of Metro's services are continuously safe, reliable, and accessible to our customers with disabilities;
- MetroAccess paratransit service is delivered safely, efficiently, and effectively; and
- Specialized transportation alternatives are fully leveraged to ensure the ongoing sustainability of MetroAccess.

The ADA Policy & Planning office works closely with Metro's engineers, planners, bus, rail and communications staffs to ensure that our doors are opened to the greatest number of people with disabilities. Our Eligibility Certification & Outreach office operates a thorough and compliant paratransit eligibility determination process that contributes to the sustainability of the service by ensuring that only those who need paratransit are determined eligible. Effective marketing provides another choice for customers with disabilities – using the accessible fixedroute system over the paratransit option. Choosing fixedroute provides greater travel independence and significantly reduced costs to the customer, and to Metro.

The Office of MetroAccess Service manages our paratransit service through a team of contractors. In FY2014, ACCS successfully implemented a new multi-contractor, performance-based business model (with a total value of \$1.0 billion in contracts over a 10-year performance period) comprised of five separate contracts: service delivery (three contractors); call center operations; and quality assurance. Benefits from the new model have already materialized through innovative approaches from our new contractors and improvements in efficiency. Growing ridership requires a regional strategy emphasizing demand management.

#### **CARe Action Plan**

- Improve service reliability for paratransit customers
- Reduce overhead costs through innovation such as exploring public/private partnerships for select paratransit trips.





#### New to FY2017

- ACCS is advancing its development of a region-wide system of coordinated paratransit alternatives via partnerships with other entities that can perform specialized transportation service to substitute for or supplement MetroAccess.
- ACCS is planning technological advancements to include a smart phone application, real time traffic map information and enhanced radio communications between dispatchers and operators.
- ACCS is working to reduce operating expenses by identifying segments of MetroAccess demand and utilize non-ADA service, either contracted or funded directly by WMATA, to provide the requested service.
- ACCS is pursuing more non-ADA paratransit alternatives, such as vehicle transfers to human service agencies that enable them to operate their own paratransit services; saving money for WMATA and jurisdictions and providing better service to customers.

• ACCS will continue to prioritize and implement accessibility improvements to bus stops throughout the region.

#### FY2016 Major Accomplishments

- Conducted a second pilot program with the State of Maryland, known as "Coordinated Alternative to Paratransit Services" (CAPS) for a human service agency to contract transportation for their clients, better serving their clients' needs at reduced cost.
- Expanded the District of Columbia taxi alternative program, known as "TransportDC".
- Completed major upgrade of the paratransit scheduling software inclusive of trip reservations, scheduling, routing and dispatch, customer feedback system and server infrastructure with better data security and failover capability.



# **Metro Transit Police**

#### Responsibilities

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

The Metro Transit Police Department (MTPD) is composed of 472 both uniformed and plain clothes sworn Police Officers charged with the duty of enforcing the laws of the signatories, the laws, ordinances and regulations of the political subdivisions, and the rules and regulations of WMATA. There are 165 Special Police Officers who are responsible for the physical security at rail yards, bus divisions and other Metro properties. The Office of Emergency Management (OEM) civilian personnel plan, train, and provide on-scene assistance for both natural and man-made emergencies. They are also responsible for management digital video and police radio communications. Other civilian employees are responsible for crime analysis, records management, and various administrative support functions.

#### FY2017 Business Plan

In response to the Federal Transit Administration (FTA) Safety Management Inspection (SMI) MTPD's business plans include the following;

- Add Fire Life Safety positions which will enhance the Office of Emergency Management support for regional first responders and for regional first responder training
- Add a special Transit Police detail to reduce fare evasion

• Begin civilianizing training instructors currently staffed by Sworn Officers

#### **CARe Action Plan**

- Increase the number of Metro Transit Police officers on the rail and bus systems
- Increase visibility of law enforcement personnel in stations and on buses with enhanced uniforms

#### FY2016 Major Accomplishments

- MTPD reported that the number of Part I Crimes in 2015 was 1,654 crimes. or 13.0 percent below the annual target of 1,900.
  - Part I Crime includes eight (8) specific crimes: homicide, rape, robbery, aggravated assault, burglary, larceny-theft, motor vehicle theft, and arson.
- MTPD continued to partner with local law enforcement officials district commanders to patrol hot spot areas and to use "Be on the Look Out" (BOLO) messaging.
- New initiatives accomplished are aimed at reducing fare evasion and bus operator assaults. These initiatives combine dedicated contingents of uniformed police officers and additional CCTV surveillance technology on certain bus routes to enforce fare collection.
- MTPD worked to control costs by awarding four competitive contracts to outsource civilian functions. All of these contracts are valid for over multiple fiscal years and for values of \$1.0 million or more.





# **Support Services**

## Responsibilities

The newly created Office of Support Services is comprised of Plant Maintenance (PLNT), Supply Chain Enterprise Services (SCES) and Elevator and Escalator (ELES). Plant Maintenance (PLNT) manages and maintains WMATA's facilities and mechanical equipment systems in support of Metrorail and Metrobus operations. The Office supports Metrorail and Metrobus operations by maintaining facilities, grounds and mechanical equipment in a state of good repair. Plant maintenance performs services at 91 rail stations, 48 non-revenue facilities (i.e. located in rail yards, bus divisions and administration office buildings), 29 parking garages, 252 parking lots, and 213 power sub-stations.

Supply Chain Enterprise Services ("Supply Chain" or "SCES") is dedicated to providing quality inventory management services and warehousing solutions to support Car Maintenance, Plant Maintenance and Tracksand Structures. The Office of Supply Chain operates a supply facility and several satellite stores.

Elevator and Escalator Services (ELES) maintains all vertical transportation equipment within the auspices of the Authority. ELES is committed to providing the safe and reliable service through the use of technology, training, and education.

#### FY2017 Business Plan

- Ensure preventive maintenance schedules are adhered to for tunnel fans, fire suppression systems, tunnel emergency exits, emergency evacuation carts and drainage pumping stations
- Participate in cross-agency monthly meetings to prioritize and address station/facility maintenance repairs to minimize risk of injury and improve employee engagement
- Complete injury investigations within 30 days of being reported
- Conduct biannual Safety Stand Downs to re-emphasize seven (7) key safety issues for safe elevator/escalator maintenance

• Work with Communications and Rail Transportation to identify strategies to enhance service disruption reporting for customers (i.e. announcements, email alerts, website reports, station signage, etc.)

## Action Plan to support the CARe report

- Strike team efforts to pilot station improvements including improved cleanliness, equipment availability, lighting and other basic amenities
- Improve station environment by upgrading unreliable elevators and escalators

# CY2015 Major Accomplishments

- Improved inventory floor spacing optimization by 12,000 square feet
- Increased employee productivity by decreasing employee travel time with the implementation of a computer-based parts retrieval system
- Material volume received was \$57.4M representing 33,800 items; Material volume issued was \$42.8M representing 32,000 items
- Replaced 500 feet of standpipe in the Prince George's Plaza station parking garage and returned it to service
- Replaced steps, grating, and handrail placing to emergency exit shaft FB-08 back in service; repaired 3 main stairway support columns and steps, and 6' of handrail to place emergency exit FA-11 back in service; and replaced 10 feet of stairs and grating at FA-04
- Renovated restrooms at the following bus loops:14th Street and Colorado Avenue, Chevy Chase, and the Rhode Island Avenue rail station
- Assisted in the preparations of the Silver Spring Transit Center Opening in September 2015
- Escalator availability was 93.3 percent for FY2016, the highest since reporting on this measure began in 2010
- Increased escalator reliability in FY2016, running an estimated 12 hours longer before incurring mechanical issues
- Completed 17 elevator rehabs in FY2016, 50 percent more than FY2015



# Parking

#### Responsibilities

The Office of Parking supports WMATA by providing the best possible customer support to transit customers by maximizing the utilization of available parking resources, and by providing a safe, friendly and reliable parking environment to customers who benefit from transit access across the region.

#### FY2017 Business Plan

- Provide reliable parking services maximizing user satisfaction with convenient user-friendly facilities for transit customers
- Maximize the use of Metro's parking assets to advance the Authority's strategic goals

- Implement innovative programs that generate revenue and promote transit use
- Effectively communicate and inform customers about Metro's parking assets

#### FY2016 Major Accomplishments

- PARK awarded a contract that provides vehicle sharing opportunities at every Metrorail station with parking. This contract encourages transit use and enhances transit access. The contract generated \$433K in new revenue.
- PARK developed and implemented technology that permits registered SmarTrip Card holders to access all Metro secure Bike & Ride bicycle parking facilities. This technology makes bicycle parking easier and more customer friendly.

# **Special Projects**

#### Responsibilities

The Office of Special Projects leads and manages major special and strategic projects at the direction of the GM/ CEO and the Chief Operating Officer (COO) in support of achieving organizational goals and immediate priorities. In addition, the Office manages and provides oversight and policy leadership, coordination, and negotiations with external stakeholders on major projects such as the Dulles Corridor Metrorail Project and reconstruction of the I-66 Maintains coordination with corridor. external stakeholders. Manages the internal coordination, tracking and GM/CEO approval of responses to OIG audits and reports.

#### FY2017 Business Plan

The focus of the Office of Special Projects is to build and maintain a premier transit system with a safety culture that meets or exceeds customer expectations. In addition, the office works to ensure fiscal stability while investing in WMATA's people and assets. Special Project's business plan includes the following:

- Provide support for WMATA's GM/CEO and COO
- Continue to manage and serve as COTR for the implementation phase of selected recommendations from the Organizational Review
- Continue to serve as the Chief Policy Officer for the Dulles Corridor Metrorail Project
- Coordinate with external stakeholders on major corridor projects

#### FY2016 Major Accomplishments

- Provided leadership on Authority-wide internal initiatives, such as the Organizational Review and Collaborative Risk Management
- Initiated and provided leadership in negotiations with VDOT and jurisdictions on interagency agreements
- Developed a streamlined approach to tracking of all OIG audits and reports



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# Chapter 4 - FY2017 Capital Budget



7000 Series Railcars at Metro Center



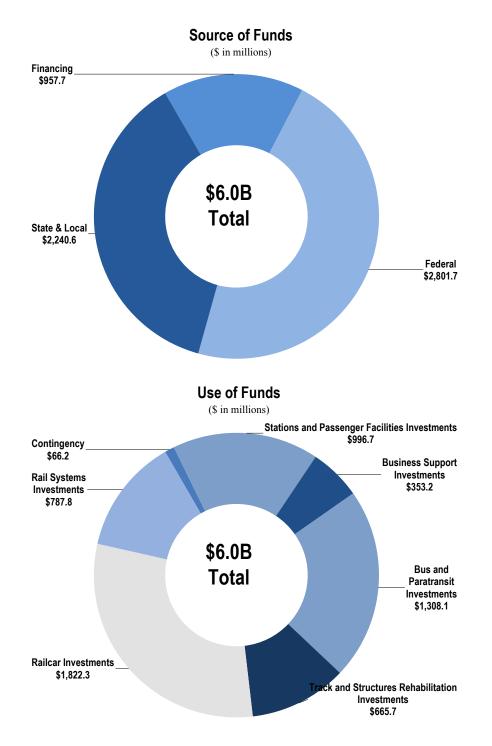
#### Overview

WMATA's approved FY2017-2022 Capital Improvement Program (CIP) totals \$6.0 billion, with funding from the Federal Government, state and local contributions, longterm financing, and other sources.

The investments focus on ensuring the safety of the WMATA system and improving the effectiveness of the

rail and bus networks by enhancing the condition of WMATA's assets through investment in replacement and state of good repair.

Of this \$6.0 billion total, \$950 million is approved to be spent in FY2017.





The approved FY2017-2022 CIP contains more than \$1.0 billion in safety-enhancing investments to fund all known National Transportation Safety Board (NTSB) recommendations and FTA's Safety Management Inspection (SMI) requirements, as well as other critical investments that will improve and strengthen the safety of the WMATA system.

These investments include more than \$445 million to complete the delivery and commissioning of new 7000 series cars to replace the 1000 series cars and more than \$310 million to replace and upgrade the Authority's radio infrastructure and install neutral host wireless technology throughout the tunnels. WMATA is committed to advancing these important initiatives in cooperation with our federal partners.

The approved FY2017-2022 CIP also continues to advance an aggressive investment plan, totaling nearly \$5 billion, designed to restore and maintain infrastructure, facilities, power systems, vehicles, and other assets throughout the system in a state of good repair. WMATA will adapt the capital program budget structure to better align with FTA requirements and to improve clarity in reporting to the Board and other stakeholders. WMATA's FY2017 capital investments have been grouped into six investment categories and 22 program areas. These major investment categories and program areas map directly into FTA's updated structure for grant administration and asset management.

#### **Sources of Funds**

Federal grants are expected to fund \$2.8 billion (47 percent) of the \$6 billion FY2017-2022 capital program, with state and local sources funding the remaining \$3.2 billion (53 percent). The FY2017-2022 CIP assumes that state and local funding will consist of \$2.2 billion in cash contributions and \$1.0 billion of long-term financing.

The following table displays funding sources in the year in which funding is anticipated to be expended, consistent with the Authority's expenditure based budgeting principles.

(dollars in millions)	FY2017 Budget	FY2018 Plan	FY2019 Plan	FY2020 Plan	FY2021 Plan	FY2022 Plan	6 Year Total
Federal Formula Programs	\$317.3	\$304.0	\$304.0	\$304.0	\$304.0	\$304.0	\$1,837.3
Federal PRIIA	172.0	150.0	150.0	150.0	150.0	150.0	922.0
Resiliency Grant	7.1	6.9	0.0	0.0	0.0	0.0	14.1
Other Federal Grants	3.6	5.5	6.7	4.4	4.0	4.0	28.3
Subtotal Federal	500.1	466.5	460.7	458.4	458.0	458.0	2,801.7
Match to Federal Formula	79.3	76.0	76.0	76.0	76.0	76.0	459.3
System Performance	117.2	125.9	137.7	135.4	143.5	150.6	810.4
State and Local PRIIA	172.0	150.0	150.0	150.0	150.0	150.0	922.0
Match to Resiliency Grant	2.4	2.3	0.0	0.0	0.0	0.0	4.7
Rail Power System Upgrades	8.4	5.1	0.0	0.0	0.0	0.0	13.5
Other State and Local	12.4	14.4	1.5	0.9	0.8	0.8	30.7
Subtotal State and Local	391.7	373.7	365.2	362.3	370.3	377.4	2,240.6
Planned Long-Term Financing	58.3	388.5	245.0	144.9	35.6	85.4	957.7
Subtotal Financing	58.3	388.5	245.0	144.9	35.6	85.4	957.7
Total	\$950.0	\$1,228.7	\$1,070.9	\$965.6	\$863.9	\$920.9	\$6,000.0

#### FY2017-2022 Approved Capital Improvement Program



#### **Federal Programs**

Federal program funding is subject to Federal authorization and appropriation and the annual award of grants by the Federal Transit Administration (FTA).

• Federal Formula Programs

Formula programs are projected to provide a total of \$1.8 billion of federal funds over the six year period, \$304.0 million of which is planned for investment during FY2017.

• Federal Passenger Rail Investment and Improvement Act (PRIIA)

The approved FY2017-2022 CIP assumes a total of \$922.0 million of PRIIA funding, \$172.0 million of which is planned for investment during FY2017. Of this total, \$900 million is planned to be awarded during the FY2017-2022, supplemented by \$22 million projected to be carried forward from FY2016.

This plan assumes that PRIIA will be appropriated each year and reauthorized before FY2021.

#### **State and Local Programs**

• State and Local Match to Federal Formula Programs

A total of \$459.3 million of state and local funds will be needed to match federal formula program grants, \$79.3 million of which is planned for investment during FY2017.

• State Match to Federal PRIIA Program

The FY2017-2022 approved CIP financial plan assumes the PRIIA legislation will be extended beyond FY2020 and that the District of Columbia, the State of Maryland, and the Commonwealth of Virginia will contribute \$150 million per year to match Federal PRIIA, consistent with the jurisdictional commitment to fund the safety, state of good repair, and preventive maintenance needs of the WMATA system. A total of \$900 million is forecasted to be billed to jurisdictions in FY2017-2022, and an additional \$22 million, from prior years, is forecasted to be spent in FY2017. • System Performance

A approved total of \$810.4 million from state and local system performance funding will support the FY2017-2022 CIP, with \$117.2 million programmed for investment during FY2017. System performance funding is contributed by the jurisdictions to advance additional capital investments beyond those funded by federal grants and match.

#### **Miscellaneous Programs**

• Other Fund Sources

The approved CIP includes investments to advance projects that are funded through competitively awarded discretionary grants, congestion mitigation and air quality funding that is passed to WMATA through a local jurisdictional agreement, and other funding sources with dedicated use. These fund sources total approximately \$48.9 million in FY2017-2022.

• Financing/Debt Strategy

The approved FY2017-2022 CIP financial plan includes a total of \$957.7 million of planned long-term debt, \$58.3 million of which is planned for use in FY2017. In accordance with the agreement made in the Capital Funding Agreement (CFA), WMATA will identify the portion of future allocated contributions for debt service payments in future approved budgets and WMATA will notify the jurisdictions at least 120 days in advance of any long-term debt issuance.

Jurisdictional capital funding, except for PRIIA, is allocated among the jurisdictions based on operating subsidy by mode and asset type. The CIP applies specific jurisdictional operating subsidy allocations to Metrobus, Metrorail, and MetroAccess projects to determine an overall blended allocation rate by jurisdiction for CIP contributions. The table displaying the allocation of state and local contributions contains anticipated jurisdictional contributions for each of the six years, by type of funding. The following section shows anticipated quarterly contributions by jurisdiction for FY2017, compared to FY2016.



Finacial Plan - Allocation of State & Local Contributions         Dollars in Millions       FY2017 Approved											
		017 Appro	oved	TX/2010	EX/2010	EX/2020	EX/2021	<b>EX 2022</b>	FY2017		
	Carry- Over	New	Total	FY2018 Plan	FY2019 Plan	FY2020 Plan	FY2021 Plan	FY2022 Plan	-2022 Total		
Federal Formula Match & System Performance											
District of Columbia	\$3.8	\$70.4	\$74.2	\$75.9	\$79.4	\$78.6	\$81.6	\$84.2	\$473.9		
Montgomery County	\$1.7	\$32.3	\$34.0	\$34.8	\$36.4	\$36.0	\$37.4	\$38.6	\$217.4		
Prince George's County	\$1.8	\$33.6	\$35.3	\$36.2	\$37.8	\$37.4	\$38.9	\$40.1	\$225.8		
Maryland Subtotal	\$3.5	\$65.9	\$69.4	\$71.0	\$74.3	\$73.5	\$76.3	\$78.8	\$443.2		
City of Alexandria	\$0.5	\$8.5	\$9.0	\$9.2	\$9.6	\$9.5	\$9.8	\$10.2	\$57.2		
Arlington County	\$0.8	\$15.8	\$16.7	\$17.0	\$17.8	\$17.6	\$18.3	\$18.9	\$106.4		
City of Fairfax	\$0.0	\$0.5	\$0.5	\$0.5	\$0.5	\$0.5	\$0.6	\$0.6	\$3.3		
Fairfax County	\$1.5	\$27.8	\$29.3	\$30.0	\$31.3	\$31.0	\$32.2	\$33.2	\$187.0		
City of Falls Church	\$0.0	\$0.6	\$0.6	\$0.6	\$0.7	\$0.7	\$0.7	\$0.7	\$4.0		
Commonwealth of Virginia		<i>\_</i>					<i>40.1</i>				
Virginia Subtotal	\$2.8	\$53.2	\$56.0	\$57.3	\$60.0	\$59.3	\$61.6	\$63.6	\$357.9		
Subtotal Federal Formula Match & System	+===				++++++	40,10					
Performance	\$10.1	\$189.4	\$199.6	\$204.3	\$213.7	\$211.4	\$219.5	\$226.6	\$1,275.1		
State and Local PRIIA											
District of Columbia	\$7.8	\$49.5	\$57.3	\$50.0	\$50.0	\$50.0	\$50.0	\$50.0	\$307.3		
State of Maryland	\$7.8	\$49.5	\$57.3	\$50.0	\$50.0	\$50.0	\$50.0	\$50.0	\$307.3		
Commonwealth of Virginia	\$7.8	\$49.5	\$57.3	\$50.0	\$50.0	\$50.0	\$50.0	\$50.0	\$307.3		
Subtotal State and Local PRIIA	\$23.5	\$148.5	\$172.0	\$150.0	\$150.0	\$150.0	\$150.0	\$150.0	\$922.0		
Other State and Local											
District of Columbia	\$6.5		\$6.5	\$7.1	—				\$13.6		
Montgomery County	\$2.0		\$2.0	\$2.2	—	_		_	\$4.2		
Prince George's County	\$2.0		\$2.0	\$2.3	_				\$4.3		
State of Maryland	\$2.0		\$2.0	\$2.1	_	_		_	\$4.2		
Maryland Subtotal	\$6.0	\$0.0	\$6.0	\$6.7	\$0.0	\$0.0	\$0.0	\$0.0	\$12.7		
City of Alexandria	\$0.5		\$0.5	\$0.6	_	_		_	\$1.1		
Arlington County	\$1.0		\$1.0	\$1.1	_	_		_	\$2.0		
City of Fairfax	\$0.0		\$0.0	\$0.0					\$0.1		
Fairfax County	\$1.7		\$1.7	\$1.9	_	_		_	\$3.6		
City of Falls Church	\$0.0		\$0.0	\$0.0					\$0.1		
Commonwealth of Virginia	\$4.2	\$0.2	\$4.4	\$2.1	\$1.5	\$0.9	\$0.8	\$0.8	\$10.4		
Virginia Subtotal	\$7.4	\$0.2	\$7.6	\$5.7	\$1.5	\$0.9	\$0.8	\$0.8	\$17.3		
Total Other State and Local	\$19.9	\$0.2	\$20.1	\$19.5	\$1.5	\$0.9	\$0.8	\$0.8	\$43.6		
Total Contributions before Debt	\$53.6	\$338.1	\$391.7	\$373.7	\$365.2	\$362.3	\$370.3	\$377.4	\$2,240.6		
Additional Contribution or Debt											
District of Columbia	\$0.0	\$21.7	\$21.7	\$144.4	\$91.0	\$53.9	\$13.2	\$31.8	\$356.0		
Montgomery County		\$9.9	\$9.9	\$66.2	\$41.8	\$24.7	\$6.1	\$14.6	\$163.3		
Prince George's County		\$10.3	\$10.3	\$68.8	\$43.4	\$25.7	\$6.3	\$15.1	\$169.6		
Maryland Subtotal	\$0.0	\$20.3	\$20.3	\$135.1	\$85.2	\$50.4	\$12.4	\$29.7	\$332.9		
City of Alexandria	_	\$2.6	\$2.6	\$17.4	\$11.0	\$6.5	\$1.6	\$3.8	\$43.0		
Arlington County		\$4.9	\$4.9	\$32.4	\$20.4	\$12.1	\$3.0	\$7.1	\$79.9		
City of Fairfax	_	\$0.2	\$0.2	\$1.0	\$0.6	\$0.4	\$0.1	\$0.2	\$2.5		
Fairfax County		\$8.5	\$8.5	\$57.0	\$35.9	\$21.2	\$5.2	\$12.5	\$140.5		
City of Falls Church	_	\$0.2	\$0.2	\$1.2	\$0.8	\$0.5	\$0.1	\$0.3	\$3.0		
Commonwealth of Virginia				_		_	_				
Virginia Subtotal	\$0.0	\$16.4	\$16.4	\$109.1	\$68.8	\$40.7	\$10.0	\$24.0	\$268.8		
Total Debt (Opt Out)	\$0.0	\$58.3	\$58.3	\$388.5	\$245.0	\$144.9	\$35.6	\$85.4	\$957.7		
Grand Total State and Local Funding with Debt	\$53.6	\$396.4	\$450.0	\$762.3	\$610.1	\$507.2	\$405.9	\$462.9			



## Financial Plan - FY2016 & FY2017 Allocation of State & Local Contributions

Dollars in Millions

		FY2016	Actual/For	recast		FY2017Approved				
	Q1	Q2	Q3	Q4	Total	Q1	Q2	Q3	Q4	Total
Federal Formula Match & System Pe	rformance									
District of Columbia	\$15.0	\$19.0	\$17.0	\$17.0	\$68.0	\$15.5	\$19.7	\$17.6	\$17.6	\$70.4
Montgomery County	\$6.9	\$8.7	\$7.8	\$7.8	\$31.2	\$7.1	\$9.0	\$8.1	\$8.1	\$32.3
Prince George's County	\$7.1	\$9.1	\$8.1	\$8.1	\$32.4	\$7.4	\$9.4	\$8.4	\$8.4	\$33.6
Maryland Subtotal	\$14.0	\$17.8	\$15.9	\$15.9	\$63.6	\$14.5	\$18.4	\$16.5	\$16.5	\$65.9
City of Alexandria	\$1.8	\$2.3	\$2.1	\$2.1	\$8.2	\$1.9	\$2.4	\$2.1	\$2.1	\$8.5
Arlington County	\$3.4	\$4.3	\$3.8	\$3.8	\$15.3	\$3.5	\$4.4	\$4.0	\$4.0	\$15.8
City of Fairfax	\$0.1	\$0.1	\$0.1	\$0.1	\$0.5	\$0.1	\$0.1	\$0.1	\$0.1	\$0.5
Fairfax County	\$5.9	\$7.5	\$6.7	\$6.7	\$26.8	\$6.1	\$7.8	\$6.9	\$6.9	\$27.8
City of Falls Church	\$0.1	\$0.2	\$0.1	\$0.1	\$0.6	\$0.1	\$0.2	\$0.1	\$0.1	\$0.6
Commonwealth of Virginia	_	_	_	_			_	_	_	_
Virginia Subtotal	\$11.3	\$14.4	\$12.8	\$12.8	\$51.3	\$11.7	\$14.9	\$13.3	\$13.3	\$53.2
Subtotal Formula Match & System Performance	\$40.2	\$51.2	\$45.7	\$45.7	\$182.9	\$41.7	\$53.0	\$47.4	\$47.4	\$189.5
State and Local PRIIA										
District of Columbia	\$9.9	\$9.9	\$13.4	\$16.3	\$49.5	\$16.3	\$13.4	\$9.9	\$9.9	\$49.5
State of Maryland	\$9.9	\$9.9	\$13.4	\$16.3	\$49.5	\$16.3	\$13.4	\$9.9	\$9.9	\$49.5
Commonwealth of Virginia	\$9.9	\$9.9	\$13.4	\$16.3	\$49.5	\$16.3	\$13.4	\$9.9	\$9.9	\$49.5
Subtotal State and Local PRIIA	\$29.7	\$29.7	\$40.1	\$49.0	\$148.5	\$49.0	\$40.1	\$29.7	\$29.7	\$148.5
CMAQ Match	—			_					_	_
Commonwealth of Virginia (DRPT)	_		\$2.7	\$3.3	\$6.0			\$0.1	\$0.1	\$0.2
Subtotal CMAQ Match	\$0.0	\$0.0	\$2.7	\$3.3	\$6.0	\$0.0	\$0.0	\$0.1	\$0.1	\$0.2
Rail Power System Upgrades	_			_					_	_
District of Columbia	\$1.0	\$1.8	\$1.8	\$1.9	\$6.6	_	_	_		_
State of Maryland	\$0.9	\$1.7	\$1.7	\$1.8	\$6.2	_	_		_	_
Commonwealth of Virginia (NVTA)	\$0.7	\$1.4	\$1.4	\$1.4	\$5.0	_	_	_		_
Subtotal Power Upgrades	\$2.7	\$5.0	\$5.0	\$5.1	\$17.7	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Total	\$91.9	\$96.3	\$83.1	\$83.9	\$355.2	\$90.7	\$93.1	\$77.1	\$77.2	\$338.1



#### **Uses of Funds**

The FY2017-2022 CIP includes \$6 billion for safetyrelated and state of good repair investments. The approved FY2017 budget represents \$950 million of this total. Approved FY2017 CIP investments are summarized in two tables. First, the investments are displayed by asset category, and then they are listed in detail by subcategory. In addition, the FY2017 capital budget includes \$52.0 million in reimbursable projects that are listed later in this chapter.

#### Safety-Related Investments

The FY2017-2022 CIP proposes more than \$1 billion in funding of safety-related investments, including full funding of all current NTSB recommendations and SMI requirements. The approved FY2017 budget contains \$302 million for safety related investments, including but not limited to the following significant investments:

- Continuation of the replacement of the three hundred 1000-series railcars with the new 7000-series.
- Completion of the design work for the above ground elements of the new 700 MHz radio system and installation of cable trays along the Red Line.
- Completion of the project to replace all the Generation 2 track circuits in the rail system, which is a National Transportation Safety Board Recommendation and Safety Management Inspection corrective action.
- Installation of event recorders and reliability improvements to the Vehicle Monitoring Systems (VMS) on legacy fleets
- Development of automated processes to record maintenance and inspection activities for tunnel ventilation systems, drainage pumping stations, and other critical systems

#### State of Good Repair Investments

In addition to the safety investments, the FY2017-2022 CIP proposes nearly \$5.0 billion in funding to repair and replace assets to bring them into a state of good repair.

Key state of good repair investments in this six year plan include:

- Continuation of on-going rehabilitation and replacement of track and rail structures to achieve a state of good repair and a steady state of maintenance
- Replacement, rehabilitation, and repair of railcars, in addition to the NTSB-directed replacement of the three hundred 1000-series railcars, including:
  - Replacement of the 4000-series railcars (100)

- Replacement of the 5000-series railcars (192)
- Purchase of additional 7000-series railcars (28)
- Initiation of the replacement of the 2000/3000series railcars
- Continuation of the railcar scheduled preventive maintenance and component replacement program that promotes a state of good repair and improves the safety and reliability of the vehicles
- Replacement, rehabilitation and repair of buses
  - Replacement of approximately 100 buses per year
  - Rehabilitation of approximately 100 buses per year
  - Continuous scheduled preventive maintenance on the entire bus fleet
- Procurement of approximately 180 MetroAccess vehicles per year
- Replacement of approximately 88 escalators
- Rehabilitation of approximately 188 escalators
- Rehabilitation of approximately 97 elevators
- Major investment in the replacement or refurbishment of fare gates and fareboxes
- Completion of the Orange/Blue line rehabilitation effort

The proposal includes \$825 million for state of good repair investments in FY2017, including but not limited to the following significant investments:

- Continued rail line segment rehabilitation on the Orange/Blue Lines
- Increased investment in railcar rehabilitation program to rebuild railcar components to sustain the railcar lifecycle and improve reliability.
- Continued rehabilitation of Alexandria, Brentwood, and New Carrollton rail yards
- Full rehabilitation of 12 Metro stations and smaller scale rehabilitations of another 12 Metro stations
- Replacement of 22 escalators and rehabilitation of an additional 18 escalators
- Rehabilitation of 12 elevators
- Replacement of approximately 86 buses and the rehabilitation of another 100 buses
- Advancing the replacement of Southern Avenue and Royal Street bus garages with new facilities at Andrews Federal Campus and Cinder Bed Road
- Implementation of fare collection equipment replacement/refurbishment



#### FY2017 FY2018 FY2019 FY2020 FY2021 FY2022 6 Year Budget Plan Plan Plan Plan Plan Total (dollars in millions) Railcar Investments \$353.6 \$385.7 \$371.4 \$229.5 \$221.2 \$260.9 \$1,822.3 Rail Systems Investments \$104.3 \$162.0 \$160.6 \$140.1 \$109.0 \$111.8 \$787.8 Track and Structures Rehabilitation Investments \$89.3 \$107.9 \$113.7 \$116.8 \$117.3 \$120.7 \$665.7 Stations and Passenger Facilities Investments \$133.0 \$234.3 \$179.6 \$184.4 \$124.2 \$141.2 \$996.7 Bus and Paratransit Investments \$218.1 \$259.1 \$172.5 \$218.1 \$222.6 \$217.5 \$1,308.1 **Business Support Investments** \$51.6 \$59.7 \$353.2 \$66.5 \$63.5 \$56.4 \$55.5 Contingency \$13.2 \$13.2 \$13.2 \$13.2 \$13.2 \$66.2 -**Total Capital Programs** \$950.0 \$1,228.7 \$1,070.9 \$965.6 \$863.9 \$920.9 \$6,000.0

#### Finacial Plan by Investment Category



	CIP	<b>Multiyear In</b> Dollars in Mi					
(dollars in millions)	FY2017 Budget	FY2018 Plan	FY2019 Plan	FY2020 Plan	FY2021 Plan	FY2022 Plan	6 Year Total
Railcar Acquisition	\$203.8	\$266.2	\$269.4	\$127.6	\$117.9	\$148.7	\$1,133.6
Railcar Maintenance/Overhaul	\$115.0	\$94.9	\$93.9	\$94.8	\$96.1	\$97.5	\$592.1
Railcar Maintenance Facilities	\$34.8	\$24.6	\$8.0	\$7.0	\$7.2	\$14.8	\$96.6
Railcar Investments	\$353.6	\$385.7	\$371.4	\$229.5	\$221.2	\$260.9	\$1,822.3
Propulsion	\$39.8	\$48.1	\$44.2	\$45.4	\$49.0	\$55.1	\$281.7
Signals & Communications	\$64.5	\$113.8	\$116.5	\$94.7	\$60.0	\$56.7	\$506.1
Rail Systems Investments	\$104.3	\$162.0	\$160.6	\$140.1	\$109.0	\$111.8	\$787.8
Fixed Rail	\$78.9	\$88.8	\$98.2	\$96.4	\$96.0	\$96.7	\$555.1
Structures	\$10.4	\$9.7	\$8.6	\$10.1	\$10.4	\$13.2	\$62.5
Track Maintenance Equip	-	\$9.4	\$6.9	\$10.2	\$10.8	\$10.7	\$48.0
Track and Structures Rehabilitation							
Investments	\$89.3	\$107.9	\$113.7	\$116.8	\$117.3	\$120.7	\$665.7
Platforms & Structures	\$46.4	\$93.6	\$39.3	\$54.7	\$35.4	\$40.4	\$309.8
Vertical Transportation	\$47.5	\$61.6	\$62.6	\$62.2	\$50.2	\$58.2	\$342.3
Fare Collection	\$10.3	\$34.3	\$49.9	\$35.4	\$9.7	\$11.9	\$151.5
Station Systems	\$24.4	\$36.7	\$23.7	\$25.6	\$21.5	\$20.6	\$152.5
Parking Facilities	\$4.4	\$8.1	\$4.2	\$6.4	\$7.4	\$10.2	\$40.6
Stations and Passenger Facilities Investments	\$133.0	\$234.3	\$179.6	\$184.4	\$124.2	\$141.2	\$996.7
Bus Acquisition	\$66.6	\$67.9	\$50.8	\$102.7	\$102.7	\$102.9	\$493.6
Bus Maintenance/Overhaul	\$81.0	\$70.8	\$69.0	\$69.2	\$71.9	\$73.7	\$435.6
Bus Maintenance Facilities	\$55.0	\$99.1	\$38.3	\$31.8	\$33.8	\$25.9	\$284.0
Bus Passenger Facilities/Systems	\$6.7	\$9.8	\$2.5	\$2.4	\$2.7	\$2.6	\$26.8
Paratransit	\$8.8	\$11.4	\$12.0	\$11.9	\$11.5	\$12.4	\$68.0
Bus and Paratransit Investments	\$218.1	\$259.1	\$172.5	\$218.1	\$222.6	\$217.5	\$1,308.1
IT	\$40.8	\$52.7	\$45.5	\$49.8	\$42.7	\$42.1	\$273.5
MTPD	\$1.0	\$2.5	\$2.0	\$1.3	\$1.3	\$1.2	\$9.4
Support Equipment/Services	\$9.8	\$11.4	\$12.1	\$12.4	\$12.5	\$12.1	\$70.3
Business Support Investments	\$51.6	\$66.5	\$59.7	\$63.5	\$56.4	\$55.5	\$353.2
Contingency	-	\$13.2	\$13.2	\$13.2	\$13.2	\$13.2	\$66.2
Total Capital Programs	\$950.0	\$1,228.7	\$1,070.9	\$965.6	\$863.9	\$920.9	\$6,000.0



#### **Capital Reimbursable Budget**

Reimbursable capital projects are unique programs or projects sponsored or directed by jurisdictional partners. Separate funding has been provided by the project sponsor to support these projects. These projects are outside of the CFA and are not included within the base CIP discussed in this section.

	FY2017
Virginia	\$38.6
Dulles Extension Design/Build	\$11.3
Dulles Phase II	\$25.8
Potomac Yard Alternative Analysis	\$0.6
Project Development	\$0.8
District of Columbia	\$1.8
Minnesota Avenue Parking Garage Repairs	\$0.7
Project Development	\$1.1
Maryland	\$11.1
MTA Purple Line	\$10.0
Project Development	\$1.1
All Jurisdictional and Other Partners	\$0.5
Neutral Host	\$0.5
Total	\$52.0

**Reimbursable Projects** Dollars in Millions

\* Reimbursable projects are listed based on the location of the project.



# Appendix A - Capital Improvement Plan

	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	6 Year
Investment by Program	Budget	Plan	Plan	Plan	Plan	Plan	Total
Railcars							
1000 Series Rail Car Replacement	202.2	168.1	7.2	5.1	32.6	30.0	445.3
2000/3000 Series Rail Car Replacement	0.4	2.1	4.2	29.7	69.7	88.0	194.1
4000 Series Rail Car Replacement	-	96.0	54.0	2.4	1.3	21.4	175.1
Rail Car Acquisition (220 Rail Cars)	-	-	204.0	90.4	14.3	9.3	317.9
Test Track & Rail Car Commissioning Facility	1.2	-	-	-	-	-	1.2
Railcar Acquisition	203.8	266.2	269.4	127.6	117.9	148.7	1,133.6
Rail Car Rehabilitation Program	50.0	67.5	68.7	70.0	71.3	72.6	400.0
Rail Car Safety & Reliability Enhancements	5.0	6.5	4.3	3.9	3.9	3.9	27.6
Rail Preventive Maintenance	60.0	20.9	20.9	20.9	20.9	20.9	164.5
Railcar Maintenance/Overhaul	115.0	94.9	93.9	94.8	96.1	97.5	592.1
Rail Shop Repair Equipment	-	-	-	-	2.8	5.7	8.5
Rail Yard Facility Repairs	29.0	18.0	-	-	-	-	47.0
Rail Yard Hardening and Bus Security	1.5	1.5	-	-	-	-	3.0
7000 Series Rail Car HVAC Maintenance Facility	1.7	2.8	4.2	3.2	0.6	5.4	17.9
Storm Water Facility Assessment	0.2	2.3	3.8	3.8	3.8	3.8	17.8
Facilities Consolidation	2.4	-	-	-	-	-	2.4
Railcar Maintenance Facilities	34.8	24.6	8.0	7.0	7.2	14.8	96.6
Railcar Investments	353.6	385.7	371.4	229.5	221.2	260.9	1,822.3
Rail Systems							
Rail Power System Upgrades	17.5	33.8	29.4	29.8	33.4	40.5	184.4
AC Power Systems State of Good Repair	3.7	4.1	3.5	3.9	5.4	5.4	26.0
Traction Power State of Good Operations	18.6	10.3	11.3	11.7	10.3	9.3	71.3
Propulsion	39.8	48.1	44.2	45.4	49.0	55.1	281.7
Radio & Cellular Infrastructure Replacement Program	30.1	72.9	89.0	65.8	32.7	25.5	316.1
National Transportation Safety Board Recommendations	19.9	20.1	5.0	5.0	5.0	2.0	57.0
Automatic Train Control State of Good Repair	14.5	20.9	22.4	23.8	22.3	29.1	133.1
Signals & Communications	64.5	113.8	116.5	94.7	60.0	56.7	506.1
Rail Systems Investments	104.3	162.0	160.6	140.1	109.0	111.8	787.8
Track & Structures Rehabilitaion							
Track Welding Program	6.5	7.5	7.7	7.0	7.9	7.5	44.2
Replacement of Rail Track Signage	0.6	1.9	1.8	1.9	1.8	1.9	9.9
Track Grout Pad Rehabilitation	3.8	3.9	4.9	5.0	5.2	5.4	28.2
Track Structural Rehabilitation	2.4	2.5	2.6	2.6	2.7	2.8	15.6
Third Rail Rehabilitation and Replacement	-	7.2	7.6	7.6	8.2	8.5	39.1
Track Rehabilitation	52.4	56.7	65.8	65.1	65.5	66.0	371.5
General Project Administration and Planning	3.0	3.0	3.5	3.5	3.5	3.5	20.0
Wayside Work Equipment	3.6	5.0	3.2	2.5	-	-	14.2
System-wide Infrastructure Rehabilitation	0.2	-	-	-	-	-	0.2
Transit Asset Management System	3.9	-	-	-	-	-	3.9



	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	6 Year
Investment by Program	Budget	Plan	Plan	Plan	Plan	Plan	Total
General Engineering	1.5	-	-	-	-	-	1.5
Emergency Construction	1.0	1.2	1.2	1.2	1.2	1.2	7.0
Fixed Rail	78.9	88.8	98.2	96.4	96.0	96.7	555.1
Station/Tunnel Leak Mitigation	7.1	5.5	8.6	10.1	10.4	13.2	55.0
Bush Hill Aerial Structure Rehabilitation	2.0	4.2	-	-	-	-	6.2
Farragut North Beam Rehabilitation	1.3	-	-	-	-	-	1.3
Structures	10.4	9.7	8.6	10.1	10.4	13.2	62.5
Track Maintenance Equipment	-	9.4	6.9	10.2	10.8	10.7	48.0
Track Maintenance Equip	-	9.4	6.9	10.2	10.8	10.7	48.0
Track and Structures Rehabilitation Investments	89.3	107.9	113.7	116.8	117.3	120.7	665.7
Stations and Passenger Facilities							
Bicycle & Pedestrian Facilities: Capacity Improvements	1.7	2.0	2.0	2.0	2.0	2.0	11.7
Station Rehabilitation Program	10.9	11.8	11.8	11.7	11.8	11.8	69.8
Station Entrance Canopies	6.8	14.7	16.0	7.4	10.5	-	55.4
Red Line Rehabilitation Stage Two	-	4.5	9.5	33.6	11.0	26.5	85.0
Orange/Blue Line Rehabilitation Stage One	27.0	60.6	-	-	-	-	87.6
Accessible Station Signage	-	0.1	0.1	0.1	0.1	0.1	0.4
Platforms & Structures	46.4	93.6	39.3	54.7	35.4	40.4	309.8
Elevator Rehabilitation	8.6	8.6	8.2	8.2	8.2	8.2	50.2
Escalator Rehabilitation	7.7	12.5	12.3	12.3	12.3	12.3	69.5
Elevator/Escalator Repairables	3.6	5.6	5.6	5.6	5.6	5.6	31.6
Escalator Replacement	27.7	34.9	36.4	36.0	24.0	32.0	191.1
Vertical Transportation	47.5	61.6	62.6	62.2	50.2	58.2	342.3
Integrating regional NEXTFARE System	0.8	0.5	0.1	0.1	-	-	1.5
Fare Collection Modernization	9.5	33.8	49.8	35.2	9.7	11.9	150.0
Fare Collection	10.3	34.3	49.9	35.4	9.7	11.9	151.5
Fire Systems	6.0	5.7	4.0	2.0	-	-	17.7
Station Cooling Program	4.1	6.6	7.0	10.8	8.6	6.6	43.6
Station Lighting Improvements	4.4	5.3	8.1	8.2	8.2	9.2	43.5
Raising Vent Shafts Vicinity Federal Triangle & Protecting							
System Core	6.0	10.1	-	-	-	-	16.1
Improving Drainage	3.5	4.5	-	-	-	-	8.0
Fire Alarm System Upgrade Project (NFPA72)	0.4	4.4	4.6	4.7	4.7	4.8	23.6
Station Systems	24.4	36.7	23.7	25.6	21.5	20.6	152.5
Parking Garage Rehabilitation	4.4	8.1	4.2	6.4	7.4	10.2	40.6
Parking Facilities	4.4	8.1	4.2	6.4	7.4	10.2	40.6
Stations and Passenger Facilities Investments	133.0	234.3	179.6	184.4	124.2	141.2	996.7
Bus and Paratransit		~ <b>-</b> ~		100 -	100 -	100.0	100 -
Bus Replacement	66.6	67.9	50.8	102.7	102.7	102.9	493.6
Bus Acquisition	66.6	67.9	50.8	102.7	102.7	102.9	493.6
Automatic Vehicle Location Equipment	2.3	-	-	-	-	-	2.3
Bus Repair Equipment	2.3	3.8	3.8	4.5	5.0	5.0	24.4



	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	6 Year
Investment by Program	Budget	Plan	Plan	Plan	Plan	Plan	Total
Bus Rehabilitation Program	35.0	46.1	43.4	44.7	46.0	47.4	262.5
Bus Camera Installation & Replacement	0.9	4.2	5.1	3.4	3.6	3.6	20.8
Bus Repairables	5.6	6.5	6.5	6.5	7.0	7.5	39.6
Bus Preventive Maintenance	35.0	10.2	10.2	10.2	10.2	10.2	86.0
Bus Maintenance/Overhaul	81.0	70.8	69.0	69.2	71.9	73.7	435.6
Underground Storage Tank Replacement	1.2	2.8	4.4	4.7	4.9	4.9	22.8
Bladensburg Shop Reconfigure	1.7	-	-	-	-	-	1.7
Southern Avenue Bus Garage Replacement	25.0	68.7	13.4	5.0	1.2	2.7	116.0
Royal Street Bus Garage Replacement (Cinder Bed Road)	20.0	16.3	0.5	-	-	-	36.9
Shepherd Parkway Bus Facility	2.0	4.8	1.5	-	-	-	8.3
Bus Garage Facility Repairs	3.2	-	-	-	-	-	3.2
CTF Electrical Upgrade	0.4	-	-	-	-	-	0.4
Pollution Prevention for Track Fueling Areas	0.2	3.4	3.3	3.8	3.8	3.8	18.2
Bladensburg Garage	1.5	3.1	15.1	18.3	23.9	14.6	76.5
Bus Maintenance Facilities	55.0	99.1	38.3	31.8	33.8	25.9	284.0
Bus Priority Corridor Network	3.1	-	-	-	-	-	3.1
Bus Planning	0.1	0.5	0.7	0.7	0.7	0.8	3.6
Bus Customer Facility Improvements	1.0	1.7	1.8	1.7	2.0	1.9	10.0
Traffic Signal Prioritization	2.5	7.6	-	-	-	-	10.1
Bus Passenger Facilities/Systems	6.7	9.8	2.5	2.4	2.7	2.6	26.8
MetroAccess Fleet Acquisition	8.8	11.4	12.0	11.9	11.5	12.4	68.0
Paratransit	8.8	11.4	12.0	11.9	11.5	12.4	68.0
Bus and Paratransit Investments	218.1	259.1	172.5	218.1	222.6	217.5	1,308.1
Business Support							
Bus & Rail Asset Management Software	2.6	2.2	2.9	4.3	3.4	3.4	18.8
Bus Operations Support Software	0.6	2.0	1.4	4.9	1.6	1.6	12.1
IT Capital Program Business Process Reengineering and Program	2 1	5.2	( )	( )	( )	( )	26.1
Support Data Centers and Infrastructures	3.1	5.3	6.9 2.8	6.9	6.9 2.7	6.9	36.1
	3.5	3.8	3.8	3.8	3.7	3.7	22.2
Document Management System Enterprise Geographic Information System	1.0	1.0	1.0	1.0	1.0	1.0	6.0
Sensitive Data Protection Technology	0.4	0.9	0.9	0.9	0.9	0.9	4.6
	0.5	1.2	1.3	2.2	1.5	1.5	8.3
Management Support Software Metro IT One Stop and Office Automation	14.5	17.3	11.8	9.8	7.5	7.5	68.4
Police Dispatch and Records Management	0.6	0.8	0.9	0.9	0.9	0.9	5.1
Network and Communications	2.0	1.3	1.3	2.0	1.5	1.5	9.7
Customer Electronic Communications & Outreach	3.2	4.8	4.9	5.9	6.1	6.3	31.2
	1.0	1.5	1.5	1.5	1.5	1.5	8.5
Rail Operations Support Software	2.0	3.4	3.7	4.6	4.4	4.4	22.5
Data Governance and Business Intelligence	0.5	0.9	1.1	1.1	1.1	1.0	5.6
Rail Mileage Based Asset Management	0.2	0.1	-	-	-	-	0.3
Safety Measurement System	2.4	2.2	2.1	0.1	0.7	-	7.4
Rail Scheduling System Upgrade	1.2	2.3	-	-	-	-	3.5



	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	6 Year
Investment by Program	Budget	Plan	Plan	Plan	Plan	Plan	Total
Wireless Communication Infrastructure	1.5	1.7	-	-	-	-	3.2
IT	40.8	52.7	45.5	49.8	42.7	42.1	273.5
Police Emergency Management Equipment	0.1	0.2	0.2	0.2	0.2	0.2	1.0
Police Portable Radio Replacement	0.0	0.9	0.8	0.1	0.0	0.0	2.0
Support Equipment - MTPD	0.7	1.4	1.0	1.0	1.0	1.0	6.1
Police Substation District 2	0.1	-	-	-	-	-	0.1
Special Operations Division Facility	0.2	-	-	-	-	-	0.2
MTPD	1.0	2.5	2.0	1.3	1.3	1.2	9.4
Service Vehicle Replacement & Leasing	2.7	1.8	2.3	1.9	2.0	4.8	15.5
Materials Handling Equipment	-	0.5	0.6	0.6	0.6	0.6	2.9
Currency Processing Machines	-	0.6	0.6	0.9	0.9	-	3.0
Environmental Compliance Project	1.0	1.6	2.3	1.9	2.0	2.0	10.8
Core & System Capacity Project Development	0.6	1.0	-	0.1	-	-	1.7
Credit Facility	3.0	1.8	1.8	1.8	1.8	1.8	12.0
Roof Rehabilitation and Replacement	1.8	4.0	4.5	4.4	5.2	3.0	22.9
Rehabilitation of Non-Revenue Facilities	0.1	-	-	0.8	-	-	0.9
Sustainability Investments - Pilot Program	0.6	-	-	-	-	-	0.6
Support Equipment/Services	9.8	11.4	12.1	12.4	12.5	12.1	70.3
Business Support Investments	51.6	66.5	59.7	63.5	56.4	55.5	353.2
Contingency	-	13.2	13.2	13.2	13.2	13.2	66.2
Total Capital Programs	950.0	1,228.7	1,070.9	965.6	863.9	920.9	6,000.0



# **1000 Series Rail Car Replacement**

#### **Project Description**

This project replaces all 300 of the 1000 series railcars, which were purchased between 1974 and 1978, with new 7000 Series railcars. This project is one component of a combined program plan structured to avoid repetitive developmental cost associated with a new car design and procurement. The total estimated cost of this project is approximately \$669 million. The FY2016 and prior project cost is \$212 million. The FY2017-2022 project plan includes \$445 million, consistent with the current project schedule. The remaining \$12 million is planned beyond FY2021.

#### Safety Impact

The replacement of the 1000 series railcars was the subject of NTSB recommendations which recommended the replacement of all 1000 series railcars. The new 7000 series railcars have a more crashworthy design which includes energy absorption zones in the front of the train to protect train operators and passengers. New 7000 series cars also include an improved door system which allows for better evacuation of passengers in emergency situations.

#### Deliverables

• Continue delivery of 7000 Series Rail cars at a planned rate of 12 cars a month

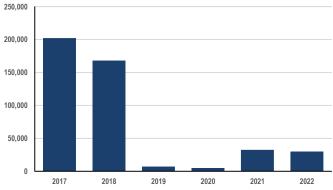
## Project Financials - CIP0057

Budget (in 000s)	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2017 to FY2022
Personnel	\$2,028	\$1,686	\$72	\$51	\$327	\$301	\$4,465
Non-Personnel	\$200,170	\$166,417	\$7,147	\$5,081	\$32,270	\$29,731	\$440,815
Total	\$202,197	\$168,103	\$7,219	\$5,133	\$32,597	\$30,032	\$445,280

## **Planned Funding Sources**

FY2017
\$161,231,645
\$13,265,755
\$27,700,000
\$202,197,400

#### **Financial Summary**



# **Investment Category:** Railcar **Program:** Railcar Acquisition





## 2000/3000 Series Rail Car Replacement

# **Investment Category:** Railcar **Program:** Railcar Acquisition

#### **Project Description**

This project replaces all 366 of the 2000 and 3000 series railcars, which were purchased between 1983 and 1988, with new 8000 series railcars. The total estimated cost of this project is approximately \$1.4 billion. The FY2017-2022 project plan includes \$194 million, consistent with the current project schedule. The remaining \$1.2 billion is planned beyond FY2022.



#### Safety Impact

The replacement of the 2000/3000 railcar fleet with the new 8000 Series will improve the reliability and safety of the WMATA system. The 8000 series railcars will include the most modern safety protections for train operators and riders including more efficient door release levers, improved communication and lighting as well as improved crashworthiness.

#### Deliverables

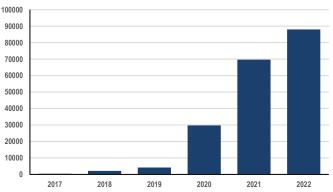
• Begin design and development activities for the replacement of the 2000/3000 Series railcars.

#### **Project Financials - CIP0059**

Budget (in 000s)	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2017 to FY2022
Personnel	\$344	\$1,806	\$3,563	\$28,259	\$66,184	\$85,360	\$185,515
Non-Personnel	\$61	\$319	\$629	\$1,487	\$3,483	\$2,640	\$8,619
Total	\$404	\$2,124	\$4,192	\$29,746	\$69,668	\$88,000	\$194,134

#### **Planned Funding Sources**

Budget	FY2017
Fed Formula SOGR - 5337	\$404,403
Total	\$404,403





# Test Track & Rail Car Commissioning Facility

# **Investment Category:** Railcar **Program:** Railcar Acquisition

#### **Project Description**

This project designs and constructs 10,000 feet of test track between the College Park and Greenbelt Metrorail stations. In addition, this project includes the design and construction of a multi-storey Commissioning facility and parking facility in the Greenbelt Rail Yard. Both facilities will be used to commission and test new and rehabilitated railcars.



#### Safety Impact

This new facility will be utilized for identifying safety and operating defects on newly acquired railcars.

#### Deliverables

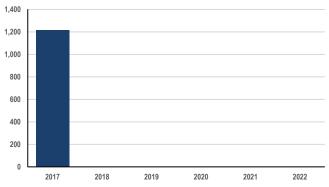
- Commissioning facility parking garage complete
- Contract closeout September 2016
- Project Closeout December 2016

#### **Project Financials - CIP0071**

Budget (in 000s)	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2017 to FY2022
Personnel	\$737	\$0	\$0	\$0	\$0	\$0	\$737
Non-Personnel	\$482	\$0	\$0	\$0	\$0	\$0	\$482
Total	\$1,218	\$0	\$0	\$0	<b>\$0</b>	\$0	\$1,218

#### **Planned Funding Sources**

Budget	FY2017
PRIIA	\$1,218,350
Total	\$1,218,350





# **Rail Car Rehabilitation Program**

Investment Category: Railcar Program: Railcar Maintenance/Overhaul

#### **Project Description**

This project provides for the scheduled overhaul of repairable railcar components to sustain the railcar lifecycle. This project will support scheduled overhauls in order to maintain a railcar state of good repair, improve lifecycle safety and railcar reliability. Approximately onefifth of the fleet (225 cars), are subject to heavy overhaul annually. Major heavy overhaul components include replacement of wheels, brake systems, traction motors and trucks.

# Program: Railcar Maintenance/Overhaul



#### Safety Impact

This program supports scheduled railcar overhauls which work to maintain safe railcar operation throughout the Metro system. One-fifth of the Metro railcar fleet is scheduled for major overhaul annually which includes replacement of wheels, brakes and traction motors. These preventive measures help to ensure the safety of Metro staff and passengers while on the metrorail system.

#### Deliverables

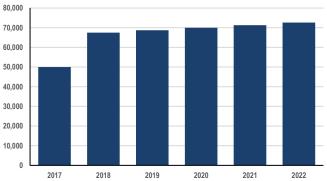
- Schedule major overhauls necessary to maintain fleet lifecycle.
- Identify overhaul components, assembly and subassembly float levels.

#### **Project Financials - CIP0063**

Budget (in 000s)	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2017 to FY2022
Personnel	\$46,369	\$62,574	\$63,701	\$64,883	\$66,091	\$67,334	\$370,952
Non-Personnel	\$3,631	\$4,900	\$4,988	\$5,081	\$5,175	\$5,273	\$29,048
Total	\$50,000	\$67,473	\$68,690	\$69,964	\$71,266	\$72,607	\$400,000

#### **Planned Funding Sources**

Budget	FY2017
Fed Formula SOGR - 5337	\$50,000,000
Total	\$50,000,000





# **Rail Car Safety & Reliability Enhancements**

#### **Project Description**

This project performs engineering analysis, diagnosis, testing and resolution of safety, maintenance and operational issues relating to the railcar fleet and its interaction with track work, automatic train control, communication and power systems, resolving compatibility issues across the various fleets and infrastructure related to changes and aging technology which improves the safety and reliability of railcars.

#### **Investment Category:** Railcar Program: Railcar Maintenance/Overhaul



#### Safety Impact

This project will replace radios in railcars which will improve train operator communication and improve safety for passengers for Emergency Passenger Call Stations (PCSs) within the 5000 series railcar fleet. Improvements to the Exterior Emergency Exit doors will also improve safety and reliability on the 4000 series fleet.

#### Deliverables

• Resolve safety, reliability and compatibility issues across the various fleets. The following deliverables will be implemented across different fleets as needed: install emergency exterior door releases, resolve wrong side door opening issue, install communications control panels, install Railcar rollback prevention and precision stopping, and complete the improvements to the HVAC systems for the 5000 series railcars. In addition to these deliverables, this project is utilized to perform engineering analysis, diagnostics and testing on WMATA's fleet as necessary throughout the year.

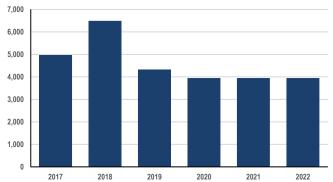
							FY2017 to	
Budget (in 000s)	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2022	
Personnel	\$968	\$1,891	\$330	\$0	\$0	\$0	\$3,189	
Non-Personnel	\$4,008	\$4,603	\$4,000	\$3,948	\$3,948	\$3,948	\$24,455	
Total	\$4,976	\$6,494	\$4,330	\$3,948	\$3,948	\$3,948	\$27,644	

#### Project Financials - CIP0067

#### Planned Funding Sources

Budget	FY2017
PRIIA	\$4,975,895
Total	\$4,975,895

#### **Financial Summary**





# **Rail Preventive Maintenance**

Investment Category: Railcar Program: Railcar Maintenance/Overhaul

#### **Project Description**

This project will provide preventive maintenance to keep the WMATA Rail fleet in a state of good repair. Funding from this project provides the labor required to provide upgrades, repairs, and maintenance to capital assets that have a useful life of over one year.

Preventive Maintenance is funded partially by this project and partially by the operating budget.



#### Safety Impact

This project provides resources for maintenance of railcars including required upgrades, repairs and replacement of critical elements. The activities performed by this project increase railcar safety and reliability thereby sustaining the railcar lifelong usability.

#### Deliverables

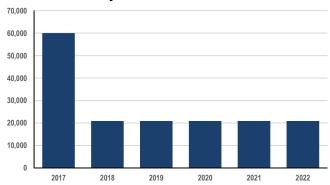
• Routine scheduled maintenance and minor repairs to railcar fleet.

### **Project Financials - CIP0142**

Budget (in 000s)	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2017 to FY2022
Personnel	\$60,000	\$20,900	\$20,900	\$20,900	\$20,900	\$20,900	\$164,500
Total	\$60,000	\$20,900	\$20,900	\$20,900	\$20,900	\$20,900	\$164,500

#### **Planned Funding Sources**

Budget	FY2017
Fed Formula SOGR - 5337	\$60,000,000
Total	\$60,000,000





# **Rail Yard Facility Repairs**

#### **Project Description**

This project is for the rehabilitation of Alexandria, Brentwood and New Carrollton Rail yards that were put into service between 1976 and 1983. The scope of work varies across the facilities and rehabilitation work will include all systems and infrastructure to increase overall efficiency. Safety hazard corrections and emergency rehabilitation work at other rail yards will be done as needed. Rehabilitation of the railcar lifts at rail yards is also included.

#### **Investment Category:** Railcar **Program:** Railcar Maintenance Facilities



#### Safety Impact

The project was created to rehabilitate and replace various rail maintenance facilities to provide a safe and modern working environment with more reliable equipment so that maintenance personnel may continue to safely perform their work and ensure a reduction in operational disruptions. Repairs include but not limited to: rehab of railcar lifts, improvements to lighting systems, upgrades to Hazmat storage equipment and replacement of switch gears.

#### Deliverables

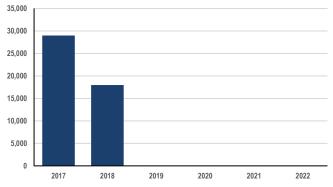
- Major rehab and construction work to be performed at Alexandria Service and Inspection (S&I) Shop.
- Major rehab and construction work to be performed at Alexandria Track and Structures (TRST) Building.
- Major rehab and construction work to be performed at Brentwood Service and Inspection (S&I) Shop
- Includes HVAC equipment replacement, electrical, lighting and shop space work

#### **Project Financials - CIP0116**

Budget (in 000s)	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2017 to FY2022
Personnel	\$3,411	\$2,114	\$0	\$0	\$0	\$0	\$5,525
Non-Personnel	\$25,589	\$15,863	\$0	\$0	\$0	\$0	\$41,453
Total	\$29,000	\$17,977	\$0	\$0	\$0	\$0	\$46,977

#### **Planned Funding Sources**

Budget	FY2017
PRIIA	\$29,000,000
Total	\$29,000,000





# **Rail Yard Hardening and Bus Security**

**Investment Category:** Railcar **Program:** Railcar Maintenance Facilities

#### **Project Description**

This project will provide for the hardening of various rail yards and enhance CCTV security at stations. A portion of the funding for this project is provided by dedicated Federal security grants.



#### Safety Impact

This project improves the safety and security in rail yards, bus garages, and Metro stations by installing the latest CCTV camera systems, access control systems, laser intrusion detection systems (LIDS), and portal approach warning systems (PAWS) to monitor and contain sensitive areas of operations and public customer spaces.

#### Deliverables

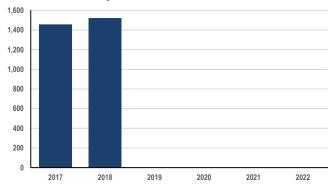
• Complete CCTV enhancements at first 6 of 7 stations on current contract: Minnesota Ave., Fort Totten, Georgia Ave., Congress Heights, Brookland, and Suitland

#### **Project Financials - CIP0145**

Budget (in 000s)	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2017 to FY2022
Personnel	\$437	\$456	\$0	\$0	\$0	\$0	\$894
Non-Personnel	\$1,020	\$1,065	\$0	\$0	\$0	\$0	\$2,085
Total	\$1,457	\$1,521	\$0	\$0	\$0	\$0	\$2,979

#### **Planned Funding Sources**

Budget	FY2017
Fed Formula SOGR - 5337	\$1,457,369
Total	\$1,457,369





# 7000 Series Rail Car HVAC Maintenance Facility

#### **Project Description**

This project will construct elevated platforms at rail yard facilities to allow for the maintenance of the new 7000 series railcar HVAC maintenance system. The HVAC system of the new 7000 series railcars is located on top of the cars and WMATA currently does not have the capability to maintain the new HVAC units in a safe and efficient manner.

#### Investment Category: Railcar Program: Railcar Maintenance Facilities



#### Safety Impact

This project will ensure the safety and ability of the maintenance crews to adequately perform HVAC maintenance on the new 7000 series railcars, which require safe access to the roof of each car.

#### Deliverables

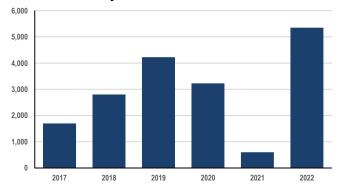
- Completion of 7000 Series rooftop access at New Carrollton Yard
- Exercise Option 1 7000 Series rooftop access at West Falls Church

#### **Project Financials - CIP0204**

Budget (in 000s)	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2017 to FY2022
Personnel	\$270	\$445	\$671	\$512	\$95	\$850	\$2,844
Non-Personnel	\$1,430	\$2,357	\$3,554	\$2,713	\$505	\$4,500	\$15,059
Total	\$1,700	\$2,802	\$4,225	\$3,225	\$600	\$5,350	\$17,902

#### Planned Funding Sources

Budget	FY2017
PRIIA	\$1,700,000
Total	\$1,700,000





## **Storm Water Facility Assessment**

**Investment Category:** Railcar **Program:** Railcar Maintenance Facilities

#### **Project Description**

This project identifies, evaluates, designs and implements modifications to WMATA's existing stormwater management infrastructure and facilities to provide best management practices which comply with federal, state, and local stormwater management requirements.



#### Safety Impact

This project addresses environmental safety concerns due to storm drainage and management practices to more stringently control discharge into surrounding areas around WMATA facilities.

#### Deliverables

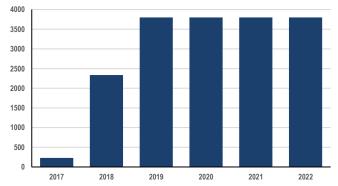
- First design task to be started in FY2017
- Report, cost estimate and implementation schedule to be completed FY2017

## **Project Financials - CIP0211**

Budget (in 000s)	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2017 to FY2022
Personnel	\$231	\$2,338	\$3,800	\$3,800	\$3,800	\$3,800	\$17,769
Total	\$231	\$2,338	\$3,800	\$3,800	\$3,800	\$3,800	\$17,769

#### **Planned Funding Sources**

Budget	FY2017
Fed Formula - 5307	\$230,505
Total	\$230,505





### **Facilities Consolidation**

**Investment Category:** Railcar **Program:** Railcar Maintenance Facilities

### **Project Description**

This project will include the purchase of up to three existing warehouses or yard spaces to provide dedicated space for relocated maintenance departments displaced by rail yard projects and who are not required to be located in an active Metrorail yard. This project will also facilitate the consolidation of other functions into more efficient locations.



### Safety Impact

Relocation from rail yards will reduce employee injuries and equipment incidents, providing a safer work environment

### Deliverables

- Final design documents completed September 2016
- Utility installation completion December 2016
- Substantial construction of warehouse, support and office space completed April 2017
- Relocate departments to renovated building to begin June 2017

Budget (in 000s)	FY2017	FY2018	FY2019	FY2020	FY2021	
Personnel	\$611	\$0	\$0	\$0	\$0	
Non-Personnel	\$1,833	\$0	\$0	\$0	\$0	

\$0

### **Project Financials - CIP0231**

Planned	Funding	Sources
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Total

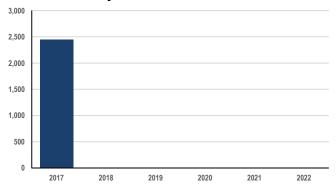
Budget	FY2017
M25	\$2,444,665
Total	\$2,444,665

\$2,445

### **Financial Summary**

**\$0** 

**\$0** 



**\$0** 



FY2017 to

FY2022

\$611

\$1,833

\$2,445

FY2022

\$0

\$0

**\$0** 

### **Rail Power System Upgrades**

Investment Category: Rail Systems Program: Propulsion

### **Project Description**

This project incrementally improves the traction-power system to increase power supply capacity to support the future expanded use of eight car trains. The increase from six to eight cars increases power requirements of each train as well as the load put on the traction-power system.

# Program: Propulsion

### Safety Impact

This project includes rehabilitation, replacement, and enhancement of rail power systems which provide improvements in the safety, performance, and reliability of rail system operations and help to prevent power related failures and incidents that may occur.

### Deliverables

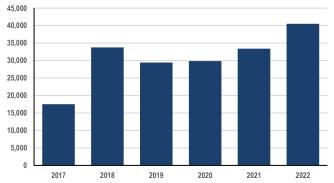
- Complete three tie breaker stations (TBS) upgrades on the Orange/Blue line
- Complete four traction power sub-stations (TPSS) on the Orange/Blue line
- Begin upgrades at remaining three locations: Ogden Street, 56th Place and 67th Avenue
- Complete traction power sub-station at Ft. Mahan location (Q1 2017)

### **Project Financials - CIP0076**

Budget (in 000s)	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2017 to FY2022
Personnel	\$5,811	\$11,216	\$9,771	\$9,910	\$11,091	\$13,453	\$61,252
Non-Personnel	\$11,685	\$22,555	\$19,650	\$19,929	\$22,304	\$27,055	\$123,178
Total	\$17,496	\$33,771	\$29,422	\$29,839	\$33,395	\$40,508	\$184,431

### **Planned Funding Sources**

Budget	FY2017
M25	\$9,084,294
Rail Power System Upgrades	\$4,205,000
Rail Power System Upgrades	\$4,206,801
Total	\$17,496,095





### AC Power Systems State of Good Repair

### **Project Description**

This project consists of continuously improving and maintaining existing AC power systems in a State of Good Repair (SOGR) in order to deliver safe and reliable Metrorail operations. Obsolete and/or worn out equipment needs to be replaced on various life-cycles varying from 18 to 40 years. The equipment SOGR categories are switchgears, panel boards, transformers, cables, motor control centers, battery banks, lighting, generators, uninterrupted power systems (UPS) and associated conduit and connection equipment.

### Investment Category: Rail Systems Program: Propulsion



### Safety Impact

This project's objective is to address equipment which poses a safety hazard to our employees and/or has reached the end of its useful life and/or poses a threat to the safety and reliable delivery of AC power. This work reduces potential safety risks such as electrical equipment and cable fires, failure of related safety-critical systems and emergency power systems, as well as injuries to WMATA maintenance personnel.

### Deliverables

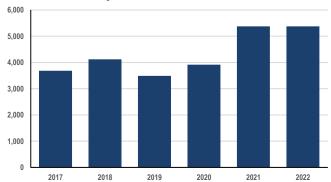
- Complete condition assessments and design activities
- Purchase of equipment and materials (Q4 FY2017) in preparation for first set of four AC switchboard rooms
- Material acquisition for the installation of feeder cables

### **Project Financials - CIP0252**

Budget (in 000s)	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2017 to FY2022
Personnel	\$618	\$691	\$586	\$657	\$902	\$902	\$4,358
Non-Personnel	\$3,067	\$3,429	\$2,906	\$3,259	\$4,475	\$4,475	\$21,610
Total	\$3,685	\$4,120	\$3,492	\$3,916	\$5,377	\$5,377	\$25,968

**Planned Funding Sources** 

Budget	FY2017
Fed Formula SOGR - 5337	\$3,685,314
Total	\$3,685,314





### **Traction Power State of Good Operations**

### **Investment Category:** Rail Systems **Program:** Propulsion

### **Project Description**

The program will provide for power equipment replacements of traction power related components which are beyond or nearing the end of their useful life to maintain a reliable traction power system.

The specific equipment to be replaced within substations are: AC and DC switchgears, AC transformers, Rectifier transformers, AC and DC panel boards, uninterruptible power systems (UPS), batteries and battery chargers, automatic voltage regulators, relays, bus duct, conduit, wire and associated installation / support equipment.

### Safety Impact

This project's objective is to address equipment which poses a safety hazard to our employees and/or has reached the end of its useful life and/or poses a threat to the safety and reliable delivery of DC power. This work reduces potential safety risks such as electrical equipment and cable fires, failure of related safety-critical systems such as the supervisory control systems at OCC/ROCC, as well as injuries to WMATA maintenance personnel.

### Deliverables

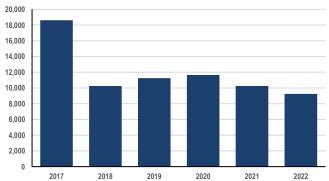
- Complete evaluation, design, and procurement for Stadium Armory traction power sub-station (TPSS) permanent solution
- Complete 1 Tie Breaker Station (TBS), 1 traction power sub-station (TPSS), 30,000 feet of cabling

Budget (in 000s)	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2017 to FY2022
Personnel	\$3,124	\$1,720	\$1,889	\$1,956	\$1,721	\$1,553	\$11,962
Non-Personnel	\$15,489	\$8,530	\$9,364	\$9,697	\$8,532	\$7,700	\$59,313
Total	\$18,613	\$10,250	\$11,253	\$11,653	\$10,253	\$9,253	\$71,275

### **Project Financials - CIP0253**

Budget	FY2017
Fed Formula SOGR - 5337	\$18,612,997
Total	\$18,612,997

### **Financial Summary**





### Radio & Cellular Infrastructure Replacement Program

### **Project Description**

This project will replace the existing WMATA Comprehensive Radio Communications System (CRCS) operating in 450-490 MHz frequency band (also referred to as T-Band) with a new system operating in the 700 MHz band, as required by the new Federal Communications Commission (FCC) T-Band relocation requirement that affects the agency's Ultra High Frequency radio system. This project also maintains the current CRCS in working order until the frequencies are secured and replaced.

### **Investment Category:** Rail Systems **Program:** Signals & Communications



### Safety Impact

The project will improve radio communications to better run the organization and provide reliable communications for emergency personnel and first responders. It also provides cellular communications to provide voice calls and text notifications for emergency alerts to and from MTPD and surrounding jurisdictional agencies.

### Deliverables

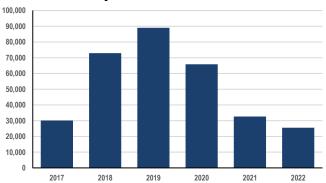
- Complete construction of JGB ROCC & BOCC improvements
- Complete DAS cable tray and cable installation for both 700 / 800 MHz Radio and Neutral Host on Red Line
- Begin construction 700MHz / 800MHz Metro Box Enclosures
- Complete design of above ground radio system.

Budget (in 000s)	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2017 to FY2022
Personnel	\$16,292	\$39,476	\$48,195	\$35,643	\$17,684	\$13,817	\$171,107
Non-Personnel	\$13,804	\$33,448	\$40,835	\$30,200	\$14,983	\$11,707	\$144,976
Total	\$30,096	\$72,924	\$89,030	\$65,843	\$32,667	\$25,525	\$316,084

### **Project Financials - CIP0136**

### **Planned Funding Sources**

Budget	FY2017
PRIIA	\$30,095,955
Total	\$30,095,955





## National Transportation Safety Board Recommendations

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

### **Project Description**

This project implements National Transportation Safety Board (NTSB) recommended safety improvements, corrective action plans, assessments and testing for systemwide implementation.



### Safety Impact

This project implements various National Transportation Safety Board (NTSB) recommended safety improvements, corrective action plans, and assessments.

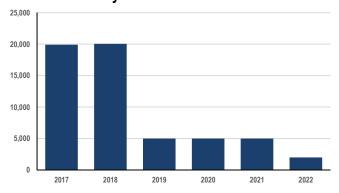
### Deliverables

- Replace 108 General Railway Signal Generation II Automatic Train Protection Modules
- Completion and close-out of program to monitor event recorder NTSB project
- Continue engineering support and project management support for Onboard Event Recorders

Budget (in 000s)	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2017 to FY2022
Personnel	\$5,417	\$68	\$0	\$0	\$0	\$0	\$5,485
Non-Personnel	\$14,489	\$19,982	\$5,000	\$5,000	\$5,000	\$2,000	\$51,472
Total	\$19,906	\$20,050	\$5,000	\$5,000	\$5,000	\$2,000	\$56,956

### **Planned Funding Sources**

Budget	FY2017
PRIIA	\$19,906,203
Total	\$19,906,203





### Automatic Train Control State of Good Repair

### **Project Description**

The Automatic Train Control (ATC) rooms and associated Train Control Room (TCR) and wayside equipment are aging. Obsolete and/or worn out equipment need to be replaced on various lifecycles varying from 20 to 40 years. The equipment categories are track circuits, Non Vital Processors, ATC Cables, switch machines, other types of TCR equipment (power supplies, etc.), and other types of wayside equipment (loops, junction boxes, snowmelters, signals, signs, etc.). This work will include the mainline stations and the Storage & Inspection (S&I) yards.

### Investment Category: Rail Systems Program: Signals & Communications



### Safety Impact

This project replaces ATC equipment approaching or beyond its lifecycle before there becomes a chance of resulting safety critical failures and operational delays. Wayside equipment is crucial in ensuring the safe operation of the metrorail system.

### Deliverables

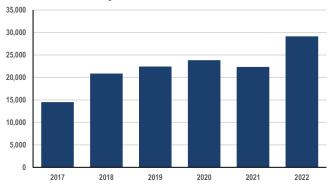
- High Frequency Track Circuit (HFTC) cable replacement at 95,000 feet
- Replace 20 mainline switches and install 18 switch machines
- Corrosion Control stray current testing at 15 locations
- Complete Phase 2 of the Asset Management Plan.

### **Project Financials - CIP0251**

Total	\$14,500	\$20,853	\$22,430	\$23,834	\$22,334	\$29,130	\$133,082
Non-Personnel	\$970	\$1,395	\$1,500	\$1,594	\$1,494	\$1,948	\$8,900
Personnel	\$13,530	\$19,458	\$20,930	\$22,240	\$20,841	\$27,182	\$124,182
Budget (in 000s)	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2017 to FY2022

### **Planned Funding Sources**

Budget	FY2017
Fed Formula SOGR - 5337	\$14,500,000
Total	\$14,500,000





### **Track Welding Program**

**Investment Category:** Track and Structures Rehabilitation **Program:** Fixed Rail

### **Project Description**

This ongoing project improves the electrical and signal conductivity of running rails, eliminates rail joint defects, reduces noise and minimizes rail wear. It also reduces maintenance and inspection costs by decreasing the number of open rail joints throughout the rail system. As of April 2016, there are approximately 2,000 open rail joints system wide. As a result of running rail replacement, approximately 1,000 new open joints are created each year. Thermite welding is also performed in areas where it is not practical to use flash butt welding equipment.

# <image>

### Safety Impact

Eliminating rail joints creates a continuous rail system that reduces unnecessary load on the track structure. Open joints create a weak point in a section of continuous running rail which places additional stress on crossties and fasteners, battered rail ends, and loose track bolts, which can all contribute to derailments.

### Deliverables

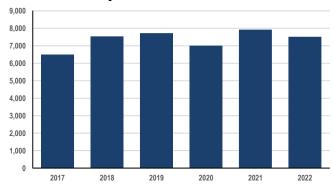
• Procure welding services contracts and specialized equipment to eliminate approximately 142 joints annually. This project is addressing wide-gauge track, which has negatively impacted the schedule of planned track welding work.

### **Project Financials - CIP0018**

Budget (in 000s)	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2017 to FY2022
Personnel	\$3,965	\$4,599	\$4,710	\$4,275	\$4,831	\$4,584	\$26,964
Non-Personnel	\$2,535	\$2,940	\$3,011	\$2,733	\$3,089	\$2,931	\$17,239
Total	\$6,500	\$7,539	\$7,721	\$7,008	\$7,920	\$7,515	\$44,203

### **Planned Funding Sources**

Budget	FY2017
PRIIA	\$6,500,000
Total	\$6,500,000





### Replacement of Rail Track Signage

**Investment Category:** Track and Structures Rehabilitation **Program:** Fixed Rail

### **Project Description**

This project replaces old, illegible roadway track signs and various other graphics indicating locations and warnings to employees, emergency responders and the general public. Track graphics are essential for safe operations and emergency response. Additionally, roadway signage requires replacement when damaged or deteriorated. The roadway graphic signs are system-wide (on the roadway fence, chain markers, warning signs on tunnel vent shaft doors, third rail power warning signs, track identification signs, etc.).



### Safety Impact

Legible signage is essential to identify track locations and hazards. Chain marker signs allow work crews to report proper locations to Rail Operations Central Control, which is essential to safely de-energize the third rail and identify work crews. Warning signs alert personnel to Roadway hazards and identify important physical characteristics, such as ventilation shafts and emergency exits.

### Deliverables

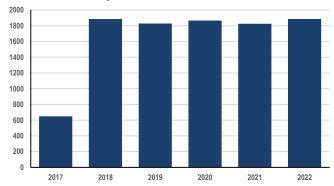
• Replace 1,500 Roadway signs annually

Budget (in 000s)	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2017 to FY2022
Personnel	\$396	\$1,150	\$1,115	\$1,138	\$1,113	\$1,150	\$6,063
Non-Personnel	\$253	\$735	\$713	\$728	\$712	\$735	\$3,876
Total	\$649	\$1 885	\$1 828	\$1 866	\$1.825	\$1 886	\$9 939

### **Planned Funding Sources**

**Project Financials - CIP0020** 

Budget	FY2017
PRIIA	\$648,605
Total	\$648,605





### **Track Grout Pad Rehabilitation**

**Investment Category:** Track and Structures Rehabilitation **Program:** Fixed Rail

### **Project Description**

This project rehabilitates the grout pads that support the track structure. WMATA has an inventory of approximately 160 miles (844,800 linear feet) of grout pads. Sections of track structure often require rehabilitation in conjunction with new fasteners, switches and switch machines. Grout pads on aerial structures and outside locations are repaired from spring through fall, while grout pads are repaired in tunnels during the winter months. The grout pads provide elevation and support for the running rails and are the main support for the rail fasteners, which maintain track geometry, cross-level and gauge.

### Safety Impact

Track grout pads support the rails and fasteners in direct fixation track, located in tunnels and on aerial bridges. Grout pads weather and crack over time, affecting the stability of the track, and the safe passage of revenue service. In addition, grout pads keep insulators in place to properly support the electrified third rail.

### Deliverables

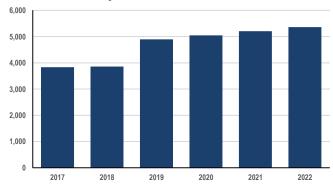
• Replace 9,200 linear feet of grout pads annually and procure cement material

### **Project Financials - CIP0021**

Budget (in 000s)	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2017 to FY2022
Personnel	\$3,605	\$3,627	\$4,599	\$4,743	\$4,892	\$5,041	\$26,507
Non-Personnel	\$230	\$232	\$294	\$303	\$312	\$322	\$1,692
Total	\$3,835	\$3,859	\$4,893	\$5,045	\$5,204	\$5,362	\$28,199

### **Planned Funding Sources**

Budget	FY2017
PRIIA	\$3,835,000
Total	\$3,835,000





### **Track Structural Rehabilitation**

**Investment Category:** Track and Structures Rehabilitation **Program:** Fixed Rail

### Project Description

This project rehabilitates structural components and restores elevated platforms, bridges and retaining walls to designed load carrying capacity. The goals are based on annual inspections and critical engineering assessments, as the loss of one of these structures could affect an entire Metrorail line segment.



### Safety Impact

Aerial structures elevate the track above physical obstructions such as roads, rivers, and properties. As with any type of bridge structure, essential components deteriorate while under constant heavy load, and require rehabilitation. When nearing the end of life cycle, concrete in retaining walls and elevated platforms can crack or spall, increasing the risk of debris falling on the track.

### Deliverables

- Pour 1,200 square feet of concrete and torque 250 bridge anchor bolts
- Replace 800 deck joints annually

### **Project Financials - CIP0022**

Budget (in 000s)	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2017 to FY2022
Personnel	\$2,092	\$2,172	\$2,270	\$2,332	\$2,405	\$2,483	\$13,753
Non-Personnel	\$274	\$285	\$298	\$306	\$315	\$325	\$1,802
Total	\$2,366	\$2,457	\$2,568	\$2,637	\$2,720	\$2,808	\$15,556

### **Planned Funding Sources**

Budget	FY2017
PRIIA	\$2,366,000
Total	\$2,366,000



### **Track Rehabilitation**

**Investment Category:** Track and Structures Rehabilitation **Program:** Fixed Rail

### **Project Description**

This project rehabilitates the track structure by replacing deteriorated running rail, crossties, direct fixation fasteners, third rail insulators and switches annually in addition to track stabilization and tamping. Track components require replacement when, based on industry standards, they become worn or unserviceable due to deterioration, excessive wear or defect development. Replacing these components maintains a state of good repair while preventing service delays and speed restrictions.

### Safety Impact

Track Rehabilitation addresses various track components and assets, which are essential to the safe passage of revenue service. Running rail guides revenue trains along the track system, while crossties, fasteners, and wellmaintained ballast maintain a stable track structure. Properly working switches are essential to safely divert trains between tracks. Insulators provide proper support and insulation of the third rail. When these components/ assets reach the end of life cycle, there is risk of derailment and fire.

### Deliverables

- Tamping of 42 miles of track to support crosstie renewal and replace 36,160 fasteners
- Replace 14 switches and replace 47,498 crossties
- Replace 11,999 insulators and eliminate 333 gauge rods

Budget (in 000s)	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2017 to FY2022
Personnel	\$20,631	\$21,557	\$25,003	\$24,737	\$24,885	\$25,068	\$141,880
Non-Personnel	\$31,766	\$35,172	\$40,794	\$40,360	\$40,601	\$40,901	\$229,594
Total	\$52,397	\$56,729	\$65,796	\$65,096	\$65,486	\$65,969	\$371,473

### Project Financials - CIP0024

### **Planned Funding Sources**

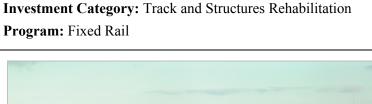
Budget	FY2017
PRIIA	\$52,397,000
Total	\$52,397,000



### **General Project Administration and Planning**

### **Project Description**

This project provides support for capital program management, professional services and grant administration improvements.





### Safety Impact

No specific safety justification applicable.

### Deliverables

- Professional and engineering services for program wide tasks
- Compliance activities for Grant management

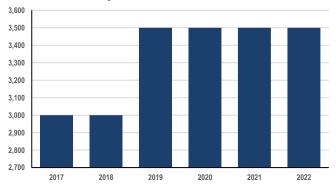
Project Financials - (	CIP0126			
Budget (in 000s)	FY2017	FY2018	FY2019	F

Budget (in 000s)	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2022
Non-Personnel	\$3,000	\$3,000	\$3,500	\$3,500	\$3,500	\$3,500	\$20,000
Total	\$3,000	\$3,000	\$3,500	\$3,500	\$3,500	\$3,500	\$20,000

### **Planned Funding Sources**

Budget	FY2017
System Performance	\$3,000,000
Total	\$3,000,000

### **Financial Summary**





FY2017 to

### Wayside Work Equipment

**Investment Category:** Track and Structures Rehabilitation **Program:** Fixed Rail

### **Project Description**

This project will install a safety signaling system at rail portals and other locations to alert personnel of approaching trains. This project will also develop a warning system to alert train operators about the presence of workers on the wayside.

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### Safety Impact

This project provides various warning systems to mitigate hazards of wayside workers in the roadway and ensures worker safety in tunnels when performing vital job functions.

### Deliverables

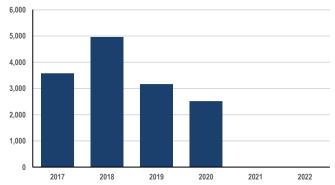
- Advertise and award contract to complete the Portal Approach Warning System (PAWS) at 19 remaining of 27 total locations.
- - Award and issue Notice to Proceed for the Train Wash Warning System at 4 yards.

### **Project Financials - CIP0133**

Budget (in 000s)	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2017 to FY2022
Personnel	\$2,075	\$2,878	\$1,835	\$1,457	\$0	\$0	\$8,245
Non-Personnel	\$1,505	\$2,088	\$1,331	\$1,057	\$0	\$0	\$5,981
Total	\$3,580	\$4,965	\$3,167	\$2,515	\$0	\$0	\$14,227

### **Planned Funding Sources**

Budget	FY2017
Fed Formula SOGR - 5337	\$3,579,844
Total	\$3,579,844





### System-wide Infrastructure Rehabilitation

**Project Description** 

This project includes completion of various system infrastructure rehabilitation contracts currently underway. This project includes, but is not limited to, station air conditioning system replacement, parking garage structure and lot repairs, urgent system repairs, correct standpipes as needed to meet pressure and flow requirements, camera installation and replacement at various WMATA facilities and various engineering studies. These activities are now completed through other projects in the Capital Improvement Program.

**Investment Category:** Track and Structures Rehabilitation **Program:** Fixed Rail



### Safety Impact

No specific safety justification applicable

### Deliverables

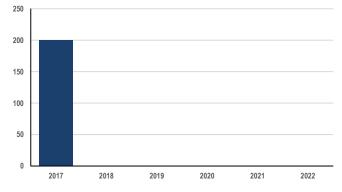
• Complete project closeout activities

### **Project Financials - CIP0138**

Budget (in 000s)	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2017 to FY2022
Personnel	\$30	\$0	\$0	\$0	\$0	\$0	\$30
Non-Personnel	\$170	\$0	\$0	\$0	\$0	\$0	\$170
Total	\$200	\$0	\$0	\$0	<b>\$0</b>	\$0	\$200

### **Planned Funding Sources**

Budget	FY2017
Fed Formula SOGR - 5337	\$200,000
Total	\$200,000





### Transit Asset Management System

**Investment Category:** Track and Structures Rehabilitation **Program:** Fixed Rail

### **Project Description**

This pilot project will develop an agency asset management model that will integrate WMATA's asset management practices into one, coordinated, organizational strategy, and provide the basis for continually improving asset management practices at WMATA. This project will build upon WMATA's previous asset management initiatives and systems. This project is funded by an FTA grant to demonstrate effective Transit Asset Management systems and "best practices" which can be replicated to improve public transportation asset management throughout the industry.

### Safety Impact

This project assists in maintaining Metro's assets in a state of good repair, ensuring safe and efficient operations.

### Deliverables

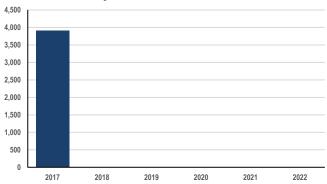
- Develop data structures, data collection plan and mobile application
- Begin Inventory and data collection
- Begin initial asset condition assessment

### **Project Financials - CIP0149**

Budget (in 000s)	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2017 to FY2022
Non-Personnel	\$3,906	\$0	\$0	\$0	\$0	\$0	\$3,906
Total	\$3,906	\$0	\$0	\$0	\$0	\$0	\$3,906

### **Planned Funding Sources**

Budget	FY2017
System Performance	\$3,905,906
Total	\$3,905,906





### **General Engineering**

**Investment Category:** Track and Structures Rehabilitation **Program:** Fixed Rail

### **Project Description**

This project provides for the development of architectural/ engineering concept designs to help define capital projects needed to resolve operational and maintenance problems that are identified as priority issues by the Chief Engineer.



### Safety Impact

General Engineering is used for the study, survey, and designs for critical safety related system structure issues that are not identified in the current capital program.

### Deliverables

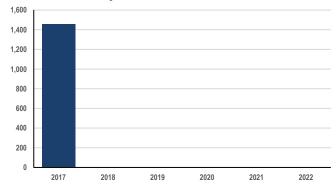
• Ongoing project to fund general engineering tasks, surveys and emergency engineering needs as identified

### **Project Financials - CIP0246**

Budget (in 000s)	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2017 to FY2022
Personnel	\$1,456	\$0	\$0	\$0	\$0	\$0	\$1,456
Total	\$1,456	<b>\$0</b>	\$0	<b>\$0</b>	<b>\$0</b>	\$0	\$1,456

### **Planned Funding Sources**

Budget	FY2017
Fed Formula - 5307	\$1,455,600
Total	\$1,455,600





### **Emergency Construction**

**Investment Category:** Track and Structures Rehabilitation **Program:** Fixed Rail

### **Project Description**

This project will include, but not be limited to repair of structural issues, urgent system repairs, correct safety hazards and emergency construction at various WMATA facilities.

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### Safety Impact

This project provides for emergency construction needs, such as but not limited to repair of structural issues, urgent system repairs, and correction of safety hazards that may have a vital impact on the ability to safely serve the customer or operate the system.

### Deliverables

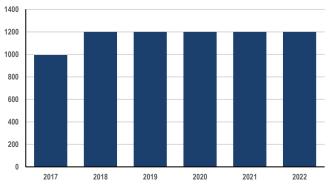
• Ongoing contingency for unforeseen emergency construction needs

### **Project Financials - CIP0247**

Total	\$995	\$1,200	\$1,200	\$1,200	\$1,200	\$1,200	\$6,995
Non-Personnel	\$995	\$1,200	\$1,200	\$1,200	\$1,200	\$1,200	\$6,995
Budget (in 000s)	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2017 to FY2022

### **Planned Funding Sources**

Budget	FY2017
System Performance	\$994,902
Total	\$994,902





### **Station/Tunnel Leak Mitigation**

### Project Description

Station Tunnel Leak Mitigation eliminates unsafe conditions created by water leaks for Metrorail passengers and employees and also prevents service delays resulting from water intrusion. This project restores the structural integrity of tunnel liners, prevents leaks, eliminates stray currents and reduces corrosion of wayside equipment and track components. In addition, drainage improvements will be implemented to allow water to properly train from the track bed.

### **Investment Category:** Track and Structures Rehabilitation **Program:** Structures



### Safety Impact

It is essential to mitigate and redirect leaks away from track and structural components, such as running rail, direct fixation fasteners, ATC equipment, and catwalks. This prevents broken rails, gauge issues, and stray current problems. Mitigation of leaks and rehabilitation of the drain system keep water flowing away from rail equipment and components, ensuring they do not deteriorate rapidly from water-related conditions.

### Deliverables

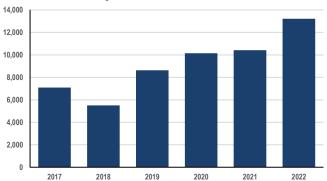
- Eliminate 1100 tunnel leaks
- Rehabilitate 87,000 linear feet of drainage
- Procure leak repair material and equipment

### **Project Financials - CIP0026**

Budget (in 000s)	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2017 to FY2022
Personnel	\$5,109	\$3,960	\$6,210	\$7,305	\$7,499	\$9,516	\$39,599
Non-Personnel	\$1,987	\$1,540	\$2,415	\$2,841	\$2,916	\$3,701	\$15,400
Total	\$7,096	\$5,500	\$8,625	\$10,146	\$10,415	\$13,217	\$54,999

### **Planned Funding Sources**

Budget	FY2017
PRIIA	\$7,096,000
Total	\$7,096,000





**Investment Category:** Track and Structures Rehabilitation **Program:** Structures

### **Project Description**

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 Blue line (the J-route) and is used by Metrorail daily.

### Safety Impact

This program will repair the post tension defects in the bridge structure in order to maintain safe operations as identified in inspections.

### Deliverables

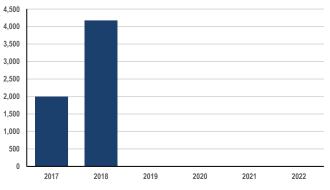
- Begin construction at the Bush Hill Aerial Structure
- CSX Right of Way acquisition, possible coordination agreement FY2017
- Complete technical evaluation of proposals received

### **Project Financials - CIP0205**

Budget (in 000s)	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2017 to FY2022
Personnel	\$496	\$1,036	\$0	\$0	\$0	\$0	\$1,531
Non-Personnel	\$1,504	\$3,142	\$0	\$0	\$0	\$0	\$4,646
Total	\$2,000	\$4,177	\$0	\$0	\$0	\$0	\$6,177

### **Planned Funding Sources**

Budget	FY2017
Fed Formula SOGR - 5337	\$1,999,751
Total	\$1,999,751





### Farragut North Beam Rehabilitation

**Investment Category:** Track and Structures Rehabilitation **Program:** Structures

### **Project Description**

This project reinforces a second structural beam at the Farragut North station. The Farragut North station was constructed as part of the first Metrorail line in 1976.



### Safety Impact

This project will address the need to reinforce Beam B9 at the Farragut North Station which sits directly below a major intersection and has shown signs of stress cracking, in order to ensure the integrity of the station and prevent any incident of future failure.

### Deliverables

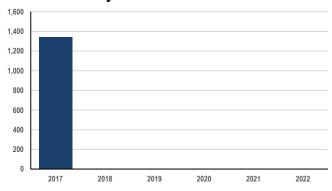
- Installation of concrete pedestals and steel column work
- Installation of structural retrofit of B9 Beam at Farragut North Station (Q4 FY2017)

### **Project Financials - CIP0216**

							FY2017 to
Budget (in 000s)	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2022
Personnel	\$326	\$0	\$0	\$0	\$0	\$0	\$326
Non-Personnel	\$1,017	\$0	\$0	\$0	\$0	\$0	\$1,017
Total	\$1,343	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	\$0	\$0	\$1,343

### **Planned Funding Sources**

Budget	FY2017
PRIIA	\$1,342,648
Total	\$1,342,648





## Bicycle & Pedestrian Facilities: Capacity Improvements

### **Project Description**

This project will increase bicycle parking capacity at Metrorail stations and improve bicycle and pedestrian connections to stations from local communities. In an effort to meet the 2030 goal of doubling bike ridership, this project also provides for the construction of new bicycle parking facilities. Additionally, this project replaces bike racks and lockers that are structurally damaged.

Investment Category: Stations and Passenger Facilities Program: Platforms & Structures



### Safety Impact

This project provides pedestrian and bicycle access improvements such as new sidewalks, lighting, covered bike racks, bike locker installations and ADA curb ramps. These improvements provide safe access for pedestrians, bicycles and persons with disabilities.

### Deliverables

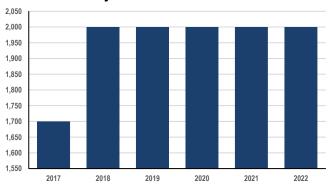
- Construction of two New Bike Facilities at West Hyattsville and Franconia Springfield Stations
- Replacement of 100 existing Bike lockers and racks that have reached end of useful life
- Software upgrades for Bike & Rides, 20 new pedestrian lights, 10 new sidewalks and 25 new ADA curb ramps
- Five new security cameras and two new bike rack covers

Budget (in 000s)	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2017 to FY2022
Personnel	\$211	\$248	\$248	\$248	\$248	\$248	\$1,453
Non-Personnel	\$1,489	\$1,752	\$1,752	\$1,752	\$1,752	\$1,752	\$10,247
Total	\$1,700	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000	\$11,700

### **Project Financials - CIP0035**

### **Planned Funding Sources**

Budget	FY2017
Fed Formula - 5307	\$1,700,000
Total	\$1,700,000





### Station Rehabilitation Program

**Project Description** 

Twenty-four stations are scheduled for rehabilitation every year which results in each station receiving rehabilitation every four years. This project consists of a thorough cleaning and power washing of all concrete and architectural features; repairs to doors, railings, paver tiles, granite surfaces, shelters, benches and signage. Also included are the painting of walls, railings, fare machines, ceiling coffer panels, doors, light poles, entrance gates, platform shelters and other metal surfaces.

Safety Impact

The station rehabilitation program improves safety at Metro stations by completing tasks such as repairing masonry surfaces (tile, granite and concrete walking surfaces); painting selected exterior and interior surfaces (including pedestrian crosswalks and traffic control markings on pavement); repairing metal components (including bus and rail shelters) and pressure washing masonry surfaces (including station entrances, mezzanines, platforms, granite edges and parapet walls).

### Deliverables

- Twelve major and twelve minor station rehabilitations are scheduled for FY2017 which include: Masonry surfaces cleaning/restoration, Shelters repairs including replacement of bench boards, glass, paint etc., Metallic surfaces refinished i.e. painted or re-bronzed, Station Graphics repaired/replaced, Escalator landing plates resurfaced, Masonry repaired or replaced as required and Doors repaired or replaced as needed
- Specific station work plan to be determined prior to start of FY2017
- Specific station workplan to be determined prior to start of FY2017

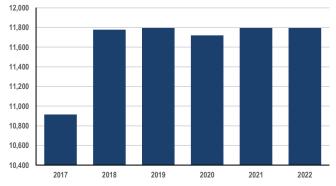
							FY2017 to
Budget (in 000s)	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2022
Personnel	\$10,915	\$11,777	\$11,795	\$11,720	\$11,795	\$11,795	\$69,797
Total	\$10.915	\$11,777	\$11,795	\$11.720	\$11,795	\$11,795	\$69.797

### Project Financials - CIP0087

### **Planned Funding Sources**

Budget	FY2017
System Performance	\$10,915,000
Total	\$10,915,000





**Investment Category:** Stations and Passenger Facilities Program: Platforms & Structures





\$69,797

### **Station Entrance Canopies**

Investment Category: Stations and Passenger Facilities Program: Platforms & Structures

### **Project Description**

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



### Safety Impact

The installation of canopies at station entrances will protect customers, employees and equipment against adverse weather conditions.

### Deliverables

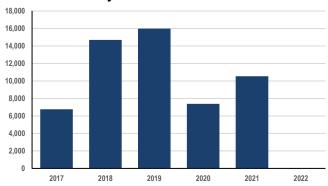
- Complete installation at Metro Center Station
- Brookland Station (east), canopy installation to begin
- Shady Grove Station installation to begin
- Brookland (east) and Shady Grove canopies to be completed in FY2018

### Project Financials - CIP0088

Budget (in 000s)	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2017 to FY2022
Personnel	\$387	\$842	\$916	\$423	\$605	\$0	\$3,173
Non-Personnel	\$6,374	\$13,849	\$15,073	\$6,958	\$9,944	\$0	\$52,198
Total	\$6,761	\$14,691	\$15,989	\$7,381	\$10,549	\$0	\$55,371

### **Planned Funding Sources**

Budget	FY2017
System Performance	\$6,761,289
Total	\$6,761,289





### Orange/Blue Line Rehabilitation Stage One

**Investment Category:** Stations and Passenger Facilities **Program:** Platforms & Structures

### **Project Description**

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



### Safety Impact

This project includes replacement of electrical equipment associated with reliable operation of power stations, as well as station ventilation, compliance with ADA customer requirements, and replacement of structures to ensure safe operation for customers at various locations on the Orange/ Blue line.

### Deliverables

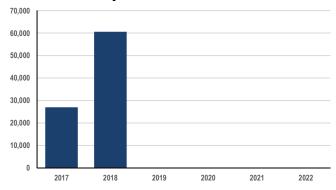
- Replacement of ceiling tiles (9 locations)
- Replacement of motor control centers (19 locations); Replacement of kiosks (3 stations)
- Replacement of ventilation and exhaust fans (7 locations)
- Replacement of platform ducts, sewage systems, and pumping stations (5 locations)

### Project Financials - CIP0110

Budget (in 000s)	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2017 to FY2022
Personnel	\$12,237	\$27,452	\$0	\$0	\$0	\$0	\$39,688
Non-Personnel	\$14,763	\$33,121	\$0	\$0	\$0	\$0	\$47,884
Total	\$27,000	\$60,572	\$0	<b>\$0</b>	<b>\$0</b>	\$0	\$87,572

### **Planned Funding Sources**

Budget	FY2017
Fed Formula SOGR - 5337	\$27,000,000
Total	\$27,000,000





### **Elevator Rehabilitation**

Investment Category: Stations and Passenger Facilities Program: Vertical Transportation

### **Project Description**

This project rehabilitates the oldest and poorest performing elevators as necessary to maintain elevator safety, availability and reliability. The elevators are rehabilitated with energy saving devices.



### Safety Impact

The safe and efficient operation and availability of elevators is critical to maintaining National Fire Protection Association safety standards, ADA requirements and WMATA internal operating procedures. WMATA rehabilitates elevators to improve station egress and to lessen the impact of necessary system upgrades and maintenance.

### Deliverables

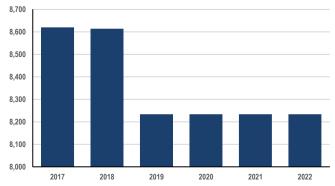
• Rehabilitate 12 elevators in multiple stations and WMATA facility buildings.

### Project Financials - CIP0072

Budget (in 000s)	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2017 to FY2022
Personnel	\$3,362	\$3,360	\$3,211	\$3,211	\$3,211	\$3,211	\$19,567
Non-Personnel	\$5,258	\$5,255	\$5,023	\$5,023	\$5,023	\$5,023	\$30,605
Total	\$8,620	\$8,614	\$8,234	\$8,234	\$8,234	\$8,234	\$50,172

### **Planned Funding Sources**

Budget	FY2017
PRIIA	\$8,620,000
Total	\$8,620,000



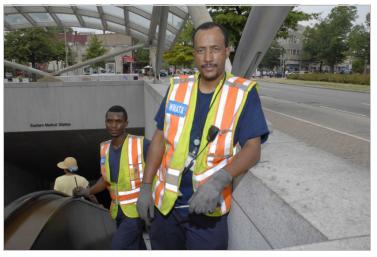


### **Escalator Rehabilitation**

Investment Category: Stations and Passenger Facilities Program: Vertical Transportation

### **Project Description**

This project rehabilitates and replaces escalators as necessary to maintain escalator availability, safety and reliability. The escalators are rehabilitated with energy saving devices.



### Safety Impact

The safe and efficient operation and availability of escalators is critical to maintaining National Fire Protection Association safety standards, ADA requirements and WMATA internal operating procedures. WMATA rehabilitates escalators to improve station egress and to lessen the impact of necessary system upgrades and maintenance.

### Deliverables

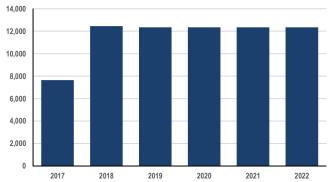
• Rehabilitate 18 escalators in various stations

### Project Financials - CIP0073

Budget (in 000s)	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2017 to FY2022
Personnel	\$689	\$1,121	\$1,111	\$1,111	\$1,111	\$1,111	\$6,253
Non-Personnel	\$6,962	\$11,331	\$11,233	\$11,233	\$11,233	\$11,233	\$63,222
Total	\$7,650	\$12,451	\$12,344	\$12,344	\$12,344	\$12,344	\$69,475

### **Planned Funding Sources**

Budget	FY2017
PRIIA	\$7,650,000
Total	\$7,650,000





### **Elevator/Escalator Repairables**

Investment Category: Stations and Passenger Facilities Program: Vertical Transportation

### **Project Description**

This project provides the capital repairs, upgrades and replacement components for elevators and escalators beyond repair.



### Safety Impact

The project maintains National Fire Protection Association safety standards, ADA requirements and WMATA internal operating procedures. The production and replacement of elevator and escalator parts in this program works to improve efficiency and the accuracy of the required components for the maintenance and rehabilitation of all of Metrois vertical transportation resources.

### Deliverables

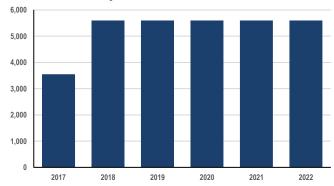
- 6,000 refurbish escalator steps. 6,000 new escalator steps. 150 to 200 well/hoistways power clean.
- 180 escalator speed reducer refurbish. 600 glide stop escalator brake boards repaired.

### **Project Financials - CIP0132**

Budget (in 000s)	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2017 to FY2022
Personnel	\$558	\$879	\$879	\$879	\$879	\$879	\$4,953
Non-Personnel	\$2,994	\$4,721	\$4,721	\$4,721	\$4,721	\$4,721	\$26,599
Total	\$3,552	\$5,600	\$5,600	\$5,600	\$5,600	\$5,600	\$31,552

### **Planned Funding Sources**

Budget	FY2017
Fed Formula SOGR - 5337	\$3,552,000
Total	\$3,552,000





### **Escalator Replacement**

**Investment Category:** Stations and Passenger Facilities **Program:** Vertical Transportation

### **Project Description**

This project will replace the oldest and poorest performing escalators in the system as needed to maintain escalator safety, availability and reliability. The new escalators will be equipped with more energy efficient devices and capabilities. This program will result in the replacement of approximately 128 escalators at 34 stations. Fourteen of the originally planned replacements under this project will now be done as major rehabilitations.



### Safety Impact

The safe and efficient operation and availability of escalators is critical to maintaining National Fire Protection Association safety standards, ADA requirements and WMATA internal operating procedures. WMATA replaces escalators to improve station egress and to lessen the impact of necessary system upgrades and maintenance.

### Deliverables

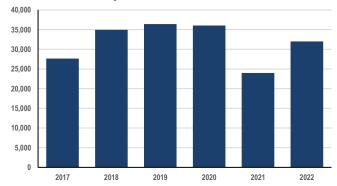
• Replace approximately 20 escalators

Project Financials - CIP0185	

							FY2017 to
Budget (in 000s)	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2022
Personnel	\$7,746	\$9,783	\$10,196	\$10,094	\$6,720	\$8,960	\$53,499
Non-Personnel	\$19,918	\$25,156	\$26,218	\$25,955	\$17,280	\$23,040	\$137,568
Total	\$27,664	\$34,939	\$36,414	\$36,049	\$24,000	\$32,000	\$191,066

### **Planned Funding Sources**

Budget	FY2017
PRIIA	\$27,664,206
Total	\$27,664,206





### Integrating regional NEXTFARE System

**Investment Category:** Stations and Passenger Facilities **Program:** Fare Collection

### **Project Description**

Safety Impact

This project replaces and upgrades the regional fare collection system and develops an active backup database for the Fare Collection System Central Computer infrastructure. This project also includes the installation and maintenance of Compact Point of Sale units, the installation of SmarTrip(R) Card Dispensers throughout the system, labor to support the conversion of the Farecard Express Reload Machine Vendors (Paper Farecards) to SmarTrip(R) Sale and Reload Machines that vend reusable SmarTrip(R) cards.

The project ensures the Fare Collection System is in a state

of good repair. The fare gate barriers which must operate

properly to provide a safe means of egress from the station

in case of emergency and must operate properly so as not

to contract customers during normal operation.

### Deliverables

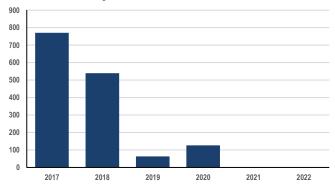
- Continuation of fare collection equipment updates
- Support installation of the Gen. III Tri-card readers for SmarTrip(R) cards
- Improvements to system to address fare evasion

### Project Financials - CIP0093

Budget (in 000s)	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2017 to FY2022
Personnel	\$462	\$324	\$38	\$76	\$0	\$0	\$899
Non-Personnel	\$308	\$216	\$25	\$51	\$0	\$0	\$600
Total	\$770	\$539	\$63	\$126	<b>\$0</b>	\$0	\$1,499

### **Planned Funding Sources**

Budget	FY2017
Fed Formula - 5307	\$770,000
Total	\$770,000





### Fare Collection Modernization

**Investment Category:** Stations and Passenger Facilities **Program:** Fare Collection

### **Project Description**

This project will replace and upgrade the existing fare collection system.



### Safety Impact

No specific safety justification applicable.

### Deliverables

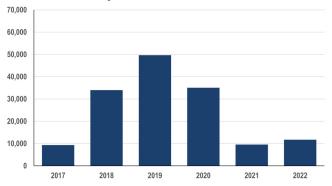
- Project planning
- Replace and upgrade the existing fare collection system

### **Project Financials - CIP0255**

Total	\$9,500	\$33,788	\$49,830	\$35,235	\$9,741	\$11,900	\$149,994
Non-Personnel	\$9,293	\$33,053	\$48,746	\$34,469	\$9,529	\$11,641	\$146,731
Personnel	\$207	\$735	\$1,084	\$766	\$212	\$259	\$3,263
Budget (in 000s)	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2017 to FY2022

### **Planned Funding Sources**

Budget	FY2017
System Performance	\$9,500,000
Total	\$0



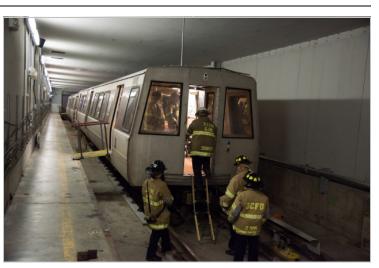


### **Fire Systems**

Investment Category: Stations and Passenger Facilities Program: Station Systems

### **Project Description**

This project upgrades existing fire alarm systems in auxiliary facilities and provides a central monitoring system. This project includes, but is not limited to, the removal and replacement of Halon Suppression System, development of a Fire and Intrusion Alarm (FIA) training lab and the repair or replacement of the existing standpipe system including parking garages.



### Safety Impact

The project was created to modernize existing fire alarm and monitoring systems, and replace critical infrastructure in buildings and tunnels in order to protect Metro passengers, employees, and capital assets from hazards associated with fire.

### Deliverables

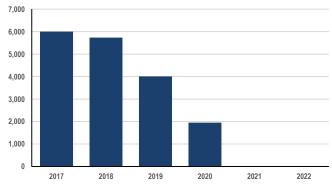
- Overhaul fire systems at 5 locations: Carmen Turner, Greenbelt, Branch Ave., Shady Grove and Glenmont
- Complete standpipe replacement on segments of the Blue and Green lines
- Completion of 14 standpipe locations

### Project Financials - CIP0150

Budget (in 000s)	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2017 to FY2022
Personnel	\$2,159	\$2,064	\$1,442	\$702	\$0	\$0	\$6,367
Non-Personnel	\$3,841	\$3,671	\$2,565	\$1,248	\$0	\$0	\$11,326
Total	\$6,000	\$5,735	\$4,007	\$1,950	\$0	\$0	\$17,693

### **Planned Funding Sources**

Budget	FY2017
PRIIA	\$6,000,000
Total	\$6,000,000





### **Station Cooling Program**

Investment Category: Stations and Passenger Facilities Program: Station Systems

### **Project Description**

This project funds the rehabilitation of station cooling systems including, but not limited to, rehabilitation/ replacement of chiller plants, cooling towers, ventilation systems, air handling units and ductwork. Station cooling systems are overhauled at 7 to 14 years and replaced at 20 years.



### Safety Impact

The project was created to rehabilitate/replace the worn or outdated rail station cooling system equipment to provide a reliable and modern ventilated environment for the traveling public and help to mitigate public health risk due to temperature extremes.

### Deliverables

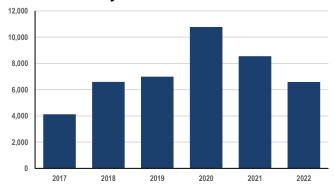
- Design and construction of Farragut North condenser water piping and E route under-platform duct
- Freon detectors at 7 chiller plant locations
- Replacement of chiller and cooling tower at Congress Heights

### **Project Financials - CIP0151**

Budget (in 000s)	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2017 to FY2022
Personnel	\$1,044	\$1,669	\$1,771	\$2,731	\$2,166	\$1,668	\$11,048
Non-Personnel	\$3,079	\$4,920	\$5,223	\$8,051	\$6,387	\$4,918	\$32,577
Total	\$4,123	\$6,589	\$6,994	\$10,782	\$8,553	\$6,585	\$43,626

### **Planned Funding Sources**

Budget	FY2017
Fed Formula SOGR - 5337	\$4,122,848
Total	\$4,122,848





### **Station Lighting Improvements**

Investment Category: Stations and Passenger Facilities Program: Station Systems

### **Project Description**

This project improves the lighting and illumination levels at mezzanines, platforms, and track beds at select Metrorail stations.



### Safety Impact

The Station Lighting Program is safety critical to WMATA's daily operations because it enhances the illumination levels of the underground stations to meet the National Fire Protection Association Life Safety Code Emergency Lighting Requirements, provide better visibility, and ensure security to the public and employees. This program also addresses ADA customer safety concerns for those with low vision.

### Deliverables

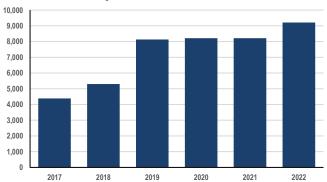
- Complete design of lighting for the atypical mezzanines
- Complete design of trackbed and parapet lighting
- Complete design of 3 station type lighting pilots: split, hub, and center
- Complete Smithsonian and Union Station trail room lighting pilots

### **Project Financials - CIP0219**

Budget (in 000s)	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2017 to FY2022
Personnel	\$1,022	\$1,234	\$1,894	\$1,914	\$1,914	\$2,147	\$10,124
Non-Personnel	\$3,364	\$4,064	\$6,236	\$6,301	\$6,301	\$7,068	\$33,335
Total	\$4,385	\$5,298	\$8,130	\$8,215	\$8,215	\$9,215	\$43,459

**Planned Funding Sources** 

Budget	FY2017
Fed Formula SOGR - 5337	\$4,385,127
Total	\$4,385,127





## Raising Vent Shafts Vicinity Federal Triangle &Investment Category: Stations and Passenger FacilitiesProtecting System CoreProgram: Station Systems

### **Project Description**

This project will elevate vent shafts which will protect stations from flood waters entering into the rail system. This project is funded by a FTA Resiliency grant.



### Safety Impact

This project will help to ensure vent shafts are not viable conduits for flood waters to enter into underground stations, resulting in the mitigation of concrete and power system incidents due to water infiltration that can disrupt services for customers.

### Deliverables

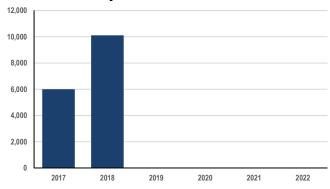
- Initial job order contracts completed Q2-FY2017. Full IFB contract to be advertised and NTP issued Q4-FY2017
- Small flood design projects completed. Engineering tasks for site surveys and reports done

### **Project Financials - CIP0241**

Budget (in 000s)	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2017 to FY2022
Personnel	\$1,937	\$3,265	\$0	\$0	\$0	\$0	\$5,203
Non-Personnel	\$4,063	\$6,847	\$0	\$0	\$0	\$0	\$10,910
Total	\$6,000	\$10,113	\$0	\$0	\$0	\$0	\$16,113

### **Planned Funding Sources**

Budget	FY2017
FTA Resiliency	\$6,000,000
Total	\$6,000,000





### Improving Drainage

Investment Category: Stations and Passenger Facilities Program: Station Systems

### **Project Description**

This project will replace and improve drainage pumping stations to support the Drainage/Flood/Piping replacement program for Flood Resiliency improvements. This project will also replace and improve drainage pumping stations and sewage ejector systems that have exceeded their lifecycle throughout the Metrorail system. This project is funded by an FTA Resiliency grant.

### Safety Impact

The project was created to rehabilitate and replace worn or outdated Drainage Pumping Station equipment to provide reliable and modern equipment and piping that will properly drain the system and prevent flooding and shutdowns which have the potential to affect customer safety and continuous safe operations.

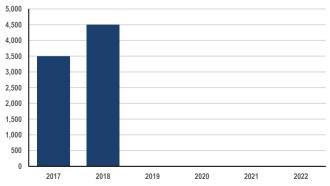
### Deliverables

- Complete construction of Phase 1 Drainage Pumping Station (DPS) and Discharge lines (5 locations)
- Complete design and construction of Phase 2 DPS and Discharge lines (5 locations)
- Phase 1 comprised of: Metro Center, Van Ness, Mid River, Queen's Chapel and Greenbelt
- Phase 2 comprised of: 7th & Mall, Pentagon, North Pentagon, South Pentagon and Forest Glen.

Budget (in 000s)	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2017 to FY2022
Personnel	\$490	\$630	\$0	\$0	\$0	\$0	\$1,119
Non-Personnel	\$3,010	\$3,871	\$0	\$0	\$0	\$0	\$6,882
Total	\$3,500	\$4,501	\$0	\$0	\$0	\$0	\$8,001

### Project Financials - CIP0242

Budget	FY2017
FTA Resiliency	\$3,500,000
Total	\$3,500,000





### Fire Alarm Upgrade Project (NFPA72)

#### **Project Description**

The system wide fire alarm upgrade will address NTSB recommendations that requires stations to be compliant with the latest version of NFPA 72 and 130. Upgrade or replacement of the fire alarm system throughout the rail system is to be addressed. WMATA will improve the life safety equipment and systems to continue to meet requirements.

Investment Category: Stations and Passenger Facilities Program: Station Systems



#### Safety Impact

This project will ensure the upgrade and replacement of fire alarm systems throughout the rail system in order to meet NFPA72 safety standards.

#### Deliverables

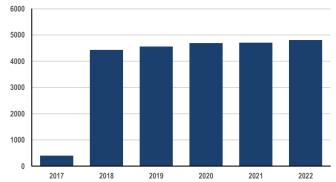
• Project to commence in FY2017, activity will include an assessment of fire alarm systems throughout the rail system.

#### **Project Financials - CIP0258**

Budget (in 000s)	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2017 to FY2022
Personnel	\$80	\$887	\$912	\$939	\$941	\$962	\$4,721
Non-Personnel	\$320	\$3,546	\$3,649	\$3,755	\$3,765	\$3,848	\$18,883
Total	\$400	\$4,433	\$4,561	\$4,694	\$4,707	\$4,810	\$23,604

#### **Planned Funding Sources**

Budget	FY2017
Fed Formula SOGR - 5337	\$400,000
Total	\$400,000





### Parking Garage Rehabilitation

**Investment Category:** Stations and Passenger Facilities **Program:** Parking Facilities

#### **Project Description**

This project will rehabilitate parking structures including repair of horizontal concrete surfaces, slabs, soffits, beams, columns, walls; repair or replacement of posttensioning anchorages, tendons, sheathing and expansion joints; application of traffic markings and traffic bearing membrane. Rehabilitation includes: structural repairs to defective concrete sections of the structure, repairs to defective "T Beam" joints, repair/replacement of defective electric/mechanical components that are critical to safe operation of the garage and repair/replacement of protective surface coating.

#### Safety Impact

This project will ensure proper maintenance and periodic repairs of the parking facility structures for the safety of both passengers and vehicles and reduce any negative effects associated with water penetration, corrosion, and surface damage from elements. This will ensure safe continuous use of services for customers.

#### Deliverables

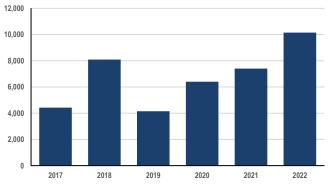
- Rehab three Parking Garages complete Vienna South Parking Garage Q2 FY2017
- Huntington South Parking Garage assessment Q4 FY2017
- Start Rehab of Shady Grove North Parking Garage and Franconia-Springfield East Parking Garage
- Start design work on West Falls, Largo, White Flint, and New Carrolton

Budget (in 000s)	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2017 to FY2022
Personnel	\$987	\$1,808	\$926	\$1,429	\$1,652	\$2,266	\$9,069
Non-Personnel	\$3,436	\$6,291	\$3,224	\$4,971	\$5,748	\$7,884	\$31,553
Total	\$4,423	\$8,098	\$4,150	\$6,400	\$7,400	\$10,150	\$40,621

#### **Project Financials - CIP0152**

#### **Planned Funding Sources**

Budget	FY2017
Fed Formula - 5307	\$625,087
Fed Formula SOGR - 5337	\$895,075
System Performance	\$2,902,820
Total	\$4,422,982





#### **Bus Replacement**

**Investment Category:** Bus and Paratransit **Program:** Bus Acquisition

#### **Project Description**

This project replaces an average of 100 buses per year in order to maintain an average fleet age of 7.5 years. This is based on a fleet size of approximately 1,500 buses that range in size from 26 to 62 feet. WMATA will continue to procure buses that utilize clean fuel technologies to reduce emissions and lower fuel costs. This project supports WMATA's long term goal of a fleet composition of 50 percent hybrid/electric diesel and 50 percent Compressed Natural Gas (CNG).

# Program: Bus Acquisition



#### Safety Impact

When a bus reaches the end of useful life and is no longer rebuildable it becomes necessary to replace to maintain a fleet of safe and reliable revenue vehicles.

#### Deliverables

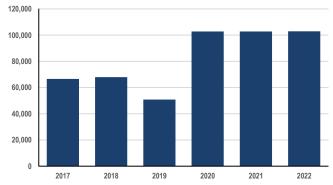
- December 2015 all 21 articulated buses delivered
- June 2016 69 of 164 CNG buses delivered
- June 2016 34 diesel hybrid buses delivered

#### **Project Financials - CIP0006**

Budget (in 000s)	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2017 to FY2022
Personnel	\$215	\$220	\$164	\$332	\$332	\$333	\$1,597
Non-Personnel	\$66,349	\$67,723	\$50,645	\$102,403	\$102,403	\$102,525	\$492,048
Total	\$66,565	\$67,943	\$50,809	\$102,735	\$102,735	\$102,858	\$493,645

#### **Planned Funding Sources**

Budget	FY2017
Fed Formula Bus - 5339	\$11,183,978
Fed Formula - 5307	\$54,580,619
CMAQ	\$800,000
Total	\$66,564,597





#### Automatic Vehicle Location Equipment

Investment Category: Bus and Paratransit Program: Bus Maintenance/Overhaul

#### **Project Description**

This project provides for the installation, upgrade and maintenance of the AVL/CAD equipment on a fleet of 1,500 revenue buses.



#### Safety Impact

This project provides GPS and Automatic Bus location to assist in emergency responses.

#### Deliverables

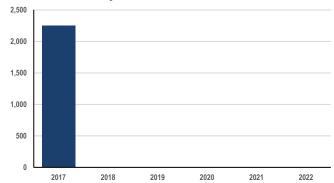
- Project Completing May 2016, Project closeout Sept. 2016
- Next Upgrade cycle to begin FY2023

#### **Project Financials - CIP0002**

Budget (in 000s)	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2017 to FY2022
Non-Personnel	\$2,256	\$0	\$0	\$0	\$0	\$0	\$2,256
Total	\$2,256	\$0	\$0	\$0	\$0	\$0	\$2,256

#### **Planned Funding Sources**

Budget	FY2017
Fed Formula - 5307	\$2,256,000
Total	\$2,256,000





### **Bus Repair Equipment**

#### **Project Description**

This project replaces existing equipment that is past its useful life and provides new equipment for the repair and maintenance of the bus and non-revenue fleets. Examples include, but are not limited to: forklifts, bus lifts, battery charging equipment, bus parts washers, diagnostic carts, engineering software and tools, welding tools, fall protection, and specialized training equipment. Additionally, this project supports minor construction for renovation and garage enhancements as needed.

## Investment Category: Bus and Paratransit Program: Bus Maintenance/Overhaul



#### Safety Impact

Replaces work equipment past its useful life to maintain safe working conditions.

#### Deliverables

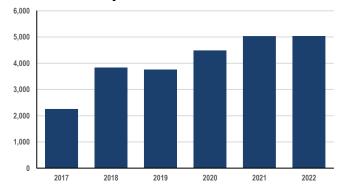
- FY2016 planned replacement of Portable lifts, Toolboxes, Forklifts, Floor scrubbers etc.
- FY2016 begin CTF Upgrades, total \$3.6m. Project to span over 3yrs. FY2016 FY2018
- Improvements to include: Flooring upgrade \$1.3m, Ventilation upgrade - \$723k, Lighting repairs \$650k

#### **Project Financials - CIP0004**

Budget (in 000s)	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2017 to FY2022
Personnel	\$88	\$149	\$146	\$174	\$196	\$196	\$949
Non-Personnel	\$2,170	\$3,689	\$3,616	\$4,314	\$4,838	\$4,841	\$23,468
Total	\$2,258	\$3,838	\$3,762	\$4,488	\$5,033	\$5,037	\$24,416

#### **Planned Funding Sources**

Budget	FY2017
Fed Formula - 5307	\$2,257,878
Total	\$2,257,878





#### **Bus Rehabilitation Program**

Investment Category: Bus and Paratransit **Program:** Bus Maintenance/Overhaul

#### **Project Description**

The Bus Rehabilitation Program is a commitment to proactive maintenance, maximizes capital investments and is comprised of six programs performed by WMATA employees at two major maintenance facilities. Under this project, a comprehensive rehabilitation program is performed, at approximately 7.5 years of age and provides for the complete rehabilitation of bus mechanical, electrical and structural systems. Additionally, this CIP supports rebuilding of major components and subcomponents. This fleet improvement project enhances overall safety, reliability and performance.

#### Safety Impact

Maintaining a safe reliable bus fleet requires heavy overhauls on a 7.5 year basis to ensure coaches meet industry safety standards.

#### Deliverables

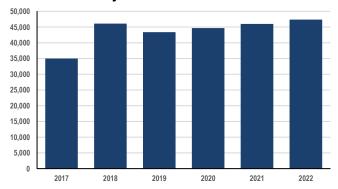
- FY2017 planned rehab of 100 buses
- Rebuild of engines, transmissions, axles and other major components
- Starting FY2016, Electrical Storage System (ESS) and Dual Power Inverter Modules (DPIM) replacement on 450 coaches over the next five years

#### **Project Financials - CIP0005**

Budget (in 000s)	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2017 to FY2022
Personnel	\$20,701	\$27,270	\$25,650	\$26,419	\$27,211	\$28,026	\$155,277
Non-Personnel	\$14,299	\$18,836	\$17,718	\$18,248	\$18,795	\$19,358	\$107,255
Total	\$35,000	\$46,107	\$43,368	\$44,668	\$46,006	\$47,384	\$262,532

#### **Planned Funding Sources**

Budget	FY2017
Fed Formula - 5307	\$35,000,000
Total	\$35,000,000





#### **Bus Camera Installation & Replacement**

#### **Project Description**

This project provides for the scheduled replacement of the closed-circuit television (CCTV) system onboard all buses, the necessary support equipment and IT infrastructure systems. Camera systems reduce the detrimental impact of fraudulent claims and vandalism, deter crime, assist in criminal prosecutions and help employees resolve customer concerns and complaints. The WMATA fleet is equipped with a CCTV system which have a useful life of 7 years.

## Investment Category: Bus and Paratransit Program: Bus Maintenance/Overhaul



#### Safety Impact

The presence of CCTV assists in deterring criminal acts and aids in the prosecution of perpetrators.

#### Deliverables

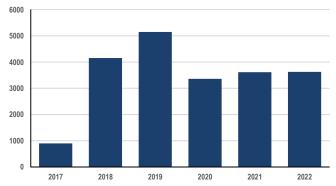
- Notice to proceed expected June 2016
- Install camera systems in 100 coaches in FY2017

#### **Project Financials - CIP0007**

Budget (in 000s)	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2017 to FY2022
Non-Personnel	\$900	\$4,154	\$5,148	\$3,359	\$3,614	\$3,628	\$20,803
Total	\$900	\$4,154	\$5,148	\$3,359	\$3,614	\$3,628	\$20,803

#### **Planned Funding Sources**

Budget	FY2017
Fed Formula - 5307	\$900,000
Total	\$900,000





#### **Bus Repairables**

Investment Category: Bus and Paratransit Program: Bus Maintenance/Overhaul

#### **Project Description**

This project provides for bus components that have reached the end of their useful life and cannot be overhauled. The components have a value of \$500 or greater and a useful life of at least one year, including but not limited to: cylinder Heads, A/C compressors, turbo assemblies, accumulators, transmissionvalve bodies, etc.. These purchases are used to replenish inventory and add new parts as required to keep the bus fleet in a state of good repair.



#### Safety Impact

Components and sub-assemblies that can no longer be safely overhauled or reused must be replaced when they reach the end of their useful life.

#### Deliverables

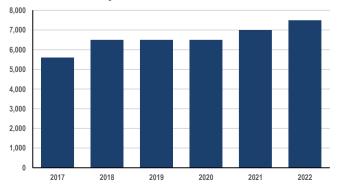
- Conversion from simplified acquisition protocol to contract process for select items to promote competition
- Acquisition of : Gen IV Transmission Housings, Front Cover Assemblies, Hyrdaulic Pumps, Condensor units etc.

#### **Project Financials - CIP0008**

Total	\$5,604	\$6,500	\$6,500	\$6,500	\$7,000	\$7,500	\$39,604
Non-Personnel	\$5,604	\$6,500	\$6,500	\$6,500	\$7,000	\$7,500	\$39,604
Budget (in 000s)	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2017 to FY2022

#### **Planned Funding Sources**

Budget	FY2017
Fed Formula - 5307	\$5,604,000
Total	\$5,604,000





#### **Bus Preventive Maintenance**

Investment Category: Bus and Paratransit Program: Bus Maintenance/Overhaul

#### **Project Description**

This project provides for funding related to preventive maintenance activities required to maintain the WMATA bus fleet in a state of good repair. Preventive maintenance programs include: accessibility equipment, destination signs, coolant systems, service lane activities, fluid analysis, power trains, filter maintenance, safety related items, bus batteries, and wheel and tire maintenance.



#### Safety Impact

Regular preventive maintenance ensures the revenue fleet is in safe operating conditions for service.

#### Deliverables

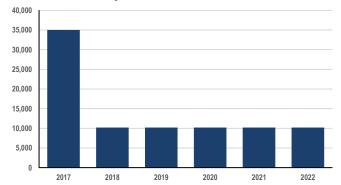
• FY2017 - Preventive Maintenance Capital budget increased to \$35 Million

#### **Project Financials - CIP0143**

Total	\$35,000	\$10,200	\$10,200	\$10,200	\$10,200	\$10,200	\$86,000
	<i>400,000</i>	φ10,200	\$10,200	\$ 10,200	\$10,200	φ10,200	<i><b>400</b></i> ,000
Personnel	\$35,000	\$10.200	\$10.200	\$10.200	\$10.200	\$10.200	\$86,000
Budget (in 000s)	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2017 to FY2022

#### **Planned Funding Sources**

Budget	FY2017
Fed Formula - 5307	\$35,000,000
Total	\$35,000,000





#### **Underground Storage Tank Replacement**

**Investment Category:** Bus and Paratransit **Program:** Bus Maintenance Facilities

#### **Project Description**

This project designs and constructs the replacement of underground storage tank (UST) systems, above ground storage tank (AST) systems and tank monitoring systems at or near the end of their warranty periods. In addition, this project rehabilitates the tank systems that are at midlife to minimize potential liabilities.



#### Safety Impact

This project will replace hazardous fluid storage tanks at various maintenance locations to ensure safe operation and prevention of environmental incidents or liabilities of WMATA.

#### Deliverables

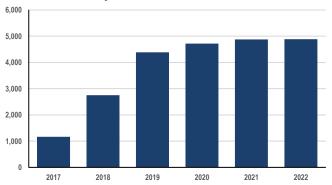
- Remove Service Vehicle Maintenance tanks and abandon monitoring wells at Carmen Turner Facility September 2016
- Replace four Underground Storage Tanks (USTs), 3 Above Ground Storage Tanks (ASTs)
- Replace used oil AST at West Falls Church December 2016
- Replace used oil AST at Shady Grove (June 2017). Install Diesel Exhaust Fluid (DEF) tank at Alexandria September 2017

Budget (in 000s)	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2017 to FY2022
Personnel	\$639	\$1,509	\$2,408	\$2,590	\$2,676	\$2,681	\$12,503
Non-Personnel	\$525	\$1,241	\$1,979	\$2,129	\$2,199	\$2,203	\$10,275
Total	\$1,164	\$2,750	\$4,387	\$4,719	\$4,875	\$4,884	\$22,779

#### **Project Financials - CIP0011**

#### **Planned Funding Sources**

Budget	FY2017
Fed Formula SOGR - 5337	\$1,163,780
Total	\$1,163,780





#### **Bladensburg Shop Reconfigure**

#### Project Description

This project will perform rehabilitation activities that will place Bladensburg (T04 – Heavy Overhaul Shop and T05 – Bus Division) in a safe, functional, and reliable condition during the transition period leading up to full facility replacement. The work includes rehabilitation of the: Compressed Natural Gas (CNG) fueling system; the bus wash system; paint booths; fire alarm system; methane gas detection system; electrical room rehabilitation; sump and sewage ejector pump system; the ventilation system components; interior lighting equipment; and selected electrical, mechanical, and structural rehabilitation tasks.

## **Investment Category:** Bus and Paratransit **Program:** Bus Maintenance Facilities



#### Safety Impact

No specific safety justification applicable

#### Deliverables

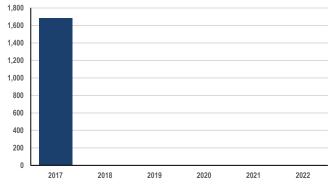
• Project closeout activities in FY2017

#### **Project Financials - CIP0078**

Budget (in 000s)	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2017 to FY2022
Personnel	\$218	\$0	\$0	\$0	\$0	\$0	\$218
Non-Personnel	\$1,468	\$0	\$0	\$0	\$0	\$0	\$1,468
Total	\$1,685	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	\$0	\$1,685

#### **Planned Funding Sources**

Budget	FY2017
Fed Formula - 5307	\$1,685,327
Total	\$1,685,327





#### Southern Avenue Bus Garage Replacement

**Investment Category:** Bus and Paratransit **Program:** Bus Maintenance Facilities

#### **Project Description**

This project will replace the existing Southern Avenue Bus Garage with a fully modern Leadership in Energy and Environmental Design (LEED) Silver facility that can hold 175 buses. The existing facility is over 90 years old. This project also includes the construction of a new heavy repair and overhaul facility. The total estimated cost of this project is approximately \$132 million.



#### Safety Impact

Current facility is over 90 years old and no longer supports a modern fleet. This project will provide a new safe and environmentally friendly facility for the maintenance and storage of 175 buses.

#### Deliverables

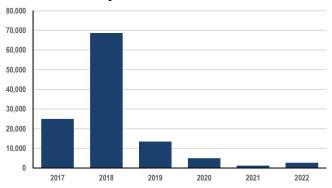
- Site utilities installation complete May 2017
- Begin structural framing and decking construction
- Roofing structural installation June 2017
- Side concrete paving work complete June 2017

#### **Project Financials - CIP0084**

Total	\$25,000	\$68,656	\$13,449	\$5,000	\$1,229	\$2,688	\$116,022
Non-Personnel	\$22.406	\$61.532	\$12.054	\$4.481	\$1.101	\$2.409	\$103,982
Personnel	\$2,594	\$7.124	\$1.396	\$519	\$128	\$279	\$12,039
Budget (in 000s)	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2017 to FY2022

#### **Planned Funding Sources**

Budget	FY2017
Fed Formula - 5307	\$23,366,129
Debt	\$1,633,871
Total	\$25,000,000





#### Royal Street Bus Garage Replacement (Cinder Investment Category: Bus and Paratransit **Bed Road**)

**Program:** Bus Maintenance Facilities

#### **Project Description**

This project replaces Royal Street Bus Garage with a fully modern Leadership in Energy and Environmental Design (LEED) Silver facility at Cinder Bed Road, with a capacity of 160 buses. The Royal Street facility is over 70 years old.



#### Safety Impact

Royal Street facility is over 70 years old and no longer supports a modern fleet. This project will provide a new safe and environmentally friendly facility for the servicing of 160 buses.

#### Deliverables

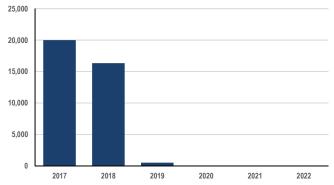
- Complete foundation work and sanitary sewer work
- Begin installation of building site electrical •
- Erect steel superstructure and install precast skin •

#### **Project Financials - CIP0085**

Budget (in 000s)	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2017 to FY2022
Personnel	\$2,800	\$2,286	\$74	\$0	\$0	\$0	\$5,160
Non-Personnel	\$17,200	\$14,042	\$454	\$0	\$0	\$0	\$31,696
Total	\$20,000	\$16,328	\$528	\$0	\$0	\$0	\$36,856

#### **Planned Funding Sources**

Budget	FY2017
Fed Formula - 5307	\$7,492,158
Debt	\$12,507,842
Total	\$20,000,000





#### **Shepherd Parkway Bus Facility**

**Investment Category:** Bus and Paratransit **Program:** Bus Maintenance Facilities

#### **Project Description**

This project will install CNG fueling equipment at Shepherd Parkway Bus Garage. The new equipment will enable the Sheperd Parkway facility to service the CNG Bus fleet and allow for future expansion of the CNG fleet.



#### Safety Impact

This project will provide new fueling equipment for the safe servicing of CNG coaches.

#### Deliverables

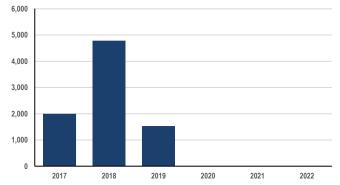
- Notice to Proceed for Design work Quarter 3 FY2016, estimated completion Quarter 4 FY2016
- Sitework expected to begin Quarter 2 2017

#### **Project Financials - CIP0086**

Budget (in 000s)	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2017 to FY2022
Non-Personnel	\$2,000	\$4,785	\$1,531	\$0	\$0	\$0	\$8,315
Total	\$2,000	\$4,785	\$1,531	\$0	\$0	\$0	\$8,315

#### **Planned Funding Sources**

Budget	FY2017
Fed Formula - 5307	\$2,000,000
Total	\$2,000,000





#### **Bus Garage Facility Repairs**

**Investment Category:** Bus and Paratransit **Program:** Bus Maintenance Facilities

#### **Project Description**

This project is a bus and auxiliary facility rehabilitation program. Some of the locations supported under this CIP are: Western, Northern and Landover bus garages, WMATA Supply Facility, Landover Open Storage and other auxiliary facilities. Rehabilitation will include infrastructure design and construction work to increase overall efficiency, replace worn or obsolete equipment, improve safety, improve employee productivity, repair structures, add capacity and capabilities for the maintenance of revenue buses. This project also improves security systems and components at bus and auxiliary facilities.



#### Safety Impact

This project serves to repair and rehabilitate bus garage facilities that are exceeding 25 years in age in order to provide a safe working environment for bus maintenance employees to ensure a proper and safe operating bus fleet, leading to reduced interruption of bus operation.

#### Deliverables

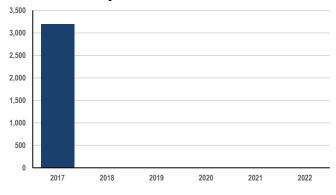
- Finalize remaining change orders to complete project contract
- Begin project close-out

#### **Project Financials - CIP0119**

Budget (in 000s)	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2017 to FY2022
Personnel	\$1,839	\$0	\$0	\$0	\$0	\$0	\$1,839
Non-Personnel	\$1,354	\$0	\$0	\$0	\$0	\$0	\$1,354
Total	\$3,193	\$0	\$0	\$0	\$0	\$0	\$3,193

#### **Planned Funding Sources**

Budget	FY2017
Fed Formula - 5307	\$3,192,695
Total	\$3,192,695





### **CTF Electrical Upgrade**

**Investment Category:** Bus and Paratransit **Program:** Bus Maintenance Facilities

#### **Project Description**

This project will provide a more reliable power source for WMATA-critical functions at Carmen Turner Facility (CTF). The project also reconfigures and realigns portions of the electrical distribution system to make it more robust.



#### Safety Impact

No specific safety justification applicable

#### Deliverables

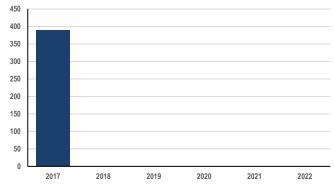
• Project completion and close-out in FY2017

#### **Project Financials - CIP0206**

Budget (in 000s)	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2017 to FY2022
Personnel	\$166	\$0	\$0	\$0	\$0	\$0	\$166
Non-Personnel	\$224	\$0	\$0	\$0	\$0	\$0	\$224
Total	\$390	\$0	\$0	\$0	\$0	<b>\$0</b>	\$390

#### **Planned Funding Sources**

Budget	FY2017
Fed Formula - 5307	\$390,000
Total	\$390,000





### **Pollution Prevention for Track Fueling Areas**

#### **Project Description**

This project designs and implements modifications to track fueling areas including, but not limited to, systems to capture, contain and pretreat diesel fuel spills prior to discharge to storm sewer system.

## **Investment Category:** Bus and Paratransit **Program:** Bus Maintenance Facilities



#### Safety Impact

This project addresses safety concerns over soil contamination and water run-off at fueling stations which may affect the surrounding environment, as required by the EPA and other regulatory bodies.

#### Deliverables

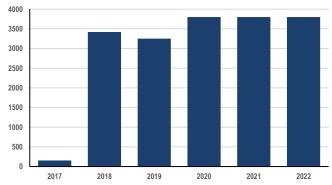
- Final design completed in Q1 FY2017
- Contract awarded by Q4 FY2017

#### **Project Financials - CIP0210**

Budget (in 000s)	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2017 to FY2022
Personnel	\$4	\$97	\$93	\$108	\$108	\$108	\$519
Non-Personnel	\$151	\$3,323	\$3,157	\$3,692	\$3,692	\$3,692	\$17,707
Total	\$156	\$3,420	\$3,250	\$3,800	\$3,800	\$3,800	\$18,226

#### **Planned Funding Sources**

Budget	FY2017
PRIIA	\$155,900
Total	\$155,900





#### **Bladensburg Garage**

**Investment Category:** Bus and Paratransit **Program:** Bus Maintenance Facilities

#### **Project Description**

This project will enhance the engineering, design and construction of a new 400-bus garage facility to replace the current Bladensburg and northern bus garages. This project will require significant additional investment beyond FY2020.



#### Safety Impact

Current facility is over 60 years old and no longer supports a modern fleet. This project will provide a new safe and environmentally friendly facility for the servicing of 400 buses.

#### Deliverables

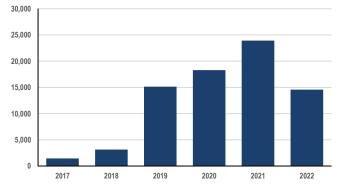
- Begin development of environmental analysis and preliminary design work
- Develop site assessment and project plan

#### **Project Financials - CIP0240**

Budget (in 000s)	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2017 to FY2022
Personnel	\$200	\$139	\$500	\$500	\$1,000	\$700	\$3,039
Non-Personnel	\$1,255	\$3,000	\$14,639	\$17,794	\$22,924	\$13,870	\$73,482
Total	\$1,455	\$3,139	\$15,139	\$18,294	\$23,924	\$14,570	\$76,521

#### **Planned Funding Sources**

Budget	FY2017
Fed Formula - 5307	\$1,454,849
Total	\$1,454,849





#### **Bus Priority Corridor Network**

Investment Category: Bus and Paratransit Program: Bus Passenger Facilities/Systems

#### Project Description

This project advances a broad range of Metrobus related planning, project development, technology system design, customer facility and capital construction projects to implement the Priority Corridor Network (PCN) Program and other Metrobus service enhancements, expansions and improvements. Working with area departments of transportation and other transit providers, WMATA staff and consultants plan, design and construct projects in support of Metrobus, MetroExtra and MetroWay service.

#### Safety Impact

This project supports improvements to the Priority Corridor Network to reduce accidents, prevent incidents and improve delivery times.

#### Deliverables

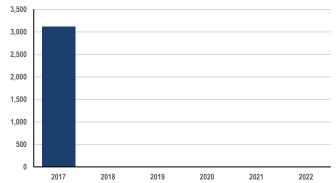
- Pentagon Station improvements; Project Closeout July 2016
- Franconia/Springfield Station improvements; Project closeout July 2017

#### **Project Financials - CIP0037**

Budget (in 000s)	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2017 to FY2022
Personnel	\$200	\$0	\$0	\$0	\$0	\$0	\$200
Non-Personnel	\$2,919	\$0	\$0	\$0	\$0	\$0	\$2,919
Total	\$3,119	<b>\$0</b>	<b>\$0</b>	\$0	<b>\$0</b>	\$0	\$3,119

#### **Planned Funding Sources**

Budget	FY2017
Fed Formula - 5307	\$20,359
Bus Livability	\$1,875,000
New Freedom	\$1,223,641
Total	\$3,119,000



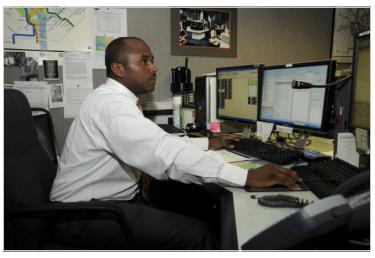


#### **Bus Planning**

**Investment Category:** Bus and Paratransit **Program:** Bus Passenger Facilities/Systems

#### **Project Description**

This program advances a broad range of Metrobus planning projects necessary to sustain the network of services and facilities. Efforts focus on service plans, customer information, facilities mgmt., bus stop accessibility, transit operations, traffic management and fare collection. The projects foster continuous regional customer engagement, service evaluation and market assessment with area departments of transportation and other transit providers, resulting in interagency policy strategies for deployment of State of Good Operations investments.



#### Safety Impact

This project provides for the conducting of studies to improve Metrobus operational effectiveness and address safety concerns.

#### Deliverables

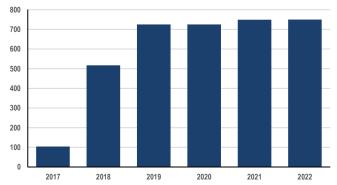
- Corridor study to begin July 2016
- Service evaluation studies to begin July 2016

#### **Project Financials - CIP0220**

Budget (in 000s)	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2017 to FY2022
Non-Personnel	\$104	\$517	\$725	\$725	\$749	\$750	\$3,569
Total	\$104	\$517	\$725	\$725	\$749	\$750	\$3,569

#### **Planned Funding Sources**

Budget	FY2017
System Performance	\$104,000
Total	\$104,000





#### **Bus Customer Facility Improvements**

#### **Project Description**

Project to sustain, replace or renovate Metrobus customer information, facilities and amenities to achieve a state of good repair and implement enhancements to reflect safety requirements and industry best practices. Projects will also enhance safe customer experience at bus stops.

#### Investment Category: Bus and Paratransit Program: Bus Passenger Facilities/Systems



#### Safety Impact

Project eliminates or mitigates hazards identified at Metrobus stops and transfer facilities, for example replacement of bus shelters, repairs to bus loops and other customer facilities.

#### Deliverables

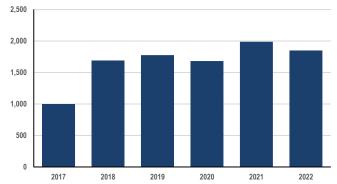
- Bus stop signage installation completed June 2017
- Bus time table map Installation completed June 2017
- Replacement of 10 bus shelters completed June 2017

#### **Project Financials - CIP0221**

Budget (in 000s)	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2017 to FY2022
Personnel	\$5	\$8	\$8	\$8	\$9	\$9	\$46
Non-Personnel	\$995	\$1,684	\$1,769	\$1,675	\$1,978	\$1,841	\$9,943
Total	\$1,000	\$1,692	\$1,777	\$1,683	\$1,988	\$1,850	\$9,989

#### **Planned Funding Sources**

Budget	FY2017
Fed Formula - 5307	\$1,000,000
Total	\$1,000,000





#### **Traffic Signal Prioritization**

Investment Category: Stations and Passenger Facilities Program

Program: Station Systems

#### **Project Description**

This project supports the expansion of Traffic Signal Prioritization on select Priority Corridors. In an effort to increase bus delivery efficiency and improve the passenger's experience, signal prioritization will decrease route times, improve route coverage and impact peak ridership delivery.



#### Safety Impact

Signal Prioritization will result in a reduction of vehicle accidents and decrease on-board passenger injuries.

#### Deliverables

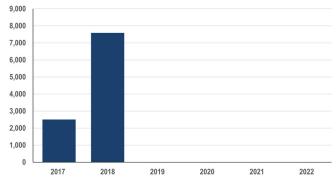
- Phase I engineering design work
- Procure Phase I traffic control equipment
- Begin installation of Phase I traffic control equipment

#### **Project Financials - CIP0254**

Budget (in 000s)	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2017 to FY2022
Personnel	\$300	\$631	\$0	\$0	\$0	\$0	\$931
Non-Personnel	\$2,200	\$7,000	\$0	\$0	\$0	\$0	\$9,200
Total	\$2,500	\$7.631	\$0	\$0	\$0	\$0	\$10,131

#### **Planned Funding Sources**

Budget	FY2017
Fed Formula - 5307	\$2,500,000
Total	\$0





#### **MetroAccess Fleet Acquisition**

**Investment Category:** Bus and Paratransit **Program:** Paratransit

#### **Project Description**

Vehicles in the paratransit fleet which have reached or exceeded their useful life will be replaced each year to maintain an average fleet age of four years, maximizing fleet safety, reliability and quality of service delivered inline with projected ridership.



#### Safety Impact

Newly acquired paratransit vehicles will include additional safety enhancements as standard equipment, to include roof strobes, rear cameras, mobile eye units and clearance lighting.

#### Deliverables

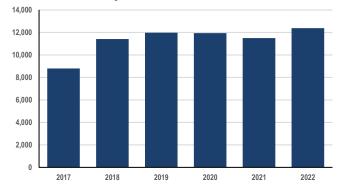
• Acquire 207 Metro Access Paratransit Vans in FY2017

#### **Project Financials - CIP0015**

Budget (in 000s)	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2017 to FY2022
Personnel	\$352	\$457	\$479	\$477	\$460	\$495	\$2,720
Non-Personnel	\$8,448	\$10,957	\$11,496	\$11,457	\$11,036	\$11,885	\$65,280
Total	\$8,800	\$11,414	\$11,975	\$11,935	\$11,496	\$12,380	\$68,000

#### **Planned Funding Sources**

Budget	FY2017
Fed Formula - 5307	\$8,241,176
ADA Grant	\$558,824
Total	\$8,800,000





#### Bus & Rail Asset Management Software

#### Investment Category: Business Support Program: IT

#### **Project Description**

This project funds upgrades and enhancements to WMATA's Asset and Work Management Tracking System that is critical to the functions of rail and bus. The project involves the development, analysis, and documentation of organizational and business requirements and their associated processes by WMATA and industry-specific subject matter experts. Aids in the maintenance and upgrades of various software.



#### Safety Impact

The development of the primary system for recordation of all maintenance transactions, including preventive maintenance transactions. The upgrade will introduce data collection and quality improvements that will support using predictive data to improve the timeliness of preventative maintenance actions and convert some corrective maintenance actions to planned maintenance actions. All of these items are affected by increasing the reliability of system components.

#### Deliverables

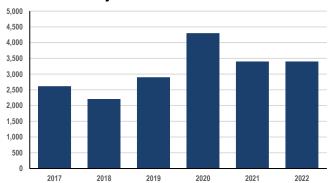
- Completion of mobile platform solutions
- Deploy Warehouse Management System
- Design and development of inventory software September 2016

#### **Project Financials - CIP0042**

Budget (in 000s)	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2017 to FY2022
Personnel	\$213	\$180	\$236	\$351	\$277	\$277	\$1,535
Non-Personnel	\$2,401	\$2,029	\$2,664	\$3,949	\$3,123	\$3,123	\$17,289
Total	\$2,614	\$2,209	\$2,900	\$4,300	\$3,400	\$3,400	\$18,824

#### **Planned Funding Sources**

Budget	FY2017
System Performance	\$2,614,300
Total	\$2,614,300





#### **Bus Operations Support Software**

#### **Project Description**

This project deploys centralized, field and on-board bus applications such as Automatic Vehicle Maintenance (AVM), Automatic Vehicle Location (AVL), Automated Passenger Counting (APC), Bus Scheduling and CAD (Computer Aided Dispatch) systems. Additionally, this project compiles the data and provides tools to support customer information needs.

#### Investment Category: Business Support Program: IT



#### Safety Impact

This project is critical to bus sofware systems, which have the following safety abilities: Connect with the bus fleet for response to safety issues such as accidents or emergency alarms. Locate all vehicles on the map and communicate with the operators. Mobile apps will provide passenger counts and other information to Bus Planning for improvements to routes and scheduling which assists in preventing safety issues such as overcrowding.

#### Deliverables

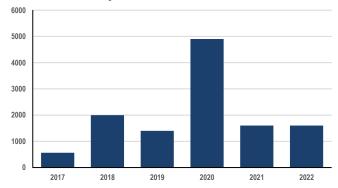
- Bus Data Warehouse Phase II to integrate and mine data for enhanced business intelligence in Bus Planning
- Updates to Regional Bus Stop project
- Bus Planning mobile applications and new Bus scheduling system.

#### **Project Financials - CIP0043**

Budget (in 000s)	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2017 to FY2022
Non-Personnel	\$565	\$2,000	\$1,400	\$4,900	\$1,600	\$1,600	\$12,065
Total	\$565	\$2,000	\$1,400	\$4,900	\$1,600	\$1,600	\$12,065

#### **Planned Funding Sources**

Budget	FY2017
System Performance	\$564,800
Total	\$564,800





### IT Capital Program Business Process Reengineering and Program Support

#### **Project Description**

This project provides business process support to IT capital investments. This project utilizes expertise in reviewing and documenting the current state and providing input into future business processes. Also within this project are Quality Management initiatives to support capital projects with documentation, process audits and corrective action recommendations to ensure continuity. Additionally, the project evaluates options for future change management and business intelligence tool implementation.

#### Investment Category: Business Support Program: IT



#### Safety Impact

This Enterprise Data Management Program allows analysis of information in all disparate systems (including safety systems), enables standardized business glossary in a central repository, improves data quality, normalizes and clean data as necessary, drives predictability maintenance analysis based on data accuracy, facilitates informed and optimal strategic decision making based on analytics for safety/preventive maintenance functions.

#### Deliverables

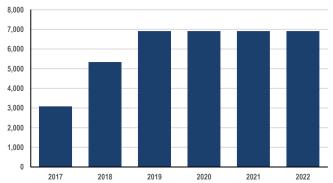
- July 2016 Launch of Enterprise Process Continuity project
- Development of cohesive strategy for failure analysis, predictive analytics and decision modeling
- System upgrades July 2016
- Development of transparent data sets for web application software Apps

#### **Project Financials - CIP0044**

Budget (in 000s)	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2017 to FY2022
Non-Personnel	\$3,083	\$5,336	\$6,910	\$6,910	\$6,910	\$6,910	\$36,059
Total	\$3,083	\$5,336	\$6,910	\$6,910	\$6,910	\$6,910	\$36,059

**Planned Funding Sources** 

Budget	FY2017
System Performance	\$3,083,000
Total	\$3,083,000





#### **Data Centers and Infrastructures**

#### **Project Description**

This project is focused on implementation and integration of data center infrastructure technologies which can achieve higher operational efficiencies, increase capacity, increase service availability and reduce risk to the underlying business services. Furthermore, this project updates the data center infrastructure, including an upgrade of the data center facility and computer rooms, transition of enterprise platforms to client-server, enterprise storage and the consolidation of redundant and inefficient server infrastructure.

#### Investment Category: Business Support Program: IT



#### Safety Impact

This project provides Safety & Preventative Maintenance support.

#### Deliverables

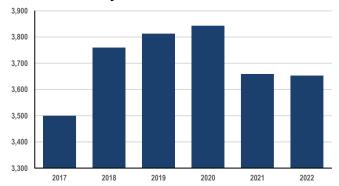
- Storage Area Network Infrastructure replacement
- Data Center and Virtual Storage improvements
- Infrastructure upgrades to enhance security of accessibility to various IT platforms

#### **Project Financials - CIP0045**

Budget (in 000s)	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2017 to FY2022
Personnel	\$455	\$489	\$496	\$500	\$476	\$475	\$2,890
Non-Personnel	\$3,045	\$3,271	\$3,317	\$3,344	\$3,183	\$3,178	\$19,338
Total	\$3,500	\$3,760	\$3,813	\$3,843	\$3,659	\$3,653	\$22,228

#### **Planned Funding Sources**

Budget	FY2017
System Performance	\$3,500,000
Total	\$3,500,000





#### **Document Management System**

**Investment Category:** Business Support Program: IT

#### **Project Description**

This project provides for enterprise-wide document management, integration of the document management system with major enterprise systems and compliance with enterprise wide document retention. This project will also assist moving many manual paper based processes to electronic processes by enabling enterprise applications to easily be linked to electronic records and forms as well as enhance the ability to respond to information requests.



#### Safety Impact

Files related to safety contained in the project include railcar manuals, engineering modification instructions, Dulles extension parts documentation, engineering technical specifications, training manuals, bus transportation and operations training records, and bus and rail incident and investigation reports, among others. The timely and efficient retrieval of records in urgent situations is critical to timely crisis management.

#### Deliverables

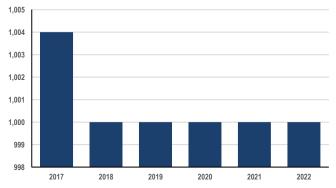
• Records management projects complete and infrastructure updgrades

#### **Project Financials - CIP0046**

Budget (in 000s)	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2017 to FY2022
Personnel	\$622	\$620	\$620	\$620	\$620	\$620	\$3,722
Non-Personnel	\$381	\$380	\$380	\$380	\$380	\$380	\$2,281
Total	\$1,004	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$6,004

#### **Planned Funding Sources**

Budget	FY2017
System Performance	\$1,003,799
Total	\$1,003,799





### **Enterprise Geographic Information System**

#### Investment Category: Business Support Program: IT

#### **Project Description**

This project creates an enterprise Geographic Information System (GIS) to support Authority-wide integrated mapping and data. The GIS will make information consistent and easily accessible throughout the Authority. This project will also integrate key maps, drawings, asset records and emergency access locations that are critical for timely emergency responses.



#### Safety Impact

The project is critical to Metro's safety and emergency response. It provides maps and data including radio outage display, detailed maps of Metro facility and asset locations, real-time maps of train and bus positions, maps and routing to track access points, maps/assets for station evacuation plans, and support for Safety Measurement System, Maximo, and crime analysis maps.

#### Deliverables

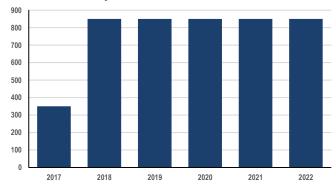
- Automatic Vehicle Locator and Automatic Vehicle Monitor interfaced with maps for real-time location information
- Bus & Rail Real-time Software system upgrades

#### **Project Financials - CIP0047**

Budget (in 000s)	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2017 to FY2022
Non-Personnel	\$350	\$850	\$850	\$850	\$850	\$850	\$4,600
Total	\$350	\$850	\$850	\$850	\$850	\$850	\$4,600

#### **Planned Funding Sources**

Budget	FY2017
System Performance	\$350,000
Total	\$350,000





#### Sensitive Data Protection Technology

#### Investment Category: Business Support Program: IT

#### **Project Description**

This project provides a comprehensive Authority-wide security architecture that will reduce the risk of malicious attacks and cyber-terrorism as well as fraud and waste while achieving and maintaining regulatory compliance.



#### Safety Impact

This project provides a comprehensive Authority-wide security architecture that will reduce the risk of malicious attacks and cyber-terrorism as well as fraud and waste while achieving and maintaining regulatory compliance. The purpose of the IT security organization is to ensure the safe operation of technology assets.

#### Deliverables

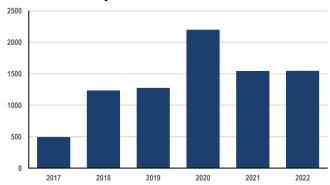
- Ongoing enhancements in Data Security apparatus
- Implement updates to Firewall Protection and Data Breach Management software

#### **Project Financials - CIP0048**

Budget (in 000s)	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2017 to FY2022
Non-Personnel	\$494	\$1,235	\$1,276	\$2,199	\$1,543	\$1,546	\$8,294
Total	\$494	\$1,235	\$1,276	\$2,199	\$1,543	\$1,546	\$8,294

#### **Planned Funding Sources**

Budget	FY2017
System Performance	\$493,759
Total	\$493,759





#### **Management Support Software**

#### Investment Category: Business Support Program: IT

#### **Project Description**

This project replaces and/or updates software that supports corporate and financial control of operations such as treasury, budget, cash management, Human Capital Management (HCM), procurement, asset management, Customer Relationship Management, Service Oriented Architecture (SOA) and vendor management functions. This project is essential for WMATA to maintain sufficient financial controls to manage its corporate operations.

#### Safety Impact

This project will support efforts to move from corrective maintenance to preventive maintenance, provide a single source for authorized configurations, and give maintainers ready access to engineering data and drawings. The timekeeping system will support implementing the fatigue policy for employees in safety critical designated job codes. This data exchange gateway increases data sharing and information system effectiveness which has significant impact on Metro Safety and Preventive Maintenance.

#### Deliverables

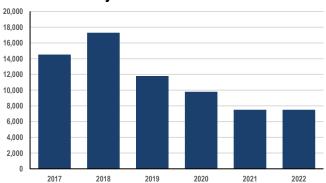
- Deployment and QA testing of the Enterprise Learning Management System
- Implementation of the Lifecycle Management system, establish failure analysis and asset lifecycle strategy
- Begin upgrades to Human Capital Management software

#### **Project Financials - CIP0049**

Budget (in 000s)	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2017 to FY2022
Personnel	\$494	\$532	\$532	\$532	\$210	\$210	\$2,510
Non-Personnel	\$14,036	\$16,768	\$11,268	\$9,268	\$7,290	\$7,290	\$65,920
Total	\$14,530	\$17,300	\$11,800	\$9,800	\$7,500	\$7,500	\$68,430

#### **Planned Funding Sources**

Budget	FY2017
System Performance	\$14,530,303
Total	\$14,530,303





#### Metro IT One Stop and Office Automation

Investment Category: Business Support Program: IT

#### **Project Description**

This project implements an enterprise level PC Replacement program, Help Desk Knowledgebase System, updated Customer Relationship Management System and one-stop IT Customer Support.



#### Safety Impact

This project provides up-to-date, cyber-security conscious fully functional IT equipment that supports the Emergency Command Center (ECC), Rail Operations Command Center (ROCC), and the Bus Operations Command Center (BOCC) and the MTPD Mobile Command Vehicle.

#### Deliverables

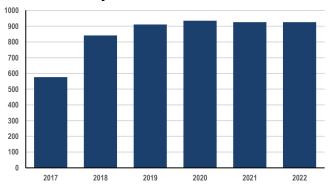
• Ongoing Authority-wide PC Desktop, laptop and tablet replacements

#### **Project Financials - CIP0050**

Budget (in 000s)	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2017 to FY2022
Personnel	\$292	\$426	\$462	\$474	\$469	\$469	\$2,592
Non-Personnel	\$284	\$415	\$449	\$461	\$457	\$457	\$2,523
Total	\$576	\$841	\$911	\$935	\$926	\$926	\$5,115

#### **Planned Funding Sources**

Budget	FY2017
System Performance	\$576,194
Total	\$576,194





#### Police Dispatch and Records Management

#### Investment Category: Business Support Program: IT

#### **Project Description**

This project replaces the current Metro Transit Police Department (MTPD) legacy dispatch system with an upto-date Computer Aided Dispatch and Records Management System, Organizational and Criminal Vehicle Reporting. Automated Location (AVL), communications integration, and mobile terminals and devices, to support MTPD response, communications, command and control, investigations, logistics, records management, multilateral reporting and business processes to improve and ensure the safety and security of WMATA for its customers and employees.

#### Safety Impact

The project is implementing a new dispatch and records management system to include, 911-style telephone integration, automated vehicle location (AVL) of emergency vehicles, property and evidence tracking, and incident, event, and use of force reporting.

#### Deliverables

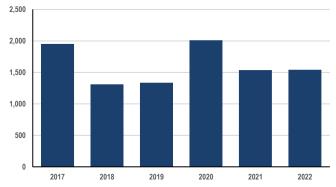
- Upgrade communication systems solution and train MTPD staff to utilize new platform
- Integration of communication systems to various support software
- Deployment of the Disaster Recovery software
- Implementation of Scheduling Business Intelligence software, Suspicious Activity Reporting module and Use of Force reporting software

,,							FY2017 to
Budget (in 000s)	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2022
Personnel	\$1,152	\$773	\$788	\$1,186	\$907	\$910	\$5,717
Non-Personnel	\$801	\$537	\$548	\$824	\$630	\$632	\$3,973
Total	\$1,953	\$1,311	\$1,336	\$2,011	\$1,537	\$1,542	\$9,690

#### Planned Funding Sources

**Project Financials - CIP0051** 

Budget	FY2017
System Performance	\$1,952,840
Total	\$1,952,840





#### **Network and Communications**

#### Investment Category: Business Support Program: IT

#### **Project Description**

This project provides a communications network that supports WMATA's current and future networking and communication needs. This project will also provide multi-protocol high bandwidth wired and wireless network solutions. The communication networks enable resource and information sharing for business functions such as voice communications, email, internet access, rail and bus operations and monitoring, surveillance systems and administrative business systems.



#### Safety Impact

This project performs life cycle maintenance on the Metroís voice and data infrastructure. In addition, the equipment replaced under this project directly supports all of the Authorityís computer-based operational applications including but not limited to telephones, radio and call recording, ROCS and CCTV.

#### Deliverables

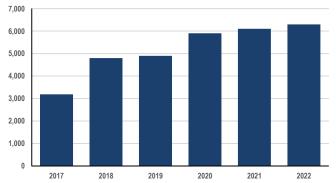
- Complete the upgrade of 87 rail station edge routers and switches
- Continue life-cycle replacements, network maintenance and expansion to support operational needs

#### **Project Financials - CIP0052**

Budget (in 000s)	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2017 to FY2022
Non-Personnel	\$3,189	\$4,800	\$4,900	\$5,900	\$6,100	\$6,300	\$31,189
Total	\$3,189	\$4,800	\$4,900	\$5,900	\$6,100	\$6,300	\$31,189

#### **Planned Funding Sources**

Budget	FY2017
System Performance	\$3,189,184
Total	\$3,189,184





## Customer Electronic Communications & Outreach

#### **Project Description**

This project provides enhanced electronic communications and systems to support the efficient delivery of services and customer outreach that focuses on customer demands for rapid and flexible data delivery systems for WMATA communications, schedules, system alerts, commuting benefits, and fares. Additionally, this project develops and implements Web Applications utilized by WMATA departments to deliver efficient core services.

#### Investment Category: Business Support Program: IT



#### Safety Impact

This project provides both web applications and customer communications and alerts that are critical to the functioning of Metroís Safety and Preventive Maintenance programs. The GOTRS web application is the primary tool for planning and approving track rights for both preventive and emergency mainline rail and yard maintenance.

#### Deliverables

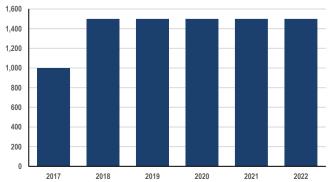
- Develop General Orders Track Rights System (GOTRS) replatform to HTML 5 June 2017
- Contractor Automated Timekeeping System (CATS) software release 3.0 to fix functionality issues
- Design and Build Personal "Sign On" feature for public facing WMATA.com June 2017
- Site Specific Work Plan App software release 2.0 complete June 2017

#### **Project Financials - CIP0054**

Budget (in 000s)	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2017 to FY2022
Non-Personnel	\$1,000	\$1,500	\$1,500	\$1,500	\$1,500	\$1,500	\$8,500
Total	\$1,000	\$1,500	\$1,500	\$1,500	\$1,500	\$1,500	\$8,500

#### **Planned Funding Sources**

Budget	FY2017
System Performance	\$1,000,000
Total	\$1,000,000





#### **Rail Operations Support Software**

#### Investment Category: Business Support Program: IT

#### **Project Description**

This project provides software application support for the Rail Operations Control Centers and other rail operation areas in order to receive vendor support and operate the rail system. The project involves the development, analysis and documentation of organizational and business requirements and their associated processes by WMATA and industry-specific subject matter experts, the procurement of the necessary hardware, software, and resources.



#### Safety Impact

This project includes support for software application and modifications that support the FTA CAPS assigned to Rail Operation Control Center (ROCC) and Transit Infrastructure Engineer (TIES). For TIES and ROCC this includes Alarm re-partitioning and reducing nuisance alarms. This project provides notifications to the ROCC regarding alarms, LOS, third rail energization, red signal overrun, Amber light (Roadway Worker work ahead warning system), control of the emergency fan ventilation system (EVOP).

#### Deliverables

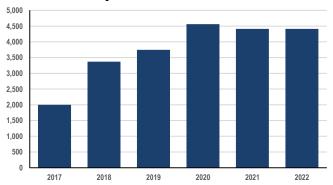
- Infrastructure Upgrades to Red Line ATC Remote Terminal Units to interface system for Rail location monitoring and active control
- Alarm Management System software development to begin
- Develop Parallel Environment to synchronize Testing Lab, JGB Operations Control Center and CTF Operations Control Center
- AIM systems training for IT and OCC personnel

Budget (in 000s)	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2017 to FY2022
Non-Personnel	\$2,000	\$3,370	\$3,745	\$4,563	\$4,411	\$4,411	\$22,501
Total	\$2,000	\$3,370	\$3,745	\$4,563	\$4,411	\$4,411	\$22,501

#### **Project Financials - CIP0056**

#### **Planned Funding Sources**

Budget	FY2017
System Performance	\$2,000,000
Total	\$2,000,000





## Data Governance and Business Intelligence

#### Investment Category: Business Support Program: IT

#### **Project Description**

This project implements business intelligence reporting and analytics that include historical trending and graphical capabilities for viewing and integrating data utilized for reporting and analysis across different data sources. This project also establishes policies and processes for achieving data governance that involves the business control of key data elements and how enterprise metrics are computed.

#### Safety Impact

The project delivers analytic reports and dashboards for SAFE and MTPD. These are used to track performance metrics for safety, as well as support operational decisionmaking. For TIES, the project delivers dashboards and reports that are used to assess maintenance status and trends, and is exploring the use of a prediction tool to support improvements in maintenance scheduling. The project also supports tasks related to data quality improvement in Maximo.

#### Deliverables

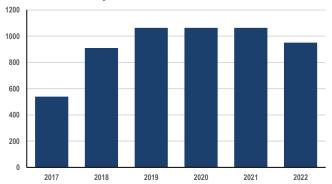
- Completion of Business Intelligence integration of multiple software
- Development of Automated Customer Travel Time performance metric and Individualized Dashboard for SmarTrip users
- Build Data Repository for relational and dimensional analytics across the three platforms
- Develop Transit Infrastructure and Engineering Services Performance Management dashboard

#### **Project Financials - CIP0128**

Budget (in 000s)	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2017 to FY2022
Personnel	\$297	\$501	\$585	\$585	\$585	\$523	\$3,075
Non-Personnel	\$243	\$410	\$479	\$479	\$479	\$428	\$2,516
Total	\$539	\$910	\$1,064	\$1,064	\$1,064	\$951	\$5,591

**Planned Funding Sources** 

Budget	FY2017
System Performance	\$539,132
Total	\$539,132





#### Rail Mileage Based Asset Management

#### Investment Category: Business Support Program: IT

#### **Project Description**

This project is intended to improve railcar fleet reliability through implementation of railcar configuration management, railcar mileage capture, mobile storeroom inventory management and mileage-based preventive maintenance.



#### Safety Impact

This project will improve maintenance practices based on mileage usage for railcars. This will increase safety, reliability and reduce overall maintenance of the railcar fleets.

#### Deliverables

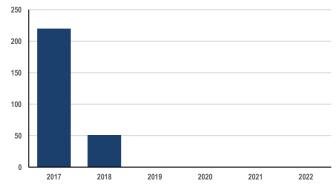
• Project closeout activities in FY2017

#### **Project Financials - CIP0140**

Budget (in 000s)	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2017 to FY2022
Personnel	\$174	\$41	\$0	\$0	\$0	\$0	\$214
Non-Personnel	\$46	\$11	\$0	\$0	\$0	\$0	\$57
Total	\$220	\$51	\$0	<b>\$0</b>	<b>\$0</b>	\$0	\$271

#### **Planned Funding Sources**

Budget	FY2017
Fed Formula - 5307	\$220,078
Total	\$220,078





# Safety Measurement System

#### Project Description

This project will develop an automated and centralized safety management system that will capture information from accidents and incidents that occur at WMATA stations, WMATA facilities and all WMATA vehicles including: MetroAccess, Metrobus and Metrorail vehicles. This system will give WMATA a single repository of safety data and will be capable of generating reports.

#### Investment Category: Business Support Program: IT



#### Safety Impact

This project will improve safety by centralizing and organizing incident information details from all over the WMATA system to better analyze and evaluate causes, and identify potential initiatives, to improve employee and customer safety measures in the future.

#### Deliverables

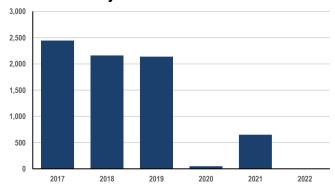
• Project to complete Hazard Management, FRMS Reports, and SMS Top Ten (deliverables 1 & 2).

#### **Project Financials - CIP0196**

Budget (in 000s)	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2017 to FY2022
Personnel	\$100	\$100	\$100	\$5	\$25	\$0	\$330
Non-Personnel	\$2,345	\$2,062	\$2,039	\$45	\$625	\$0	\$7,116
Total	\$2,445	\$2,162	\$2,139	\$50	\$650	\$0	\$7,446

#### **Planned Funding Sources**

Budget	FY2017
PRIIA	\$2,444,904
Total	\$2,444,904





### Rail Scheduling System Upgrade

#### Investment Category: Business Support Program: IT

#### **Project Description**

This project focuses on business process improvements in daily operations, planning and scheduling of Metrorail service delivery. The expanding Metrorail system and track-maintenance complex work requires а comprehensive transit scheduling application. Optimized and effective usage of the limited resources will be core to solving challenges such as the maintenance of aging infrastructure and the commitment of providing reliable and safe service to our customers. This project will be completed in two phases. The first phase will install the resource scheduling component and the second phase will install the daily operation management component.



#### Safety Impact

This project focuses on business process improvements in rail planning and scheduling. Optimized and effective usage of limited resources are core to solving challenges such as the maintenance of aging infrastructure and commitments to providing reliable and safe service to customers.

#### Deliverables

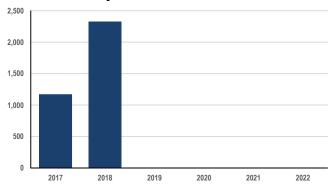
• Continue Phase 2: Development and the installation of the daily operation system

#### **Project Financials - CIP0215**

Budget (in 000s)	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2017 to FY2022
Personnel	\$528	\$1,048	\$0	\$0	\$0	\$0	\$1,576
Non-Personnel	\$645	\$1,281	\$0	\$0	\$0	\$0	\$1,926
Total	\$1,173	\$2,329	\$0	\$0	<b>\$0</b>	\$0	\$3,503

#### **Planned Funding Sources**

Budget	FY2017
Fed Formula SOGR - 5337	\$1,173,479
Total	\$1,173,479





#### Wireless Communication Infrastructure

#### **Project Description**

This project includes the engineering, design and construction of a wireless network in all WMATA rail stations to support ongoing operational activities, business initiatives, and customers. This project will also provide WMATA personnel mobile access to internal applications.

#### Investment Category: Business Support Program: IT



• Wireless networking implemented at 47 stations

#### Safety Impact

This project is a specific deliverable under the Momentum program (Next Generation Communications Infrastructure) that allows station managers to use mobile devices to better assist customers through increased access to information and the Authority's operational staff access to Rail Car operational metrics for preventive and corrective maintenance. The network will provide for enhanced communication throughout Metrorail system during regular operation and emergency response.

# Project Financials - CIP0230

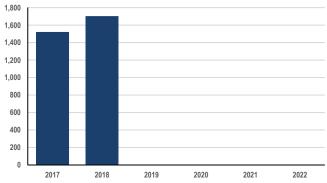
Budget (in 000s)	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2017 to FY2022
Personnel	\$1,034	\$1,158	\$0	\$0	\$0	\$0	\$2,192
Non-Personnel	\$487	\$545	\$0	\$0	\$0	\$0	\$1,031
Total	\$1,521	\$1,703	<b>\$0</b>	\$0	\$0	\$0	\$3,223

#### **Planned Funding Sources**

Budget	FY2017
Fed Formula SOGR - 5337	\$1,520,591
Total	\$1,520,591

#### **Financial Summary**

**Deliverables** 





# Police Emergency Management Equipment

#### Investment Category: Business Support Program: MTPD

#### **Project Description**

This project upgrades WMATA facilities to support rescue and recovery operations. Additionally, this project funds the purchase, repair or replacement of damaged or obsolete rescue and recovery support equipment.



#### Safety Impact

The Office of Emergency Management requires support equipment. If OEM support equipment is not replaced on a routine basis, safety conditions during rescue and recover efforts are less than optimal.

#### Deliverables

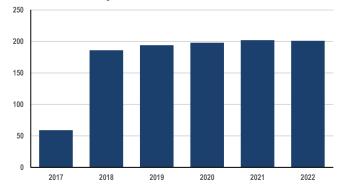
• Backup Emergency Operations Center upgrades

#### **Project Financials - CIP0099**

Budget (in 000s)	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2017 to FY2022
Non-Personnel	\$59	\$186	\$194	\$198	\$202	\$201	\$1,042
Total	\$59	\$186	\$194	\$198	\$202	\$201	\$1,042

#### **Planned Funding Sources**

Budget	FY2017
Fed Formula - 5307	\$59,444
Total	\$59,444





### Police Portable Radio Replacement

#### **Project Description**

This project purchases replacement police radios based upon a useful lifecycle and new radios for department growth. Additionally, this project supports the maintenance and upkeep of 450 handheld radio units, 100 Mobile Dash mounted radio units and 75 multiband radio units for communication with other jurisdictions.

#### Investment Category: Business Support Program: MTPD



#### Safety Impact

The Metro Transit Police Department requires communications equipment. If MTPD radios are not replaced on a routine basis, safety conditions during police patrols are less than optimal.

#### Deliverables

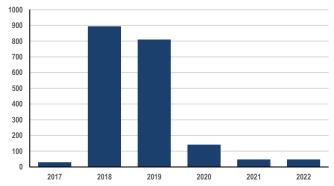
• Receive 150 Handheld Radio Equipment

#### **Project Financials - CIP0103**

Budget (in 000s)	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2017 to FY2022
Personnel	\$30	\$94	\$70	\$20	\$18	\$18	\$251
Non-Personnel	\$0	\$800	\$740	\$122	\$30	\$30	\$1,722
Total	\$30	\$894	\$810	\$142	\$48	\$48	\$1,973

#### **Planned Funding Sources**

Budget	FY2017
Fed Formula - 5307	\$30,293
Total	\$30,293





## Support Equipment - MTPD

#### Investment Category: Business Support Program: MTPD

#### **Project Description**

This project upgrades storage and training facilities to support the police and houses law enforcement equipment and repairs or replaces damaged or obsolete equipment used to support law enforcement.



#### Safety Impact

The Metro Transit Police Department requires support equipment. If MTPD support equipment is not replaced on a routine basis, safety conditions during police patrols are less than optimal. Police support equipment such as: video, security, communications and personal protection. Enables MTPD to respond and clear incidents in a safe and effective manner.

#### Deliverables

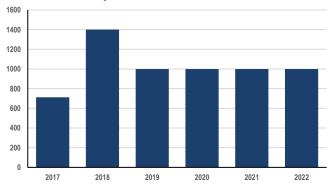
- Facility Security Improvements complete June 2017
- Police Patrol Equipment Upgrade complete June 2016

#### **Project Financials - CIP0127**

Budget (in 000s)	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2017 to FY2022
Non-Personnel	\$712	\$1,400	\$1,000	\$1,000	\$1,000	\$1,000	\$6,112
Total	\$712	\$1,400	\$1,000	\$1,000	\$1,000	\$1,000	\$6,112

#### **Planned Funding Sources**

Budget	FY2017
Fed Formula - 5307	\$712,361
Total	\$712,361





## **Police Substation District 2**

#### **Project Description**

This project is for the design and construction of a new substation for MTPD District Two as well as a Police Training Facility with indoor firing range and an adjacent parking lot on WMATA owned property at Franconia-Springfield Metro Station.

#### Investment Category: Business Support Program: MTPD



#### Safety Impact

No specific safety justification applicable.

#### Deliverables

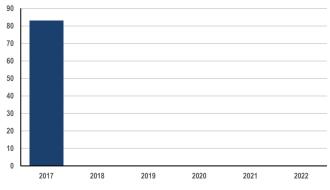
- Construction Punch list complete February 2016
- Construction completion March 2016
- Project Closeout FY2017

#### **Project Financials - CIP0101**

Budget (in 000s)	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2017 to FY2022
Personnel	\$67	\$0	\$0	\$0	\$0	\$0	\$67
Non-Personnel	\$16	\$0	\$0	\$0	\$0	\$0	\$16
Total	\$83	<b>\$0</b>	\$0	\$0	\$0	\$0	\$83

#### **Planned Funding Sources**

Budget	FY2017
Fed Formula - 5307	\$83,456
Total	\$83,456





## **Special Operations Division Facility**

#### **Project Description**

This project replaces the temporary facility used by the Metro Transit Police Special Operations Division located in Suitland, Maryland, near the Branch Avenue Metrorail station with a new facility near the Landover Bus Garage. This facility includes the Special Response Team, Transit Anti-Crime Team, Auto Theft Unit and Explosive Ordinance Disposal Team

#### Investment Category: Business Support Program: MTPD



#### Safety Impact

No specific safety justification applicable.

#### Deliverables

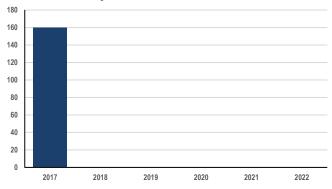
- Construction Punch list complete December 2015
- Occupancy Permit Q3 FY2016
- Project Completion- June 2016

#### **Project Financials - CIP0106**

							FY2017 to
Budget (in 000s)	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2022
Personnel	\$126	\$0	\$0	\$0	\$0	\$0	\$126
Non-Personnel	\$34	\$0	\$0	\$0	\$0	\$0	\$34
Total	\$160	<b>\$0</b>	\$0	\$0	\$0	\$0	\$160

#### **Planned Funding Sources**

Budget	FY2017
Fed Formula - 5307	\$159,615
Total	\$159,615





## Service Vehicle Replacement & Leasing

Investment Category: Business Support Program: Support Equipment/Services

#### **Project Description**

This project funds the replacement of non-revenue service vehicles at the end of their useful life and funds lease agreements for service vehicles. Service vehicles are used in critical maintenance and law enforcement functions. The current replacement standard is 100,000 miles or 8 years for a vehicle used in light duty service, 100,000 miles or 12 years on heavy duty vehicles, and 100,000 miles or 5 years on law enforcement vehicles. These standards were established based on a 2013 evaluation to improve the efficiency of the support fleet.



#### Safety Impact

To safely maintain WMATA's core operations several types of non-revenue vehicles are needed. For example: MTPD vehicles, tow vehicles and roadside maintenance support vehicles.

#### Deliverables

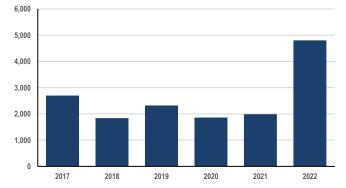
- Replacement of 59 MTPD vehicles
- Replacement of various heavy duty and special purpose vehicles

#### **Project Financials - CIP0009**

Budget (in 000s)	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2017 to FY2022
Personnel	\$10	\$7	\$9	\$7	\$7	\$18	\$57
Non-Personnel	\$2,690	\$1,832	\$2,313	\$1,855	\$1,981	\$4,785	\$15,457
Total	\$2,700	\$1,839	\$2,322	\$1,862	\$1,988	\$4,803	\$15,514

#### **Planned Funding Sources**

Budget	FY2017
Fed Formula - 5307	\$2,700,000
Total	\$2,700,000





#### **Environmental Compliance Project**

Investment Category: Business Support Program: Support Equipment/Services

#### **Project Description**

This project designs and constructs upgrades and/or replaces equipment and facilities in order to maintain compliance with environmental regulations, to respond to directives from environmental regulatory agencies, to minimize risk, civil and criminal citations and fines. The scope of this project includes, but is not limited to, storage tank systems, tank monitoring systems, wastewater pretreatment systems, storm water pretreatment systems, remediation systems and air emission sources.



#### Safety Impact

This project provides the upgrade and replacement of systems related to hazardous material disposal, water and air treatment, and disposal tank monitoring to ensure environmental compliance and a safe working facility for WMATA employees.

#### Deliverables

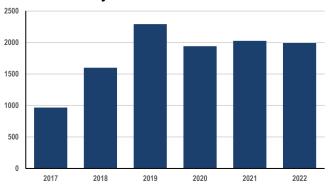
- Upgrade pretreatment system at Huntington Q2 FY2017
- Replace Oil Water Separator (OWS) bypass for cleaning at Oliver Street Discharge Pumping Station (DPS) Q3 FY2017
- Repair OWS at the Revenue Collection Facility (RCF) in Alexandria (Q4 FY2017). Upgrade pretreatment system at Carmen Turner Facility (CTF) Q2 FY2017

							FY2017 to
Budget (in 000s)	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2022
Personnel	\$20	\$34	\$49	\$41	\$43	\$42	\$229
Non-Personnel	\$947	\$1,566	\$2,244	\$1,901	\$1,983	\$1,950	\$10,591
Total	\$967	\$1,600	\$2,293	\$1,942	\$2,026	\$1,992	\$10,820

#### **Project Financials - CIP0010**

#### **Planned Funding Sources**

Budget	FY2017
Fed Formula - 5307	\$967,058
Total	\$967,058





# Core & System Capacity Project Development Investment Category: Business Support

#### **Project Description**

This project conducts near-term and long-range planning studies and produces financial and implementation plans for core capacity enhancements in order to improve travel time, customer comfort, pedestrian flow, vertical transportation, line or route operations, and station access.

# **Program:** Support Equipment/Services



#### Safety Impact

Most core stations and their lines have been classified as over capacity since 2008. Since 2014, eight such stations have been above Metrois approved design standards for safe passenger flow. This effort provides design and planning solutions to make these stations and lines safe again by alleviating overcrowding conditions that contribute to unsafe conditions and degradation of on-time performance.

#### **Deliverables**

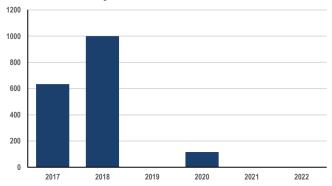
- Determine feasibility of proposed new junctions, pocket tracks and turnbacks
- Develop Station Area Strategic Investment Plan
- Prepare documentation for fuure core capacity grant application

#### Project Financials - CIP0039

Budget (in 000s)	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2017 to FY2022
Personnel	\$52	\$82	\$0	\$9	\$0	\$0	\$143
Non-Personnel	\$582	\$918	\$0	\$107	\$0	\$0	\$1,607
Total	\$634	\$1,000	<b>\$0</b>	\$116	\$0	\$0	\$1,750

#### **Planned Funding Sources**

Budget	FY2017
System Performance	\$633,659
Total	\$633,659





# **Credit Facility**

**Investment Category:** Business Support **Program:** Support Equipment/Services

#### **Project Description**

This project funds the lines of credit and interim financing costs necessary to finance capital program cash flow needs.



#### Safety Impact

No specific safety justification applicable.

#### Deliverables

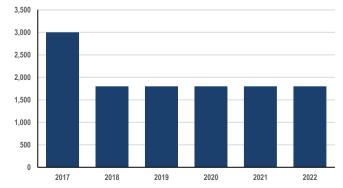
• Maintenance of ongoing Lines of Credit and other instruments for short term funding needs

#### **Project Financials - CIP0131**

Budget (in 000s)	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2017 to FY2022
Non-Personnel	\$3,000	\$1,800	\$1,800	\$1,800	\$1,800	\$1,800	\$12,000
Total	\$3,000	\$1,800	\$1,800	\$1,800	\$1,800	\$1,800	\$12,000

#### **Planned Funding Sources**

Budget	FY2017
System Performance	\$3,000,000
Total	\$3,000,000





## **Roof Rehabilitation and Replacement**

Investment Category: Business Support Program: Support Equipment/Services

#### **Project Description**

This project will replace and perform major rehabilitation of roofs on all types of WMATA facilities.



#### Safety Impact

This project will address roofs of any WMATA facility to ensure a safe enclosure and operation of any building structure, many of which house critical system, power, or operational equipment, preventing degradation from the elements and age, as well as disruption of services to customers.

#### Deliverables

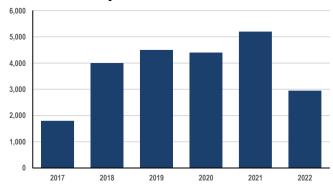
• Construction work on Montgomery Bus Garage to begin

#### **Project Financials - CIP0170**

Budget (in 000s)	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2017 to FY2022
Personnel	\$310	\$689	\$775	\$758	\$896	\$508	\$3,936
Non-Personnel	\$1,490	\$3,312	\$3,725	\$3,642	\$4,304	\$2,442	\$18,915
Total	\$1,800	\$4,001	\$4,500	\$4,400	\$5,200	\$2,950	\$22,851

#### **Planned Funding Sources**

Budget	FY2017
Fed Formula SOGR - 5337	\$1,800,000
Total	\$1,800,000





#### **Rehabilitation of Non-Revenue Facilities**

#### Investment Category: Business Support Program: Support Equipment/Services

#### **Project Description**

This project provides infrastructure improvements and rehabilitation of non-revenue facilities. Elements of this project include the replacement or overhaul of HVAC, mechanical, electrical, data/communications, structural components and systems. Facilities include MTPD facilities, Carmen Turner Facilities and other non-revenue facilities.



#### Safety Impact

The Non-Revenue Facilities responds to these priorities by maintaining building code compliance (NFPA, OSHA, ADA and Jurisdictional) as well as rehabilitating/replacing mechanical equipment systems (including fire suppression, HVAC, emergency egress) at the Authorityís non-revenue facilities. Failure to maintain our facilities and mechanical equipment systems in a state of good repair jeopardizes the safety of our employees and the integrity of our infrastructure investments.

#### Deliverables

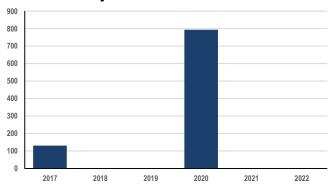
- Purchase new equipment to include but not limited to enhanced sprinkler system, upgraded electrical wiring, rehabilitate flooring and bathroom components, replace old carpet, rehabilitate drain pits, replace HVAC units, minor structural renovations at Carmen Turner Facility.
- Migrate HVAC systems into authority-wide control system to include the purchase of electric heaters, fan coil units, gas heaters, heating ventilation units and package air conditioning units at Carmen Turner and Pennsy Drive

Budget (in 000s)	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2017 to FY2022
Non-Personnel	\$131	\$0	\$0	\$793	\$0	\$0	\$924
Total	\$131	\$0	\$0	\$793	\$0	\$0	\$924

#### **Project Financials - CIP0197**

#### **Planned Funding Sources**

Budget	FY2017
Fed Formula - 5307	\$131,066
Total	\$131,066





## Sustainability Investments - Pilot Program

#### **Project Description**

This project will identify and pilot new technologies and practices to reduce operating costs, consumption of natural resources, and pollution while continuing to improve service.

#### Investment Category: Business Support Program: Support Equipment/Services



#### Safety Impact

This project will install inverters and batteries to increase the quality of power provided to trains, thus reducing degradation of onboard systems. Degradation of onboard systems can result in system failures requiring the offboarding of passengers. When there is a power outage or a traction power substation going off line, batteries can provide backup power. The data collected will aid in asset condition awareness and optimization of preventive maintenance resulting in increased reliability of critical systems.

#### Deliverables

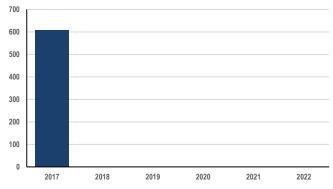
• Energy management system - mapping locations, energy use and savings opportunities

#### **Project Financials - CIP0212**

Budget (in 000s)	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2017 to FY2022
Personnel	\$79	\$0	\$0	\$0	\$0	\$0	\$79
Non-Personnel	\$530	\$0	\$0	\$0	\$0	\$0	\$530
Total	\$609	\$0	<b>\$0</b>	\$0	<b>\$0</b>	\$0	\$609

#### **Planned Funding Sources**

Budget	FY2017
Fed Formula - 5307	\$608,800
Total	\$608,800





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# Appendix B - Board Budget Resolutions

#### PRESENTED AND ADOPTED: March 24, 2016

# SUBJECT: APPROVAL OF FISCAL YEAR (FY) 2017 OPERATING BUDGET AND PUBLIC HEARING STAFF REPORT

#### 2016-14

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

WHEREAS, The Board of Directors received and considered the General Manager/Chief Executive Officer's (GM/CEO) proposed FY2017 operating budget, and approved a docket of proposed customer service initiatives and fare policy changes for FY2017 for consideration at a public hearing; and

WHEREAS, The Board of Directors conducted a public hearing on February 22, 2016, preceded by an open forum on the proposed operating budget, the results of which are summarized in the Staff Report (Attachment A); and

WHEREAS, The Board of Directors also sought comment at the public hearing on Metro's proposed FY2017 Capital Improvement Program (CIP) and Federal FY2016 Grant Applications, as required for recipients of Federal Transit Administration (FTA) grant funding, and those comments are also included in the Staff Report; and

WHEREAS, As required in Metro's Board-approved Public Participation Plan (PPP), Metro staff conducted additional public outreach to riders regarding the proposed customer service initiatives and fare policy changes at key locations throughout the WMATA transit system, and through community-based organizations, and conducted an online survey, with the results of these outreach efforts summarized in the Staff Report; and

WHEREAS, Metro is currently piloting a new 'Metro Select' monthly pass product, as authorized in Resolution 2015-67, and staff will report back to the Board with a recommendation on whether to continue and expand this product; and

WHEREAS, It is anticipated that the Montgomery County Council will approve continued funding for the "Kids Ride Free" program to provide free Metrobus rides for Montgomery County students between 2:00 p.m. and 7:00 p.m. for the FY2017 budget; and

WHEREAS, It is anticipated that the District of Columbia will approve continued funding for the School Transit Subsidy Program (including the "Kids Ride Free" program for students on Metrobus and Metrorail), as well as continued funding for transfer discounts at Anacostia and Congress Heights stations; now, therefore be it

Motioned by Mr. Goldman, seconded by Mr. Price

Ayes: 8 – Mr. Evans, Ms. Harley, Mr. Corcoran, Mr. Downey, Mr. Price, Mr. Goldman, Mrs. Hudgins and Ms. Tregoning



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*RESOLVED*, That the Board of Directors approves the Staff Report on the public hearing and outreach concerning the proposed CIP, customer service initiatives and fare policy changes; and be it further

*RESOLVED*, That the Board of Directors approves the GM/CEO proposal for a "grace period," under which customers who enter and exit the same Metrorail station within a 15 minute period will be credited for any fare paid; and be it further

*RESOLVED*, That the Board of Directors authorizes the development of the proposed "University Pass" product, so long as that product is implemented within the following terms and conditions: The fare charged shall be \$1 per day per eligible student; the pilot shall include Metrorail and Metrobus services, and may include Express Bus services and airport shuttles; and the pilot shall exclude MetroAccess services; and be it further

*RESOLVED,* That the Board of Directors directs staff to negotiate and implement a pilot program agreement with interested universities and undertake the University Pass pilot, and to report to the Board after the completion of the first school term in which one or more universities have participated in the program with a recommendation on whether to continue the program; and be it further

*RESOLVED*, That the Board of Directors directs staff to evaluate the viability and scalability of the University Pass Program to include regional bus partners, and include recommendations regarding this evaluation in the report to the Board; and be it further

*RESOLVED*, The Board of Directors approves the GM/CEO proposal to add bus passes to existing rail passes at no additional charge, subject to staff recommendations for improving and simplifying the set of Metrorail pass products as part of the forthcoming staff report on the Metro Select pass pilot; and be it further

*RESOLVED*, That the Board of Directors approves and adopts the FY2017 operating budget of \$1.745 billion, with revenues, expenses and subsidies detailed in Attachments B and C, which includes no fare increases, no service reductions, and no increase in total jurisdictional operating subsidy; and be it further

*RESOLVED,* That the FY2017 operating budget includes an increase of eligible preventative maintenance activities funded by FTA grants through the capital budget from \$31 million to \$95 million; and be it further

*RESOLVED*, That \$21.2 million of debt service expenditures resulting from the issuance of Metro Matters bonds are subsumed within the FY2017 budget and allocated to the jurisdictions as detailed in Attachment C; and be it further

*RESOLVED*, That the total budget for FY2017 Operating Reimbursable Program projects shall be \$34.2 million, as detailed in Attachment D; and be it further



*RESOLVED*, That the budget for Operating Reimbursable Safety & Security grants for FY2016 shall be \$4.7 million or such lesser amount of federal safety and security grants awarded to WMATA as shown in Attachment D; and be it finally

*RESOLVED,* That this Resolution shall be effective 30 days after adoption in accordance with § 8(b) of the WMATA Compact.

Reviewed as to form and legal sufficiency,

Mark R. Pohl Acting General Counsel

WMATA File Structure Nos.: 4.2.2 Fiscal Year Budgets 9.12.9 Tariff (WMATA Fare Structure)



## Attachment A



#### Washington Metropolitan Area Transit Authority Public Outreach & Input Report

Docket B16-01: Proposed FY2017 Operating Budget

Docket B16-02: Proposed FY2017 Capital Improvement Program & Federal FY2016 Grant Applications

March 4, 2016



#### Introduction

Each year, the Washington Metropolitan Area Transit Authority (Metro) provides the public with an opportunity to comment on the proposed budget for the following year. Metro's proposed FY2017 operating budget includes no fare increases, no service reductions and maintains the jurisdictional operating subsidy from the previous year. The proposed FY2017-2022 Capital Improvement Program (CIP) includes a proposed \$1.1 billion capital investment plan for FY2017 that focuses on safety and state of good repair investments and advances the rehabilitation and replacement of Metro's critical infrastructure, including facilities, equipment, railcars, and buses.

The following report is a summary of the public outreach and resulting comments on the proposed FY2017 budget. This report includes an overview of the Public Participation Plan that was undertaken, as well as a summary of the feedback received from the public from various forums.

#### FY2017 Budget Proposal Package

The final proposal package that went to the public for feedback included:

#### Proposed Operating Budget Items

- Eliminating the ability to add value to a SmarTrip® card on Metrobus
- Adding a free bus pass to existing rail passes
- Creating a discounted student pass for participating universities
- Providing a "grace period" to credit back any fare paid after entering and exiting the same station within 15 minutes
- Hiring new safety personnel in order to comply with FTA Safety Management Inspection requirements

#### Proposed Capital Budget Items

- Purchasing new railcars, buses, MetroAccess vehicles and replacement parts
- Repairing and/or replacing existing rail tracks and structures
- Improving technology systems that supply power to Metrorail
- Renovating maintenance facilities (bus garages and rail yards) for Metrobus and Metrorail
- Repairing and/or replacing elevators and escalators
- Upgrading Metro stations through maintenance and space improvements
- Developing dedicated bus lanes
- Improving bicycle and pedestrian facilities

#### **Communications & Outreach to the Public**

In order to encourage customers to provide feedback on the proposals, as well as to fulfill the Board-approved Public Participation Plan, Metro tailored a communications and outreach plan that focused on customers that may be impacted by these proposals.

For the proposal to eliminate SmarTrip® value-add ability on Metrobus, this feedback process may be the beginning of a more robust public participation effort. If WMATA management wishes to pursue this change as part of the final FY2017 budget, additional outreach that is directly targeted at Title VI populations and at bus customers who currently load value on Metrobus must be completed, along with a Title VI equity analysis for Board approval. Preliminary analysis that



2

has been presented to the Board in budget work sessions does indicate that minority populations in particular could be negatively impacted by this proposal.

All communications and outreach efforts were conducted during the public comment period of Saturday, February 6 through Monday, February 29 at 9:00 a.m. The final plan included the following efforts:

- Pop-up events at three Metrorail stations
- Direct email
- Outreach to Community Based Organizations (CBOs)
- Targeted marketing & media
- Public hearing

Feedback was collected through the following sources:

- Paper and tablet surveys in English and Spanish at pop-up events, CBO meetings and public hearing
- Online survey in English, Spanish, Amharic, Arabic, Chinese, Korean, and Vietnamese
- WrittenTestimony@wmata.com emails
- Verbal public comments during the public hearing

#### Pop-up Events

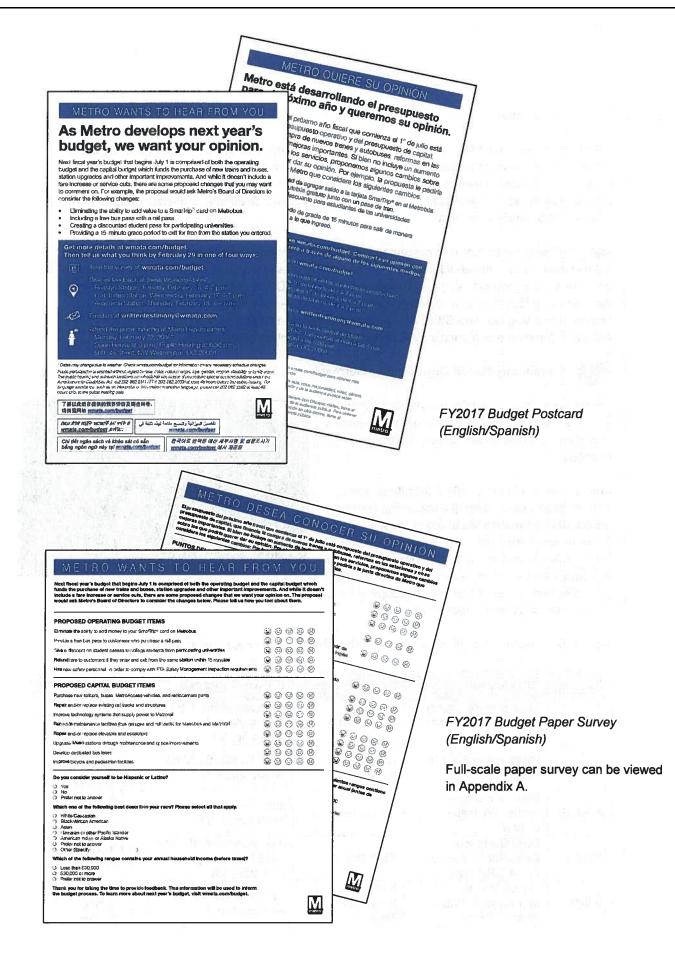
Metro staff traveled to three high ridership/high rail-to-bus transfer Metrorail stations to collect feedback from riders. Metro staff who speak Spanish were present at all events, and dates and times were chosen to correspond with high ridership periods. Outreach staff wore Metro aprons or safety vests, and those who were bilingual wore large pins that identified them as speaking another language. English/Spanish postcards were distributed, and English/Spanish paper and tablet surveys in English and Spanish were collected. A Board Member participated at two of the pop-up events, and Metro's CFO participated at one of the pop-up events.

Pop-up Event Location	Date	Time	# of postcards distributed*	# of surveys completed
Rosslyn Metrorail Station	Tuesday, February 16	4:00-7:00 p.m.	600	130
Fort Totten Metrorail Station	Wednesday, February 17	4:00-7:00 p.m.	600	108
Anacostia Metrorail Station	Thursday, February 18	4:00-7:00 p.m.	1,100	133

\*Note that this only captures surveys completed in-person and not those who chose to complete the survey online or sent in written comments.









## Direct Email

Direct emails were sent to a sample of registered SmarTrip® card customers who had used their SmarTrip® card within the last month at one of the outreach event locations or made a bus-to-rail transfer. The emails invited customers to complete an online survey as well as alerted them to days and times when staff would be present to take in-person feedback or answer questions. A total of 5,988 emails were sent.

Metro staff also sent email notifications to their stakeholder lists. The Office of External Relations notified their 2,900+ stakeholder list, which includes places of worship, event venues, residences and apartments, schools, shopping areas and more. The Office of Government Relations notified local Advisory Neighborhood Commissions, local jurisdictions and legislative staff in DC, Maryland and Virginia. The Office of ADA Policy and Planning shared with the Accessibility Advisory Committee and encouraged them to share with other constituents.



#### **Community Based Organization Outreach**

Local Community Based Organizations (CBOs) helped spread the word and encouraged feedback from their constituents about the proposed changes.

Emails were sent to over 300 CBOs three times, once to inform them about the upcoming comment period and information about the proposals, a follow-up email with web links and a copy of the bilingual flier once the public comment period went live, and a final reminder email. Individual emails



were also sent to select CBOs with a copy of the postcard and paper surveys to share with their constituents as deemed appropriate.

Dates(s)	Organization	Type of Event	Location/Address	Target Audience
1/29/16	Montgomery County Office of Community Partnerships	Presentation	Rockville Memorial Library 21 Maryland Ave Rockville, MD	Ethnic minority communities
2/11/16	Washington English Center	Community Services Fair	2200 California St NW Washington, DC	Adult immigrant students
2/19/16	Bernice Fonteneau Senior Wellness Center	Presentation	3531 Georgia Ave NW Washington, DC	African American seniors
2/22/16	CBO Outreach Committee attended by 14 CBO reps	CBO Meeting	Arlington Central Library 1015 N. Quincy St Arlington, VA	Title VI constituents
2/24/16	Carlos Rosario International Public Charter School	Metro Information Table	1100 Harvard St NW Washington, DC	Adult immigrant students

Staff also conducted the following visits with the CBOs to encourage participation:

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# Targeted Marketing & Media

Metro used targeted marketing and media strategies to increase awareness and encourage feedback on the proposal.

- A legal notice was printed in the *Washington Post* on Saturday, February 6 and Saturday, February 13 notifying the public of the multiple opportunities to provide public comment.
- Advertisements were placed in papers throughout the region, including ethnic media in four different languages:
  - o The Express (English)
  - o The Afro (English)
  - o El Tiempo Latino (Spanish)
  - Washington Hispanic (Spanish)
  - o Korean Times (Korean)
  - o Epoch Times (Chinese)
  - o Doi Nay (Vietnamese)
- A news release was published on Friday, February 12.
- The webpage wmata.com/budget was updated to inform customers about the proposals and contained the official notice in Amharic, Arabic, Chinese, French, Korean, Spanish and Vietnamese. The page also linked to the survey and listed the pop-up events and public hearing information.
- English and Spanish signs were posted in all Metrorail stations, Information Centers on Metrobus, and in MetroAccess vehicles.
- Various publications, including the Washington Post and Progressive Railroading, covered the proposals and public hearing online and in print. There was also radio coverage on WTOP and TV coverage on ABC7.
- Local blogs such as GreaterGreaterWashington and PoPville posted about the proposed changes, as well as Metro's own planning blog, PlanIt Metro.
- Metro's social media accounts (Facebook, Twitter) were used to post information about the proposals and an advisory was pushed out to riders.
- Copies of the proposed changes were sent to all jurisdictional libraries.



# Public Hearing

Metro hosted a public hearing on Monday, February 22 at Metro Headquarters, Jackson Graham Building, 600 5<sup>th</sup> St NW, Washington DC. This location is accessible by Metrorail and Metrobus and is ADA-compliant.

An information session began at 6:00 p.m. and provided the opportunity for attendees to speak with staff members about the proposals. The public hearing began at 6:30 p.m. and followed WMATA's standard public hearing procedures. At the beginning of the hearing, the Vice Chair of Metro's Board, Keturah Harley, read a prepared statement outlining the public hearing process, and WMATA CFO Dennis Anosike presented an overview of the proposals. Pre-registered speakers were then called to the podium to offer testimony followed by speakers who had registered at the hearing. Board members Mortimer Downey, Michael Goldman and Catherine Hudgins were also in attendance.

Number of Attendees	Number of people who provided verbai testimony
37	15



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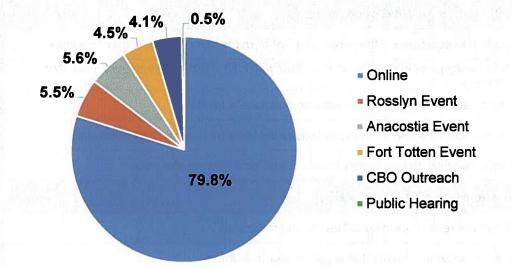
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#### **Public Input Results**

Metro gathered public reaction and feedback to the proposed budget through in-person surveys completed at station events and Community Based Organizations, an online survey tool, and at the public hearing.

The overwhelming majority of feedback came by online survey completion. The public could also complete the survey at any of our outreach events - this accounted for nearly 20% of all feedback received. Open-ended comments were solicited via <u>writtentestimonty@wmata.com</u>. These comments, 172 in total, were submitted by 112 individuals. The following describes each of these sources separately.



#### **Public Input Sources**



#### Input from the Online and Paper Surveys

The strategy across all surveys was to understand how customers felt about the proposed public docket. 2,375 surveys were collected through multiple sources:

- Online survey
- Paper & tablet surveys collected at outreach pop-up events
- Paper surveys collected from local Community Based Organizations
- Paper surveys collected at the Public Hearing

To gauge customers' feelings, a five point scale of emoticon faces was used to identify emotion.



Customers were asked to communicate how they felt about each docket item. Table 1 summarizes customer responses. An average rating below 3 indicates a more positive response, above 3 is more negative.

As may have been expected, most budget docket items were generally well received by our customers. The one exception to this is the proposal to eliminate the ability to add money to your SmarTrip® card on Metrobus. The majority of customers were neutral or against this proposal, with 32% of customers strongly against it, 16% somewhat against it, 27% neutral, 11% in favor, and 15% in strong favor.

The most positive operating budget docket item was the proposal to refund fare to customers who enter and exit from the same station within 15 minutes.

Operating Items (in order of popularity)	Average Rating
Refund fare to customers if they enter and exit from the same station within 15 minutes	1.25
Hire new safety personnel, in order to comply with FTA Safety Management Inspection requirements	1.47
Provide a free bus pass to customers who purchase a rail pass	1.75
Give a discount on student passes to college students from participating universities	1.84
Eliminate the ability to add money to your SmarTrip® card on Metrobus	3.38
Capital Items (in order of popularity)	Average Rating
Repair and/or replace existing rail tracks and structures	1.38
Improve technology systems that supply power to Metrorail	1.41
Purchase new railcars, buses, MetroAccess vehicles, and replacement parts for each	1.51
Repair and/or replace elevators and escalators	1.57
Upgrade Metro stations, through maintenance and space improvements	1.76
Improve bicycle and pedestrian facilities	1.82
Develop dedicated bus lanes	1.9
Renovate maintenance facilities (bus garages and rail yards) for Metrobus and Metrorail	2

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	Scale
	1 Positive
	Somewhat Positive
et a tractatulist a load a los	3 Neutral
	Somewhat Negative
	5 Negative

**TABLE 1 - Budget Items** 



#### **Survey Demographics**

The online survey was available for all customers to participate. The survey format complied with ADA standards for the visually impaired and was offered in seven languages - English, Spanish, Chinese, Amharic, Korean, Vietnamese, and Arabic. Including both online surveys and paper surveys completed at outreach events, a total of 77 surveys were completed in Spanish, five in Chinese, three in Amharic, two in Arabic, two in Korean, and one in Vietnamese. The remainder were completed in English.

To guarantee equitable feedback gathering, staff conducted outreach at stations with high Title VI usage (both bus and rail), as well as partnered with CBOs for improved participation by these groups.

Overall, 32 percent of survey respondents were non-white. While below the system average (56%), the outreach events to stations and CBOs bolstered participation beyond normal levels found in other outreach mechanisms. These same outreach events also yielded higher participations rates for low income persons. Both outreach to stations and CBOs achieved or exceeded the system average of 26 percent of participation.

Table 2 provides the percentage breakdown of demographics grouped by survey mechanism (online survey vs in-person events -- station outreach, CBO outreach, and public hearing surveys). Percentages will not always add to 100 due to multiple responses on some items.

Group	Online	In-Person Events	
Hispanic	so internet	C. Longing	
Yes	5.1%	16.9%	
No	86.8%	73.5%	
Prefer not to answer	8.1%	9.6%	
Ethnicity			
White	65.3%	26.6%	
Black	17.4%	59.3%	
Asian	4.6%	3.3%	
Pacific Islander	0.2%	0.3%	
Native American	0.9%	1.5%	
Multi-race	1.8%	.4%	
Prefer not to answer	10.2%	9.0%	
Other	1.5%	.3%	
Income Level			
Below \$30,000	7.2%	24.5%	
Above \$30,000	80.2%	48.9%	
Prefer not to answer	12.6%	26.6%	

# Demographic Comparison by Survey Method

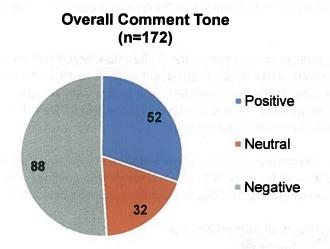
#### TABLE 2 – Demographic Breakdown of Survey Results





# Input from <u>writtentestimony@wmata.com</u> email & Public Testimony

Customers had an option to email comments about the proposals to <u>writtentestimony@wmata.com</u> as well as give verbal testimony at the public hearing. Metro received a total of 172 comments from 97 individuals who submitted comment at <u>writtentestimony@wmata.com</u> and 15 individuals who spoke at the public hearing. The pie chart below details overall comment tone.



The overall tone of public comment received from <u>writtentestimony@wmata.com</u> and the verbal public testimony was negative. 51% of comments were negative, 30% positive, and 19% were neutral. This negative sentiment was largely driven by negative reactions to elimination of add value on buses. Table 3 below gives a detailed breakdown of comments by budget item.



Buc	lget items	Total	Negative	Neutral	Positive
	Eliminate the ability to add money to your SmarTrip® card on Metrobus	64	58	2	4
Operating Items	Provide a free bus pass to customers who purchase a rail pass	13 10	1	2 0	10 7
	Give a discount on student passes to college students from participating universities				
	Refund fare to customers if they enter and exit from the same station within 15 minutes	24	1	0	23
	Hire new safety personnel, in order to comply with FTA Safety Management Inspection requirements	1	0	0	1
Cap	ital Improvement Projects	6	1	0	5
	eral comments not related to the proposed get items	54	24	28	2

#### TABLE 3 – Breakdown of comment tone by budget item



# METRO WANTS TO HEAR FROM YOU

Next fiscal year's budget that begins July 1 is comprised of both the operating budget and the capital budget which funds the purchase of new trains and buses, station upgrades and other important improvements. And while it doesn't include a fare increase or service cuts, there are some proposed changes that we want your opinion on. The proposal would ask Metro's Board of Directors to consider the changes below. Please tell us how you feel about them.

#### PROPOSED OPERATING BUDGET ITEMS

Eliminate the ability to add money to your SmarTrip® card on Metrobus	8 8 9 9 9
Provide a free bus pass to customers who purchase a rail pass	8 8 2 2
Give a discount on student passes to college students from participating universities	8 9 9 9 8
Refund fare to customers if they enter and exit from the same station within 15 minutes	8 8 9 9
Hire new safety personnel, in order to comply with FTA Safety Management Inspection requirements	••••
PROPOSED CAPITAL BUDGET ITEMS	a sentin A cartaire
Purchase new railcars, buses, MetroAccess vehicles, and replacement parts	8 8 🙂 🙂
Repair and/or replace existing rail tracks and structures	8 8 9 9
Improve technology systems that supply power to Metrorail	8 8 9 9
Renovate maintenance facilities (bus garages and rail yards) for Metrobus and Metrorail	8 8 9 9
Repair and/or replace elevators and escalators	8 8 9 9
Upgrade Metro stations through maintenance and space improvements	8 8 9 9
Develop dedicated bus lanes	8 8 9 9
Improve bicycle and pedestrian facilities	8 8 🙂 🙂

#### Do you consider yourself to be Hispanic or Latino?

- O Yes
- O No
- O Prefer not to answer

#### Which one of the following best describes your race? Please select all that apply.

- O White/Caucasian
- O Black/African American
- O Asian
- O Hawaiian or other Pacific Islander
- O American Indian or Alaska Native
- O Prefer not to answer
- O Other (Specify:\_\_\_\_\_

#### Which of the following ranges contains your annual household income (before taxes)?

- O Less than \$30,000
- O \$30,000 or more
- O Prefer not to answer

Thank you for taking the time to provide feedback. This information will be used to inform the budget process. To learn more about next year's budget, visit wmata.com/budget.







# METRO DESEA CONOCER SU OPINIÓN

El presupuesto del próximo año fiscal que comienza el 1° de julio está compuesto del presupuesto operativo y del presupuesto de capital, que financia la compra de nuevos trenes y autobuses, reformas en las estaciones y otras mejoras importantes. Si blen no incluye un aumento de tarifa o cortes en los servicios, proponemos algunos cambios sobre los que podría querer dar su opinión. Por ejemplo, la propuesta le pediría a la junta directiva de Metro que considere los siguientes cambios: Por favor díganosqué piensa sobre ellos.

#### PUNTOS DEL PRESUPUESTO OPERATIVO PROPUESTO

Eliminar la posibilidad de añadir dinero a su tarjeta de SmarTrip en el Metrobus	8 8 9 9
Proporcionar un pase de autobús gratuito a los clientes que compren un pase de tren	8 8 9 9 9
Ofrecer un descuento en los pases de estudiante a los estudiantes universitarios de las universidades participantes	88999
El reembolso de tarifas a los clientes cuando entran y salen por la misma estación en un período de 15 minutos	88990
Contratar nuevo personal de seguridad, con el fin de cumplir con los requisitos de Inspección de Gestión de la Seguridad de la Administración Federal de Transporte (FTA, por sus siglas en inglés)	99998 8
PUNTOS DEL PRESUPUESTO DE CAPITAL PROPUESTO	en i
Comprar nuevos vagones de ferrocarril, autobuses, vehículos MetroAccess y piezas de repuesto para cada uno	<b>()</b> () () () () () () () () () () () () ()
Reparar y/o reemplazar las vías y estructuras ferroviarias existentes	8 8 9 9
Mejorar los sistemas de tecnología que suministran energía a Metrorail	8 8 9 9 9
Renovar las instalaciones de mantenimiento (garajes de autobuses y patios de ferrocarriles) para el Metrobus y Metrorail	8 8 9 9 9
Reparar y/o reemplazar ascensores y escaleras eléctricas	8 8 9 9
Mejorar las estaciones de Metro, a través de mejoras de mantenimiento y espacio	8 9 9 9 8
Desarrollar carriles exclusivos para autobuses	8 8 9 9
Mejorar las instalaciones para bicicletas y peatones	8 8 9 9 9

# ¿Se considera usted hispano o latino?

¿Cuál de las siguientes opciones describe mejor su raza? Por favor, seleccione todo lo que corresponda.

- O SI
- O No
- O Prefiero no responder
- O Blanco/Caucásico
- O Negro/Afroamericano
- O Asiático
- O Hawaiano o de otra Isla del Pacífico
- O Indígena Estadounidense o nativo de Alaska
- O Prefiero no responder
- O Otro (especifique:\_\_\_\_

#### ¿Cuál de los siguientes rangos contiene su ingreso familiar anual (antes de impuestos)?

- O Menos de \$30,000
- O \$30,000 o más
- O Prefiero no responder

Gracias de nuevo por tomarse el tiempo para darnos su opinión. Esta información se utilizará para informar al proceso presupuestario. Para obtener más información sobre el presupuesto del próximo año, visite wmata.com/budget.





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#### Attachment B:

#### Summary of FY2017 Operating Budget: Revenues and Expenses

(Dollars in Thousands)	APPROVED Budget <u>FY2017</u>	BUS Budget <u>FY2017</u>	RAIL Budget <u>FY2017</u>	ACCESS Budget <u>FY2017</u>	
			39) B (0.000		
REVENUES	A-224 - 0.01			surge part man	
Passenger	\$774,891	\$152,120	\$612,800	\$9,972	
Other Passenger	\$17,043	\$8,825	\$8,218	\$0	
Parking	\$47,103	\$0	\$47,103	\$0	
Advertising	\$23,500	\$15,699	\$7,801	\$0	
Joint Development	\$7,000	\$0	\$7,000	\$0	
Fiber Optics	\$16,500	\$0	\$16,500	\$0	
Other	\$13,989	\$3,080	\$10,909	\$0	
Interest	\$0	\$0	\$0	\$0	
Total Revenues	\$900,026	\$179,724	\$710,330	\$9,972	
EXPENSES					
Personnel	\$1,308,762	\$529,015	\$767,668	\$12,078	
Services	\$218,086	\$44,734	\$75,346	\$98,006	
Materials & Supplies	\$86,723	\$37,429	\$48,978	\$315	
Fuel (Gas/Diesel/CNG)	\$36,963	\$25,927	\$3,449	\$7,588	
Utilities & Propulsion	\$90,924	\$15,361	\$74,800	\$763	
Casualty & Liability	\$34,895	\$13,547	\$20,682	\$667	
Leases & Rentals	\$6,725	\$2,045	\$3,838	\$842	
Miscellaneous	(\$37,731)	(\$14,777)	(\$22,257)	(\$697)	
Total Expenses	\$1,745,347	\$653,281	\$972,504	\$119,563	
Net Local Subsidy	\$845,321	\$473,556	\$262,173	\$109,591	
Cost Recovery Ratio	51.6%	27.5%	73.0%	8.3%	

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	Total	District of Columbia	Montgomery County	Prince George's County	City of Alexandria	Arlington County	City of Fairfax	Fairfax Countv	City of Falls Church
Metrobus Operating Subsidy Regional Bus Subsidy Non-Regional Bus Subsidy	\$413,763,677 \$69,792,785	\$176,670,157 \$22,613,774	\$59,668,512 \$8,269.740	\$69,946,030 \$20.581,924	\$18,161,604 \$1.662,718	\$29,746,444 \$918 044	\$626,513 \$0	\$57,456,540 \$57,456,540 \$5 746 584	\$1,487,877 \$0
Subtotal Percent of Total	\$473,556,461 100%	\$199,283,931 42.1%	\$67,938,252 14.3%	\$90,527,955 19.1%	\$19,824,323 4.2%	\$30,664,488 6.5%	\$626,513	\$63,203,124 13.3%	\$1,487,877 0.3%
Metrorall Operating Subsidy Base Allocation Max Fare Subsidy	\$254,976,548 \$7,196,860	\$86,769,898 \$688,421	\$47,113,246 \$3,202,953	\$41,627,970 \$1,461,533	\$12,030,985 \$293,205	\$24,920,366 \$186.710	\$823,670 \$60,408	\$40,920,914 \$1.265.260	\$769,500 \$38.368
Subtotal Percent of Total	\$262,173,408 100%	\$87,458,319 33.4%	\$50,316,199 19.2%	\$43,089,504 16.4%	\$12,324,190 4.7%	\$25,107,076 9.6%	\$884,077 0.3%	\$42,186,173 16.1%	\$807,868 0.3%
MetroAccess Subsidy Percent of Total	\$109,591,179 100%	\$25,715,043 23.5%	\$21,767,046 19.9%	\$46,809,201 42.7%	\$836,386 0.8%	\$823,079 0. <i>8</i> %	\$300,465 0.3%	\$13,262,069 12.1%	\$77,892 0.1%
Net Operating Subsidy	\$845,321,049 100%	<b>\$312,457,294</b> 37.0%	<b>\$140,021,497</b> 16.6%	<b>\$180,426,659</b> 21.3%	<b>\$32,984,898</b> 3.9%	<b>\$56,594,643</b> 6.7%	<b>\$1,811,055</b> 0.2%	\$118,651,366 14.0%	<b>\$2,373,637</b> 0.3%
Metro Matters Debt Service Total Debt Service	\$21,177,444	\$10,673,432 \$40,673,432	\$4,944,933 \$4,044,933	\$5,506,136 \$5,506,136	\$0	\$0	8	80	\$52,943
Jurisdictional Operating Funding	63	\$323,130,726	\$144,966,430	\$185,932,795	\$32,984,898	\$56,594,643	\$1,811,055	\$118,651,366	\$04,545 \$2,426,580

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Attachment C: FY2017 Summary of State/Local Operating Requirements

	Totai	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 Non-Regional Bus Subsidy	\$413,763,677 \$69,792,785	\$176,670,157 \$22,613,774	\$59,668,512 \$8,269,740	\$69,946,030 \$20,581,924	\$18,161,604 \$1,662,718	\$29,746,444 \$918.044	\$626,513 \$0	\$57,456,540 \$5 746 584	\$1,487,877 \$0
Subtotal Percent of Total	\$473,556,461 100%	\$199,283,931 42.1%	\$67,938,252 14.3%	\$90,527,955 19.1%	\$19,824,323 4.2%	\$30,664,488 6.5%	\$626,513	\$63,203,124 13.3%	\$1,487,877 0.3%
Metrorail Operating Subsidy Base Allocation Max Fare Subsidy	\$254,976,548 \$7,196,860	\$86,769,898 \$688,421	\$47,113,246 \$3,202,953	\$41,627,970 \$1,461,533	\$12,030,985 \$293,205	\$24,920,366 \$186,710	\$823,670 \$60,408	\$40,920,914 \$1.265,260	\$769,500 \$38.368
Subtotal Percent of Total	\$262,173,408 100%	\$87, <b>4</b> 58,319 33.4%	\$50,316,199 19.2%	\$43,089,504 16.4%	\$12,324,190 4.7%	\$25,107,076 9.6%	\$884,077 0.3%	\$42,186,173 16.1%	\$807,868 0.3%
MetroAccess Subsidy Percent of Total	\$109,591,179 100%	\$25,715,043 23.5%	\$21,767,046 19.9%	\$46,809,201 42.7%	\$836,386 0.8%	\$823,079 0. <i>8</i> %	\$300,465 0.3%	\$13,262,069 12.1%	\$77,892 0.1%
Net Operating Subsidy	\$845,321,049 100%	<b>\$312,457,294</b> 37.0%	<b>\$140,021,497</b> 16.6%	<b>\$180,426,659</b> 21.3%	<b>\$32,984,898</b> 3.9%	<b>\$56,594,643</b> 6.7%	<b>\$1,811,055</b> 0.2%	<b>\$118,651,366</b> 14.0%	<b>\$2,373,637</b> 0.3%
Metro Matters Debt Service Total Debt Service	\$21,177,444 \$21,177,444	\$10,673,432 \$10,673,432	\$4,944,933 <b>\$4,944,933</b>	\$5,506,136 <b>\$5,506,136</b>	<b>8</b>	99 97	<b>%</b>	9 <b>9</b>	\$52,943 \$52,943
Jurisdictional Operating Funding	\$866,498,493	\$323,130,726	\$144,966,430	\$186,932,796	\$32,984,898	\$56,594,643	\$1,811,055	\$118,651,366	\$2,426,580

metro

.

### Attachment D: FY2017 Operating Reimbursable Budget

	FY 2017 Updated Budget
State & Local Funding	Circle 1
DC Circulator <sup>1</sup>	\$22,791
Federal Grant Funding	
Safety & Security grants	4,701
Other Sources of Funding	
DC Circulator - Passenger fare revenue	3,316
Joint Development & Adjacent Construction projects	2,788
Local bus maintenance (ART CNG) and Other	600
Total Eppenditures	\$34,196

<sup>1</sup> Local funding equals expenditures less passenger revenue.



### PRESENTED AND ADOPTED: April 28, 2016

### SUBJECT: APPROVAL OF FISCAL YEAR (FY) 2017 CAPITAL BUDGET AND SIX-YEAR CAPITAL IMPROVEMENT PROGRAM, AMENDMENT OF BOARD DELEGATIONS IN RESOLUTION 2011-30 AND EXTENSION OF UNIVERSITY PASS PILOT

### 2016-24

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

WHEREAS, The Board of Directors received and considered the General Manager/Chief Executive Officer's (GM/CEO) proposed FY2017-2022 Capital Improvement Program (CIP); and

WHEREAS, In adopting the FY2017 operating budget in Resolution 2016-14, the Board of Directors approved a Staff Report on public outreach that included public feedback on the Program of Projects, which is the list of projects to be funded by the federal grants as expressed in the proposed FY2017 Capital budget and Federal FY2016 Grant Applications; and

WHEREAS, In adopting the FY2017 operating budget, the Board of Directors also directed staff to implement a University Pass pilot program; and

WHEREAS, In Resolution 2016-13, the Board of Directors authorized the GM/CEO to negotiate and execute a one-year extension to the current Capital Funding Agreement (CFA); and

WHEREAS, Resolution 2011-30 amends, among other things, the reprogramming policy for the capital budget, and delegates authority for certain reprogramming actions and non-procurement actions to the GM/CEO as part of procurement streamlining contained in Section 600, of Chapter 1, of the Procurement Policy; and

WHEREAS, Resolution 2011-30 authorizes the GM/CEO to reprogram up to five percent of the approved total annual capital budget on an annual cumulative basis between existing projects, with any further reprogramming requiring Board of Directors approval; and

WHEREAS, In Resolution 2016-04, the Board of Directors authorized the GM/CEO to negotiate and execute a Project Construction Agreement (PCA) between the Washington



Metropolitan Area Transit Authority (WMATA) and the Maryland Transit Administration (MTA) for the Purple Line Reimbursable Project; and

WHEREAS, Staff must apply for federal formula and PRIIA grants within four weeks of the adoption of the capital budget; and

WHEREAS, The application deadlines for most discretionary grant programs are shorter than the normal cycle for Board of Directors action; and

WHEREAS, Resolution 2011-30, requires Board of Directors approval in order to apply for discretionary grants with matching requirements; now, therefore be it

*RESOLVED*, That the Board of Directors approves and adopts the FY2017 Capital budget of \$950 million and the six-year CIP for FY2017 through FY2022 of \$6.0 billion as summarized at the program level in Attachments A-1 through A-3; and be it further

*RESOLVED*, That the Board of Directors acknowledges that, in accordance with the terms of the CFA, if any projects are started during the term of the CFA or any bonds or other financial instruments are issued pursuant to the CFA, the Contributing Jurisdictions have agreed to continue to make their Allocated Contributions for those projects or debt service until the conclusion of the projects or the final maturity of the bonds or other financial instruments; and be it further

*RESOLVED,* That the reprogramming authority delegated to the GM/CEO in Resolution 2011-30, is hereby amended, such that the GM/CEO may reprogram up to five percent of the approved total annual capital budget on an annual cumulative basis between programs, including between programs in different investment categories, with any further reprogramming requiring Board of Directors approval; and be it further

*RESOLVED,* That Section 600 of Chapter 1 of WMATA's Procurement Policy is revised to delete the fourth bullet of Section 601.C. and replace it with the following:

"Any reprogramming action over 5% of the approved total annual capital budget on an annual cumulative basis between existing projects programs, regardless of which investment category a program is contained within; thereafter, the GM/CEO will seek additional reprogramming authority to cover additional reprogramming amounts in increments which he shall determine to increase the total GM/CEO authority."; and be it further

*RESOLVED*, That the Board of Directors approves the use of Federal Transit Administration (FTA) grant and local matching funds in the amount of \$95 million for preventive maintenance expenditures; and be it further

2

*RESOLVED*, That the budget for the Capital Reimbursable Program includes \$52.0 million for both new projects and prior-year reimbursable program project budgets, including \$10.0 million for the Purple Line Reimbursable Project with the MTA, as detailed in Attachment B; and be it further

*RESOLVED*, That in order to implement the elements of the FY2017 CIP, the GM/CEO, the Chief Financial Officer (CFO), or their designee are authorized to: (1) file and execute grant applications on behalf of WMATA for funds from the federal government and any other public or private entity consistent with the CIP; (2) conduct public hearings at any time during FY2017 in furtherance of the implementation of the CIP; and (3) execute and file the annual FTA Certifications and Assurances; and be it further

*RESOLVED*, That in order to maximize WMATA's opportunity to compete for discretionary grants to advance currently unfunded capital needs, Resolution 2011-30 is amended to authorize the GM/CEO, the CFO, or their designee to file and execute grant applications, on behalf of WMATA for funds from the federal government and any other public or private entity for unfunded capital needs, regardless of whether such application would require a local match, but subject to approval by the Board of Directors prior to acceptance of any such grant awarded to WMATA; and be it further

*RESOLVED*, That the table of Non-Procurement Activities Requiring Board Approval found in Section 600 is revised by deleting the fourth bullet under "Other" and replacing it with the following:

"Nonannual State or Federal Grants with match requirements Acceptance of competitive and discretionary grant awards, provided, however, that GM/CEO or his designee may apply for such grants without Board approval."; and be it further

*RESOLVED*, That the pilot period for the University Pass shall be expanded to one year; and be it finally

*RESOLVED*, That in order for staff to timely file for federal grants, this Resolution shall be effective immediately.

Reviewed as to farm and legal sufficiency,

Mark R. Pohl Acting General Counsel

WMATA File Structure Nos.:

- 2.7 Delegation of Authority
- 4.2.2 Fiscal Year Budgets
- 9.12.9 Tariff (WMATA Fare Structure)

1         Budget         Plan         Plan <th>rt</th> <th>FY2017</th> <th>FV2018</th> <th>FY2019</th> <th>FY2020</th> <th>FY2021</th> <th>FY2022</th> <th>6 Year</th>	rt	FY2017	FV2018	FY2019	FY2020	FY2021	FY2022	6 Year
stadul littis         2203.8         2266.2         5284.4         5117.6         5117.9         51           intest         333.6         538.7         539.1         539.9         94.8         66.1         70.0         72.7           hul         115.0         94.1         80.0         70.0         72.7         5           hul         66.6         70.8         69.0         69.2         71.9         5           Abul         81.0         70.8         69.0         69.2         71.2         5           Abystem         8.6         70.8         81.4         12.0         11.2         10.2         7           Abystem         8.6         70.8         53.1.1         52.1.1         52.1.1         52.1           Abystem         8.6         11.4         12.0         11.2         12.2         12.2           Abystem         5.5         61.6         62.6         62.7         52.1.6         52.1.6         52.1.6           Abystem         5.12.4         31.7.5         52.1.6         52.1.6         52.1.6         52.1.6         52.1.6         52.1.6         52.1.6         52.1.6         52.1.6         52.1.6         52.1.6         52.1.6	Investment by Program	Budget	Plan	Plan	Plan	Plan	Plan	Total
verhald         115.0         94.9         93.9         94.8         96.1           cifites         33.8         32.45         535.1         537.1         27.2         5           Auth         535.6         535.7         537.1         522.5         521.1         5           Auth         51.0         7.0         7.2         5         521.1         5         7         5           Auth         51.0         7.0         8.8         11.4         12.0         11.9         11.5         7         3         3         3         8         3         3         3         3         8         1 <td< td=""><td>Railcar Acquisition</td><td>\$203.8</td><td>\$266.2</td><td>\$269.4</td><td>\$127.6</td><td>\$117.9</td><td>\$148.7</td><td>\$1,133.6</td></td<>	Railcar Acquisition	\$203.8	\$266.2	\$269.4	\$127.6	\$117.9	\$148.7	\$1,133.6
cliftest         34.8         24.6         8.0         7.0         7.2           hul         533.6         535.7         531.4         522.5         522.1	Railcar Maintenance/Overhaul	115.0	94.9	93.9	94.8	96.1	97.5	592.1
535.36         538.57         537.14         522.65         522.12           hall         66.6 $7/3$ 69.0 $90.2$ $10.27$ hall         81.0 $70.8$ 69.0 $90.2$ $10.27$ fies         55.0         99.1         38.3 $31.8$ $31.8$ $31.8$ $7/9$ 67         9.8 $11.4$ $12.0$ $12.9$ $12.9$ $7/9$ 67.1 $51.9$ $51.7$ $51.8$ $31.8$ $31.8$ $31.8$ $7/9$ $67.1$ $51.7$ $51.8$ $51.9$ $52.7$ $57.9$ estimate $51.8$ $51.7$ $51.8$ $51.7$ $52.6$ $21.5$ $7.4$ $8.6$ $10.3$ $34.3$ $54.7$ $52.6$ $21.6$ $7.4$ $8.6$ $12.6$ $62.2$ $52.7$ $52.6$ $21.6$ $7.4$ $8.6$ $7.8$ $8.6$ $22.7$ $52.6$ $21.6$ $7.4$ $8.6$ $7.8$ $8.6$	Railcar Maintenance Facilities	34.8	24.6	8.0	7.0	7.2	14.8	96.6
hull         66.6         67.9         50.8         102.7         124.7 <th124.7< th=""> <th124.7< th=""> <th124.7< td=""><td>Railcar Investments</td><td>\$353.6</td><td>\$385.7</td><td>\$371.4</td><td>\$229.5</td><td>\$221.2</td><td>\$260.9</td><td>\$1,822.3</td></th124.7<></th124.7<></th124.7<>	Railcar Investments	\$353.6	\$385.7	\$371.4	\$229.5	\$221.2	\$260.9	\$1,822.3
hull         B10         703         600         602         712         712         712           fies         550         991         38.3         31.8	Bus Acquisition	EC C	013	903	1 001			
matrix $0.10$ $0.10$ $0.10$ $0.10$ $0.10$ $0.12$ $71.9$ $f/yytems$ $6.7$ $9.8$ $1.14$ $1.20$ $1.19$ $1.2$ $71.9$ $f/yytems$ $6.7$ $9.8$ $1.14$ $1.20$ $1.12$ $2.216$ $2.25.6$ $2.216$ $2.25.6$ $2.22.6$ $2.22.6$ $2.25.6$ <th< td=""><td>Bits Maintenance (Overhaud</td><td></td><td></td><td>0.00</td><td>1.201</td><td>1.201</td><td>6.7NT</td><td>493.6</td></th<>	Bits Maintenance (Overhaud			0.00	1.201	1.201	6.7NT	493.6
res         55.0         99.1         38.3         31.8         33.8 $\sqrt{5}$ (sems)         6.7         9.8         1.4         1.2         2.7		81.0	70.8	69.0	69.2	71.9	73.7	435.6
6.7 $9.8$ $2.5$ $2.4$ $2.7$ Arystems $8.8$ $1.14$ $1.20$ $1.19$ $1.15$ estments $3214$ $3234$ $312$ $3214$ $3226$ $32$ estments $3214$ $3234$ $3134$ $313$ $343$ $347$ $324$ $3234$ $3214$ $3226$ $312$ $3254$ $3216$ $3214$ $3214$	bus Maintenance Facilities	55.0	99.1	38.3	31.8	33.8	25.9	284.0
R8         114         120         115         115           retinents         5718.1         5739.1         517.5         521.6         52 $46.4$ $93.6$ $39.3$ $54.7$ $55.4$ $57.5$ $52.6$ $52.5$ $52.6$ $52.5$ $50.2$	Bus Passenger Facilities/Systems	6.7	9.8	2.5	2.4	2.7	2.6	26.8
estiments         \$218.1         \$259.1         \$17.5         \$218.1         \$22.6         \$2           47.5         61.6         62.6         62.5         50.2         50.2           10.3         34.3         36.7         23.7         55.6         21.5           10.3         34.3         36.7         23.7         55.6         21.5           10.3         34.3         36.7         23.7         55.6         21.5           11.6         7.4         36.7         23.7         55.6         21.5           11.6         7.4         36.7         23.7         55.6         21.4         51           11.6         7.4         36.7         23.7         51.9.6         51.4.1         51.4.2         51           11.6         7.4         36.7         23.7         51.6.6         51.4.1         51.0.6         51           11.6         7.4         8.8         18.8         16.6         51.40.1         51.0.6         51         51           11.6         7.4         45.7         51.6.6         51.40.1         51.6.0         51         51         51         51         51         51         51         51         51 <td>Paratransit</td> <td>8.8</td> <td>11.4</td> <td>12.0</td> <td>11.9</td> <td>11.5</td> <td>12.4</td> <td>68.0</td>	Paratransit	8.8	11.4	12.0	11.9	11.5	12.4	68.0
46.4         93.6         39.3         54.7         35.4           47.5         61.6         62.6         62.2         50.2           10.3         34.3         49.9         35.4         9.7           10.3         34.3         49.9         35.4         9.7           10.3         34.3         34.9         59.6         215.5           24.4         8.1         4.2         6.4         7.4           7.4         8.1         4.2         6.4         7.4           7.4         8.1         4.2         6.4         7.4           9.3         64.5         11.3         11.6.5         94.7         60.0 $64.5$ 11.3         11.6.5         94.7         60.0         7.4 $64.5$ 11.3         11.6.5         94.7         7.60.0         7.6 $61.6$ 10.6         94.6         6.9         10.1         10.4         7.6 $61.6$ 94.6         7.8         8.8         98.2         96.4         96.0 $61.6$ 94.6         94.6         7.6         10.1         10.4         10.2         10.2	Bus and Paratransit Investments	\$218.1	\$259.1	\$172.5	\$218.1	\$222.6	\$217.5	\$1,308.1
475 $61.6$ $62.6$ $62.7$ $50.2$ $50.2$ 103         34.3         36.7         23.7         25.6         21.5           24.4         36.7         23.7         25.6         21.5         57.1           24.4         36.7         23.7         55.6         21.5         57.1           24.4         38.1         4.2         6.4         7.4         51.2         51.4         51.4           fadilities investments         513.0         523.3         5175.6         513.4         51.2         51.2         51.2           ons         64.5         113.8         116.5         94.7         60.0         51           ons         64.5         113.8         116.5         94.7         60.0         51           ots         516.0         516.0         516.0         510.1         510.9         51           ots         74.5         96.0         510.1         510.1         510.1         510.1         510.1         510.1         510.1         510.1         510.1         510.1         510.1         510.1         510.1         510.1         510.1         510.1         510.1         510.1	Platforms & Structures	46.4	93 K	30.3	547	36.4	100	0.000
Indextrements         10.3         34.3         49.9         56.4         7.4           7 facilities investments         24.4         36.7         23.7         56.6         21.5           7 facilities investments         513.0         523.4         36.7         23.7         56.6         21.5 $4.4$ 36.7         513.0         523.4         51.9.6         5184.4         51.34.2         51 $64.5$ 113.8         116.5         94.7         60.0         51 $64.5$ 113.8         116.5         94.7         60.0         51 $64.5$ 113.8         116.5         94.7         60.0         51 $64.5$ 113.8         116.5         94.7         60.0         51 $64.5$ 113.8         116.5         94.7         60.0         51 $64.5$ 13.8         98.2         98.2         96.4         96.0         510.4         510.5         510.5         510.6         510.6         510.6         510.6         510.6         510.6         510.6         510.6         510.6         510.6         510.6         510.6         510.6         510.6         510.	Vertical Transportation	47.5	616	5.5 6.7			t o 1	0.505
244 $36.7$ $23.7$ $25.6$ $21.5$ $4$ $8.1$ $4.2$ $6.4$ $7.4$ $7$ $513.0$ $513.0$ $513.0$ $513.0$ $513.0$ $513.0$ $513.0$ $513.0$ $513.0$ $513.0$ $513.0$ $513.0$ $513.0$ $513.0$ $513.0$ $513.0$ $513.0$ $513.0$ $510.0$	Fare Collection	10.3	34.3	9.94	35.4	2.00	20.2 0 1 1	2.121
4.4         8.1         4.2         6.4         7.4           Facilities investments         \$133.0         \$234.3         \$179.6         \$134.4         \$124.2         7.4           ns         64.5         113.8         116.5         94.7         60.0         51           ons         64.5         516.0         516.0         516.0         51         51         51           ons         510.4         97         86.0         51         10.1         10.4         10.4           ons         10.4         9.7         513.7         516.8         517.3         51           ons         10.4         9.7         513.7         516.8         517.3         51           ons         10.4         10.7         10.2         10.2         10.8<	Station Systems	24.4	36.7	23.7	25.6	21.5	20.6	152.5
Facilities Investments         \$133.0         \$234.3         \$179.6         \$184.4         \$124.2           ons         39.8         48.1         44.2         45.4         49.0           ons         64.5         113.8         116.5         94.7         60.0           ons         64.5         113.8         116.5         94.7         60.0           ons         5104.3         \$162.0         \$166.6         \$140.1         \$109.0           ots         78.9         88.8         98.2         96.4         96.0           ots         78.9         88.8         98.2         96.4         96.0           ots         10.4         9.7         8.6         10.1         10.4           ots         10.4         9.7         8.6         10.1         10.4           ots         10.4         9.7         6.9         10.2         10.8           ots         513.7         \$113.7         \$116.8         \$117.3           ots         52.7         45.5         49.8         42.7           ots         10.8         12.1         12.4         12.4           ots         10.8         12.1         12.4         12.4 <td>Parking Facilities</td> <td>4.4</td> <td>8.1</td> <td>4.2</td> <td>6.4</td> <td>7.4</td> <td>10.2</td> <td>40.6</td>	Parking Facilities	4.4	8.1	4.2	6.4	7.4	10.2	40.6
ns         39.8         48.1         44.2         45.4         49.0           ns         64.5         113.8         116.5         94.7         60.0           ns         64.5         113.8         116.5         94.7         60.0           ns         64.5         113.8         116.5         94.7         60.0           ns         78.9         88.8         98.2         96.4         96.0           ns         9.4         9.7         813.3         810.2         10.1           ns         9.4         6.9         10.1         10.4         97.3           ns         9.13.7         9.13.7         9.16.8         9.17.3           ns         9.13.7         9.13.7         9.13.7         9.13.7           ns         9.13.7         9.13.7         9.13.7         9.13.7           ns         9.13.4         12.1         12.1         12.4         12.5    <	Stations and Passenger Facilities Investments	\$133.0	\$234.3	\$179.6	\$184.4	\$124.2	\$141.2	\$996.7
oils         64.5         113.8         116.5         94.7         60.0           tts         \$104.3         \$162.0         \$166.6         \$140.1         \$109.0           tts         78.9         \$162.0         \$166.6         \$140.1         \$109.0         \$109.0           tts         78.9         \$88.8         98.2         96.4         96.0         96.0           ip         78.9         88.8         98.2         96.4         96.0         10.4         10.4         10.4           ip         78.9         88.3         \$10.7         81.6         10.1         10.4         96.0           tts         94.6         \$13.7         \$11.6         10.2         10.2         10.3         10.4           tts         94.6         \$10.7         \$13.7         \$11.6         10.2         10.2         10.2           vices         9.8         11.4         12.1         12.4         12.3         13.3         13.3           vices         9.8         11.4         12.1         12.4         12.4         12.5         13.3         13.3         13.3         13.3         13.3         13.3         13.3         13.3         13.3         13.3 </td <td>Propulsion</td> <td>39.8</td> <td>48.1</td> <td>44.2</td> <td>45.4</td> <td>49.0</td> <td>55.1</td> <td>2817</td>	Propulsion	39.8	48.1	44.2	45.4	49.0	55.1	2817
nts         5104.3         5162.0         5160.6         5140.1         5103.0           in         78.9         88.8         98.2         96.4         96.0           in         78.9         88.8         98.2         96.4         96.0           in         10.4         9.7         8.6         10.1         10.4           in         10.4         9.7         8.6         10.1         10.4           in         9.4         6.9         10.2         10.8         10.8           inbilitation investments         \$89.3         \$107.9         \$113.7         \$116.8         \$117.3           vices         9.8         11.4         12.1         12.4         12.3           vices         9.8         11.4         12.1         12.4         12.5           vices         58.1.5	Signals & Communications	64.5	113.8	116.5	94.7	60.0	56.7	506.1
ip78.988.898.296.496.0ip $10.4$ $9.7$ $8.6$ $10.1$ $10.4$ load $10.4$ $9.7$ $8.6$ $10.1$ $10.4$ load $9.4$ $6.9$ $10.2$ $10.3$ $10.4$ load $58.3$ $5107.9$ $5113.7$ $5116.8$ $5117.3$ $51$ load $40.8$ $52.7$ $45.5$ $49.8$ $42.7$ load $1.0$ $2.5$ $2.0$ $1.3$ $1.3$ vices $9.8$ $11.4$ $12.1$ $12.4$ $12.5$ vices $9.8$ $56.5$ $59.7$ $56.5$ $56.4$ $5$ intents $51.6$ $56.5$ $51.7$ $513.2$ <td< td=""><td>Rail Systems Investments</td><td>\$104.3</td><td>\$162.0</td><td>\$160.6</td><td>\$140.1</td><td>\$109.0</td><td>\$111.8</td><td>\$787.8</td></td<>	Rail Systems Investments	\$104.3	\$162.0	\$160.6	\$140.1	\$109.0	\$111.8	\$787.8
ip         10.4         9.7         8.6         10.1         10.4           elabilitation investments         \$89.3         \$107.9         \$113.7         \$116.8         \$117.3         \$10.8           elabilitation investments         \$89.3         \$107.9         \$113.7         \$116.8         \$117.3         \$1<           elabilitation investments         \$89.3         \$107.9         \$13.7         \$116.8         \$117.3         \$1<           reference         9.8         11.4         12.1         12.4         12.5         \$1.3           vices         9.8         11.4         12.1         12.4         12.5         \$56.4         \$5           remuts         \$51.6         \$66.5         \$59.7         \$63.5         \$56.4         \$5         \$56.4         \$5	Fixed Rail	78.9	88.8	98.2	96.4	96.0	96.7	555.1
ip     9.4     6.9     10.2     10.8       ehabilitation Investments     \$89.3     \$107.9     \$113.7     \$116.8     \$117.3     \$1       ehabilitation Investments     40.8     52.7     45.5     49.8     42.7       refer     1.0     2.5     2.0     1.3     1.3       vices     9.8     11.4     12.1     12.5       vices     9.8     11.4     12.1     12.5       with the test     \$51.6     \$66.5     \$59.7     \$63.5       the test     513.2     \$13.2     \$13.2     \$13.2	Structures	10.4	9.7	8.6	10.1	10.4	13.2	62.5
ehabilitation investments     \$89.3     \$107.9     \$113.7     \$116.8     \$117.3     \$       reference     40.8     52.7     45.5     49.8     42.7       vices     1.0     2.5     2.0     1.3     1.3       vices     9.8     11.4     12.1     12.4     12.5       tments     \$51.6     \$66.5     \$59.7     \$63.5     \$56.4       tments     \$13.2     \$13.2     \$13.2     \$13.2     \$13.2	Track Maintenance Equip		9.4	6.9	10.2	10.8	10.7	48.0
40.8     52.7     45.5     49.8     42.7       vices     1.0     2.5     2.0     1.3     1.3       vices     9.8     11.4     12.1     12.4     12.5       tments     551.6     \$66.5     \$59.7     \$63.5     \$56.4       tments     513.2     \$13.2     \$13.2     \$13.2     \$13.2	Track and Structures Rehabilitation Investments	\$89.3	\$107.9	\$113.7	\$116.8	\$117.3	\$120.7	\$665.7
1.0         2.5         2.0         1.3         1.3           vices         9.8         11.4         12.1         12.4         12.5           timents         \$51.6         \$66.5         \$59.7         \$63.5         \$56.4           timents         \$13.2         \$13.2         \$13.2         \$13.2         \$13.2         \$13.2		40.8	52.7	45.5	49.8	42.7	42.1	273.5
vices     9.8     11.4     12.1     12.4     12.5       timents     \$51.6     \$66.5     \$59.7     \$63.5     \$56.4       timents     \$13.2     \$13.2     \$13.2     \$13.2     \$13.2	MTPD	1.0	2.5	2.0	1.3	1.3	1.2	9.4
tments \$51.6 \$66.5 \$59.7 \$63.5 \$56.4 \$13.2 \$13.2 \$13.2 \$13.2 \$13.2	Support Equipment/Services	9.8	11.4	12.1	12.4	12.5	12.1	70.3
\$13.2 \$13.2 \$13.2 \$13.2	Business Support Investments	\$51.6	\$66.5	\$59.7	\$63.5	\$56.4	\$55.5	\$353.2
	Contingency		\$13.2	\$13.2	\$13.2	\$13.2	\$13.2	\$66.2
	Total Canital Programs	¢0ED D	- 911 F	64 010 0	4000 0			

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FY2017-2022 Capital Improvement Program (CIP) Financial Plan - Funding Sources

(dollars in millions)

	FY2017 Budget	FY2018 Plan	FY2019 Plan	FY2020 Plan	FY2021 Plan	FY2022 Plan	6 Year Total
Federal							
Federal Formula Programs	\$317.3	\$304.0	\$304.0	\$304.0	\$304.0	\$304.0	\$1,837.3
Federal PRIIA	172.0	150.0	150.0	150.0	150.0	150.0	922.0
Resiliency Grant	7.1	6.9					14.1
Other Federal Grants	3.6	5.5	6.7	4.4	4.0	4.0	28.3
Subtotal Federal	500.1	466.5	460.7	458.4	458.0	458.0	2,801.7
State and Local							
Match to Federal Formula	79.3	76.0	76.0	76.0	76.0	76.0	459.3
System Performance	117.2	125.9	137.7	135.4	143.5	150.6	810.4
State and Local PRIIA	172.0	150.0	150.0	150.0	150.0	150.0	922.0
Match to Resiliency Grant	2.4	2.3					4.7
Rail Power System Upgrades	8.4	5.1					13.5
Other State and Local	12.4	14.4	1.5	0.9	0.8	0.8	30.7
Subtotal State and Local	391.7	373.7	365.2	362.3	370.3	377.4	2,240.6
Financing							
Planned Long-Term Financing	58.3	388.5	245.0	144.9	35.6	85.4	957.7
Subtotal Financing	58.3	388.5	245.0	144.9	35.6	85.4	957.7
Total	\$950.0	\$1,228.7	\$1,070.9	\$965.6	\$863.9	\$920.9	\$6,000.0

metro

	FY2	FY2017 Budget		FV2018	EV2019	EVJOJA	EV1014
	Carry-Over	New	Total	Plan	Plan	Plan	Plan
Federal Formula Match & System Performance							
District of Columbia	\$3.8	\$70.4	\$74.2	\$75.9	\$79.4	\$78.6	\$81.6
Montgomery County	1.7	5.05	1.45	8 PE	N 25	20.0	1
Prince George's County	1.8	33.6	35.3	36.2	37.8	20.00	1.70 28.0
Maryland Subtotal	3.5	62.9	69.4	71.0	74.3	73.5	76.3
City of Alexandria	0.5	8.5	9.0	9.2	9.6	9.5	9.8
Arlington County	0.8	15.8	16.7	17.0	17.8	17.6	18.3
City of Fairfax	0.0	0.5	0.5	0.5	0.5	5.0	0.6
Fairfax County	1.5	27.8	29.3	30.0	31.3	31.0	32.2
City of Falls Church Commonwealth of Virginia	0.0	0.6	0.6	0.6	0.7	0.7	0.7
Virginia Subtotal	2.8	53.2	<b>56.0</b>	57.3	60.0	59.3	61.6
Subtotal Federal Formula Match & System Performance	10.1	189.4	199.6	204.3	213.7	211.4	219.5
State and Local PRIIA	24						
District of Columbia	7.8	49.5	57.3	50.0	20.0	SO O	002
State of Maryland	7.8	49.5	57.3	50.0	20.0	20.0	
Commonwealth of Virginia	7.8	49.5	57.3	50.0	20.0	50.0	50.0
Subtotal State and Local PRIIA	23.5	148.5	172.0	150.0	150.0	150.0	150.0
Other State and Local							

# 41.0 91.0 144.4 66.7 21.7 0 0 21.7 Additional Contribution or Debt District of Columbia Montgomery County

1.1 2.0 0.1 3.6 0.1 10.4 17.3

356.0

31.8

13.2

53.9

\$2,240.6

\$370.3

362.3

1365.2

\$373.7

\$391.7

\$338.1

1.5 **1** 

19.5

20.1

19.9 \$53.6

**Total Other State and Local Total Contributions before Debi** 

0.2 0.2 0.2

43.6

0.8

0.8 0.8

0.8 **0.8** 0.8

0.0 0.9

0.0 1.1 0.0 2.1 2.1 2.1

0.5 1.0 1.7 0.0 7.6

0.5 0.1 0.0 0.0 7.4 7.4 7.4

Arlington County City of Fairfax Fairfax County City of Falls Church Commonwealth of Vii Virginia Subtotal

City of Alexandria

metro

163.3 169.6 **332.9** 

43.0 79.9 2.5 140.5 3.0

268.8 \$957.7

**13.6** 4.2 4.3 4.2 **12.7** 

Montgomery County	9.9	9.9	66.2	41.8	24.7	6.1	14.6
Prince George's County	10.3	10.3	68.8	43.4	25.7	6.3	15.1
Maryland Subtotal	20.3	20.3	135.1	85.2	50.4	124	29.7
City of Alexandria	2.6	2.6	17.4	11.0	6.5	1.6	3.8
Arlington County	4.9	4.9	32.4	20.4	12.1	3.0	7.1
City of Fairfax	0.2	0.2	1.0	0.6	0.4	0.1	0.2
Fairfax County	8.5	8.5	57.0	35.9	21.2	5.2	12.5
City of Falls Church Commonwealth of Virninia	0.2	0.2	1.2	0.8	0.5	0.1	0.3
Virginia Subtotal	16.4	16.4	109.1	68.8	40.7	10.0	24.0
fotal Debt (Opt Out)	\$58.3	\$58.3	\$388.5	\$245.0	\$144.9	\$35.6	\$85.4

FY2017-2022 Total

FY2022 Plan

**\$473.9** 217.4 225.8 **225.8 443.2** 57.2 106.4 187.0 4.0

**584.2** 38.6 40.1 **78.8** 10.2 10.2 18.9 0.6 33.2 0.7

1,275.1

226.6

357.9

63.6

307.3 307.3 307.3 **922.0** 

50.0 50.0 **150.0** 

### Attachment B

## FY2017 Budget for Capital Reimbursable Projects (dollars in millions)

Jurisdiction/Project F	Y2017 Budaet
Virginia	\$38.6
<ul> <li>Dulles Extension Design/Build</li> </ul>	\$11.3
Dulles Phase II	25.8
Potomac Yard Alternative Analysis	0.6
Project Development	0.8
District of Columbia	\$1.8
<ul> <li>Minnesota Avenue Parking Garage Repa</li> </ul>	irs 0.7
Project Development	1.1
Maryland	\$11.1
MTA Purple Line	10.0
Project Development	1.1
All Jurisdictional and Other Partners	\$0.5
Neutral Host	0.5
Total	\$52.0



### **Appendix C - Human Capital Summary**

Human capital management is a way of defining and categorizing employees' skills and abilities to ensure those skills and abilities are used to accomplish the goals and objectives of the organization. At WMATA, the management of human capital involves workforce planning and investment, and is aligned with WMATA's strategic plan and core mission of operating and maintaining a safe, reliable, and effective transit system.

Human capital is a measurement of the number of people employed and the various costs associated with such employment, often referred to as personnel costs. WMATA's personnel costs fall into two major categories: labor and fringe benefits.

Labor costs, which include regular wage and overtime pay for operations employees, as well as salary expense for management, professional, and administrative personnel, make up approximately 68.4 percent of total personnel costs. The proposed authority-wide FY2017 labor budget is \$1.1 billion.

Fringe benefit costs are the personnel-related expenses incurred by an employer that are above and beyond the direct cost of employee wages and salaries. WMATA's fringe benefits are comprised of health insurance and pension plan costs required by collective bargaining agreements to retain a professional workforce. Fringe benefits also include government mandated costs including unemployment insurance and payroll taxes. The approved authority-wide FY2017 fringe benefit budget is \$508.6 million. FY2017 budget is \$7.7 million less than FY2016 due to a reduction in retirement costs, largely the result of two developments. First, the pension budget decreased 6.2 percent, or \$11.1 million, due to a provision in the latest negotiated agreement between **WMATA** and Amalgamated Transit Union's Local 689, the bargaining unit for station managers and most operator and maintenance personnel, whereby the represented employees are now required to contribute to their retirement plan. Second, Other Post Employee Benefits (OPEB), budgeted at \$11.0 million in FY2016, was not funded. In the fall of 2015, the Board provided guidance to continue the current methodology of pay-as-you-go for retiree health insurance costs, in lieu of setting up a trust to manage the ongoing retiree health care liability. These reductions were offset by increased cost requirements for health care.

The following tables provide a detailed, three-year comparison of total human capital requirements for WMATA. The approved staffing requirement for FY2017 is 13,032, consisting of 11,568 operating positions, 1,420 capital positions and 44 positions funded by reimbursable projects. The FY2017 approved budget includes a 0.3 percent increase in headcount (37 positions) over WMATA's approved headcount for FY2016 primarily due to Safety Management Initiatives.



The table below shows a breakdown, by department, of the staffing levels for FY2015 - FY2017.

### Human Capital by Department

	FY2015 Approved Budget	FY2016 Approved Budget	FY2017 Approved Budget <sup>*</sup>	Change from FY2016 to FY2017
General Manager / CEO	4 <sup>(0)</sup>	4	4 <sup>(0)</sup>	(0)
Inspector General	34	34	36	2
Board Secretary	5	5 (0)	4(0)	(1)
Chief of Staff	32	32	_	(32)
External Relations	130	127	139	12
Internal Business Operations	498	494	562	68
Chief Financial Officer	371	367	237	(130)
Assurance, Quality & Performance	7	8	108	100
Fair Practices	(0)	$11^{(0)}$	21	10
General Counsel	48	48	48	_
Safety & Environmental Management	66	67	66	(1)
Chief Engineer	_	5	792	787
Chief Operating Officer	(0)	(0)	6	6
Rail Services	1,663	1,661	4,680	3,019
Bus Services	4,177	4,183	4,173	(10)
Access Services	56	56	53	(3)
Metro Transit Police	745	729	726	(3)
Parking	_	13	13	_
Support Services	(0)	(0)	1,362	1,362
Special Projects	_	_	2	2
Transit Infrastructure and Engineering Services	4,921	5,004	(0)	(5,004)
Deputy General Manager - Training & Other Support	148	147	_	(147)
TOTAL	12,905	12,995	13,032	37

\* The department breakdown of the FY2017 Approved budget reflects the March 2016 GM/CEO authority-wide reorganization.



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

#### Human Capital Summary - All Modes

Fringe Benefit

	FY2015 Approved Budget	FY2016 Approved Budget	FY2017 Approved Budget	Change
POSITIONS	12,905	12,995	13,032	37 ()
PAYROLL	\$1,045,949,681	\$1,084,718,301	\$1,102,420,774	\$17,702,473
Health Care	\$197,584,852	\$209,985,794	\$221,126,580	\$11,140,786
Taxes FICA	\$79,539,103	\$81,918,916	\$84,010,943	\$2,092,027
Pension Defined Benefit	\$163,161,750	\$163,042,250	\$155,961,882	(\$7,080,368)
Pension Defined Contribution	\$14,955,800	\$16,103,500	\$12,124,000	(\$3,979,500)
OPEB Trust Contribution	\$4,000,000	\$11,000,000	(0)	(\$11,000,000)
Life Insurance	\$1,741,999	\$1,650,000	\$2,024,358	\$374,358
Long Term Disability	\$649,999	\$1,125,000	\$1,237,500	\$112,500
Taxes Unemployment	\$600,000	\$1,150,000	\$1,148,516	(\$1,484)
Workers Comp Assessment	\$2,552,600	\$2,552,600	\$1,500,000	(\$1,052,600)
Total Allocated Fringe Benefits	\$464,786,103	\$488,528,060	\$479,133,779	(\$9,394,281)
Unallocated Fringe Benefits and Workers' Compensation	\$27,186,223	\$27,757,813	\$29,428,761	\$1,670,948
TOTAL FRINGE BENEFITS	\$491,972,326	\$516,285,873	\$508,562,540	(\$7,723,333)

### Human Capital Summary

Fringe Benefit Annual Budgeting Rates

	FY2015 Approved Budget	FY2016 Approved Budget	FY2017 Approved Budget	Change
Average Annual Pay	\$81,050	\$83,472	\$84,593	\$1,121
Average Full Fringe Cost	\$38,123	\$39,730	\$39,024	(\$705)
Full Fringe Rate	47.0%	47.6%	46.1%	-1.5%

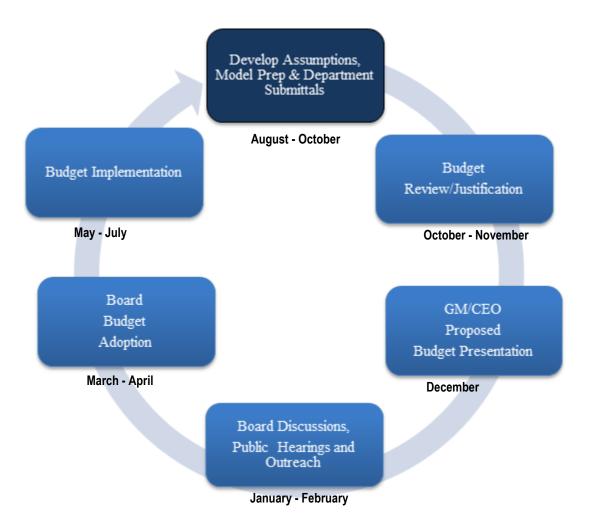


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## **Appendix D - Budget Process**

WMATA's annual budget serves as the foundation for its financial planning and control. The General Manager, Chief Financial Officer and staff prepare and submit the budget to the Board of Directors for consideration and approval. The annual budget consists of three components: operating, capital, and reimbursables. 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. WMATA's budget planning begins in August of the preceding fiscal year with the development of budget priorities and assumptions for the plan year. The fiscal year begins on July 1; the bpdget is adopted and implemented by June 30. The budget Process consists of six major phases: 1) model preparation, development of key assumptions/drivers and budget formulation (which includes department submissions); 2) budget review/ justification; 3) presentation of the proposed budget to the Board; 4) Board discussions, public hearings and outreach; 5) budget adoption by the Board; and 6) budget implementation/amendment (see below figure).



### Budget Development and Departmental Submissions

WMATA began the process of developing the FY2017 Proposed budget shortly after the adoption of the FY2016 Approved budget. As part of the budget development process, the FY2015 Actuals with specific programmatic changes were used as the FY2017 baseline for budgeted non-personnel related costs. The FY2016 Approved Budget and the FY2015 Actuals were then analyzed, and certain identified assumptions were modified. Some of those assumptions were fuel prices, contractually obligated union wages and benefits, and fare revenues. Based on the analysis of the data, WMATA assigned targets to each department. Simultaneously, WMATA pursued additional Federal, state and local revenue and grants.



The FY2017 Proposed budget was balanced through a combination of expense efficiencies, including preventive maintenance and overhaul utilization through the Capital Improvement Program (CIP), offset by realignment of revenue based on projected ridership. Below are additional assumptions that were incorporated into the development of the FY2017 Proposed budget.

- Using the Strategic Plan (the "Plan") framework, the General Manager/CEO's Business Plan guides both Operating and Capital budget development processes. It identifies priorities for WMATA, 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 proposed FY2017 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 business plan that drive the budget planning process. These guidelines and assumptions are then passed along and incorporated into the department budgets.
- The initial planning, development of assumptions, preparation of instructions and training materials are conducted in August.
- The annual budget kickoff meeting is held in September with all department leaders and budget preparers. New budget initiative requests are then developed.
- The department operating and capital budget requests are developed, reviewed, approved (at the department level) and submitted to OMBS by mid-October.

### Budget Review and Proposal

- The proposed CIP is developed concurrently with the proposed operating budget. OMBS and the AGM-TIES meet with each project manager to review the capital forecasts and requests. Recommendations for updates to the CIP are reviewed with executive management in November 2015.
- Operating and Capital budget requests are reviewed by OMBS and the Executive Leadership Team (ELT). The proposed budget recommendations are presented to the General Manager/CEO in November.

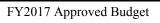
• Once the GM/CEO has approved the annual Budget Proposal and Multi-Year plans, they are presented to Board of Directors during the December meeting. They are also released to the public in December.

### **Budget Discussion and Adoption**

- The budget is presented and reviewed at the Finance and Administration Committee meeting and the full Board deliberates through early spring.
- WMATA undertakes significant outreach efforts regarding the budget, including proposed service changes, prior to adoption. The outreach occurs in three key areas:
  - *Public hearings*: During the budget process, WMATA holds at least one public hearing to review any proposed service and/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.
  - 0 Public *participation*: WMATA's Public Participation Plan guides substantial additional outreach efforts beyond the public hearings: open houses, station pop-ups, and community events. The outreach provide sspecific 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, lowincome. and limited English proficient populations.
  - *Rider survey*: WMATA also conducts an online survey to solicit rider input on key questions regarding the budget and fare policy.
- WMATA 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, WMATA's outreach efforts meet or exceed the requirements of both the WMATA Compact and the Federal Transit Administration's newly expanded Title VI guidelines.

### Amendments

- When necessary, amendments to the budget are presented to the Finance and Administration Committee.
- The Finance and Administration Committee will present amendments to the Board for review, approval and adoption.





### **Budget Implementation**

- Implementation of the adopted budget occurs between May and June.
- The FY2017 Approved budget becomes effective on July 1, 2016.
- 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 Management to the Board of Directors.
- These reports are used to monitor financial performance and ensure compliance with the approved budget.

### **Budget Basis**

The underlying financial statements guiding 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 WMATA'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 Generally Accepted Accounting Principles (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, and
- Net actuarial determined post-employment benefit obligation recognized under Government Accounting Standards Board (GASB) Statement No. 45, which was implemented by WMATA 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 switched from an Incremental to a hybrid Zero-based budgeting approach for the development of the FY2017 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.

### WMATA's Enterprise Fund

The Enterprise Fund is the sole fund for WMATA. 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 debt service and the operating budget subsidy. Business revenues include advertising and joint development, among other funding sources.

### **Balanced Operating Budget**

WMATA is required to annually adopt a balanced operating budget 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 by the Board's estimated revenues and receipts from all sources, excluding funds included in the capital budget or otherwise earmarked for other purposes. At the end of the fiscal year, if there is an operating deficit, the local jurisdictions are billed on July 1 for their respective contributions.

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.

The primary focus of the capital budget is safety and the condition of WMATA'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 fixed assets, or to improve and extend the useful life of an existing fixed asset.

The capital budget process assists the agency's leadership in making decisions regarding the assets and infrastructure required to support and/or grow the bus, rail, and paratransit operations. WMATA'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

### FY2017 BUDGET CALENDAR

August	Initial planning, development of assumptions, preparation of instructions and training materials for the Operation and Capital Budgets are initiated.
September	The FY2017 budget kickoff meeting and system training classes are held with all departments. A review of FY2015 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 most current project schedules and cost estimates.
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 and the Annual Work Plan (AWP) is released to the jurisdictional partners. The proposed budget is presented to the Finance and Administration Committee.
January/February	Board Discussions and public participation are held.
March - April	Findings from public participation are summarized and presented to the board. Updated Operating and Capital budgets are prepared for Board approval.
April	Approval of the FY2017 Annual Budget.



### **Appendix E - Financial Standards**

The Financial Standards are divided into three sections: general, business planning parameters, and debt policy. The purpose of the general standards is to ensure that WMATA prudently manages its financial affairs and establishes appropriate cash reserves. The business planning parameters provide management with a framework 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 WMATA 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.

### Financial Standards – General

### GAAP

• Complete and accurate accounting records are maintained in accordance with Generally Accepted Accounting Principles (GAAP) as required by 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. WMATA 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.

## Audited Comprehensive Annual Financial Report (CAFR)

• An independent certified public accounting firm performs an examination of WMATA's consolidated financial statements, including Single Audit requirements. The goal is to receive an unqualified opinion on the financial statements and an opinion that WMATA is in compliance with the Federal Single Audit requirements in all material respects and to receive the Government Finance Officers Association (GFOA) award for excellence in reporting.

### **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 WMATA's Compact.
- In accordance with Board Resolution No. 81-36, designated WMATA 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 WMATA-administered pension plans. Based on the results of such analysis, WMATA 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, WMATA records the liabilities, including losses incurred but not reported, at 100 percent of the net present value.
- The budget includes operating, capital, and other components necessary to implement the policy directions contained in previously Board-adopted longer-term plans. The operating budget spans a 12-month period, and funding for the capital budget carries over from one fiscal year to the next. 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 for bus operations 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 WMATA's assets, including major transportation projects, and is included in each annual budget.
- From time to time, WMATA 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 appropriate state and Federal criteria and the likelihood of obtaining approvals.

### Financial Standards – Debt Policy

- WMATA 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, WMATA may borrow money in pursuit of its mission. All such bonds and evidences of indebtedness is authorized by resolution of the Board and is payable solely out of the revenues of WMATA. The bonds and other debt obligations of WMATA, except as may be otherwise provided in the indenture under which they are issued, are direct and general obligations of WMATA 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 account for approximately 45 percent of the funding for WMATA'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; and
  - 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 interjurisdictional 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 is determined by taking the urbanized area population distribution for the compact area (50 percent weighting) and combining it with the weighted population density (urbanized population divided by area). The formula prorates the urbanized population distribution by people per square mile.

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 (month of May sample) for each jurisdiction divided by the total average weekday ridership.

- 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%
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2. Number of rail stations 33.3%

3. Average weekly ridership

33.3%

Density weighted population is determined by taking the urbanized area population distribution for the compact area (50 percent weighted) and combining that with the weighted population density (urbanized population divided by area). This calculation 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 system average weekday ridership (month of May sample) times the jurisdictional ridership distribution, 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), which currently covers the period FY2011 to FY2016, and has been extended through FY2017. 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 WMATA rather than participate in the debt issuance.



### **Appendix F - Debt Service**

### **Debt Policy/Borrowing Powers**

WMATA's Compact allows WMATA to borrow money in pursuit of its mission. All such bonds and evidences of indebtedness are payable solely out of WMATA'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 WMATA are pledged for the prompt payment of the debt service.

WMATA 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:

- WMATA is to punctually pay principal and interest according to provisions in the bond document.
- Except for certain instances, WMATA 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.

• WMATA must at all times maintain certain insurance or self-insurance covering the assets and operations of the transit system.

### **Existing Gross Revenue Transit Bonds**

In October 2003, WMATA issued \$163.5 million of Gross Revenue Transit Refunding Bonds, Series 2003, to refund the callable portion of WMATA's outstanding Gross Revenue Transit Refunding Bonds, Series 1993. The final maturity for the 1993 bonds was in July 2010 and the final maturity for the 2003 bonds was July 2014.

In June 2009, WMATA 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 net annual jurisdictional debt service payment on the bonds is \$21.2 million, reflecting an 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.

#### **Gross Revenue Transit Bonds** FY2017 Jurisdiction Funding

	Principle	Interest	Total Due
Series 2009A			
Due to Bondholders 1/1/2017		\$4,992,472	\$4,992,472
Due to Bondholders 7/1/2017	\$8,690,000	\$4,992,472	\$13,682,472
Total	\$8,690,000	\$9,984,944	\$18,674,944
Series 2009B <sup>1</sup>			
Due to Bondholders 1/1/2017		\$1,251,250	\$1,251,250
Due to Bondholders 7/1/2017	_	\$1,251,250	\$1,251,250
Total	\$0	\$2,502,500	\$2,502,500

1 Net of Build America Bond (BAB) credit

WMATA previously maintained a \$330 million commercial paper program to provide funds for the WMATA Matters Program. Payment of all maturing commercial paper was guaranteed by an irrevocable letter of credit. In June 2009, WMATA retired the \$330.0 million commercial paper program. At the time of bond settlement commercial paper outstanding totaled \$314.5 million. All proceeds from the Series 2009-A Bond issuance and a portion of the proceeds from the jurisdiction opt out were utilized to retire the commercial paper. The balance of \$107.5 million from the jurisdiction opt out and Series 2009-B proceeds was used to finance the remaining work under the WMATA Matters capital program.



During FY2014, WMATA increased the availability on its lines of credit from \$150 million to \$302.5 million. During FY2015 and through FY2016, WMATA began the process of reducing the outstanding balance on the lines of credit. Effective FY2017 the availability on the lines of credit will be reduced by \$52.5 million reflecting a new availability amount of \$250 million. During the second quarter of FY2015, the Authority issued a one-year Grant Anticipation Note (GAN) for \$200 million. During the

### **New Capital Bonds**

The Capital Improvement Program (CIP) is a six-year program. To support the CIP, long-term borrowing may be required.

The following tables provides a summary of WMATA's estimated jurisdictional share of debt and detail of WMATA's proposed debt issuances and jurisdictional

fourth quarter of FY2015, WMATA exercised an optional prepayment right and repaid \$100 million of the outstanding GAN balance. Additional optional prepayments were made during the first quarter of FY2016, with final maturity occurring in October 2015. The lines of credit and note support WMATA's capital program. The lines of credit are also available to support operating cash flow needs.

allocations. The amounts represented in these tables are subject to change based on financial market conditions and jurisdictional decisions to opt for additional cash contributions in lieu of debt issuance

#### **Debt Strategy**

	Principle	Interest	Total Due	
District of Columbia				
Total District of Columbia	\$355,947	\$4,119	\$360,067	
Maryland				
Montgomery County	\$163,294	\$1,890	\$165,183	
Prince George's County	\$169,617	\$1,963	\$171,580	
Total Maryland	\$332,911	\$3,853	\$336,763	
Virginia				
Alexandria	\$42,958	\$497	\$43,455	
Arlington County	\$79,942	\$925	\$80,867	
City of Fairfax	\$2,464	\$29	\$2,493	
Fairfax County	\$140,447	\$1,625	\$142,072	
Falls Church	\$3,031	\$35	\$3,066	
Total Virginia	\$268,842	\$3,111	\$271,953	
Total Debt	\$957,700	\$11,083	\$968,783	



### Gross Revenue Transit Bonds (Detail)

								Aggregate
Year Ending	Principal	Interest	<b>Debt Service</b>	Principal	Interest	BAB Credit	<b>Debt Service</b>	
1/1/2010		6,950,487	6,950,487		2,160,278	(756,097)	1,404,181	8,354,667
7/1/2010	5,375,000	6,193,503	11,568,503		1,925,000	(673,750)	1,251,250	12,819,753
1/1/2011		6,059,128	6,059,128		1,925,000	(673,750)	1,251,250	7,310,378
7/1/2011	6,555,000	6,059,128	12,614,128		1,925,000	(673,750)	1,251,250	13,865,378
1/1/2012		5,895,253	5,895,253		1,925,000	(673,750)	1,251,250	7,146,503
7/1/2012	6,885,000	5,895,253	12,780,253		1,925,000	(673,750)	1,251,250	14,031,503
1/1/2013		5,734,128	5,734,128		1,925,000	(673,750)	1,251,250	6,985,378
7/1/2013	7,205,000	5,734,128	12,939,128		1,925,000	(673,750)	1,251,250	14,190,378
1/1/2014		5,556,653	5,556,653		1,925,000	(673,750)	1,251,250	6,807,903
7/1/2014	7,560,000	5,556,653	13,116,653		1,925,000	(673,750)	1,251,250	14,367,903
1/1/2015		5,385,753	5,385,753		1,925,000	(673,750)	1,251,250	6,637,003
7/1/2015	7,900,000	5,385,753	13,285,753		1,925,000	(673,750)	1,251,250	14,537,003
1/1/2016		5,193,503	5,193,503		1,925,000	(673,750)	1,251,250	6,444,753
7/1/2016	8,285,000	5,193,503	13,478,503		1,925,000	(673,750)	1,251,250	14,729,753
1/1/2017*	, ,	4,992,472	4,992,472		1,925,000	(673,750)	1,251,250	6,243,722
7/1/2017*	8,690,000	4,992,472	13,682,472		1,925,000	(673,750)	1,251,250	14,933,722
1/1/2018		4,775,222	4,775,222		1,925,000	(673,750)	1,251,250	6,026,472
7/1/2018	9,125,000	4,775,222	13,900,222		1,925,000	(673,750)	1,251,250	15,151,472
1/1/2019	- , - ,	4,547,097	4,547,097		1,925,000	(673,750)	1,251,250	5,798,347
7/1/2019	9,580,000	4,547,097	14,127,097		1,925,000	(673,750)	1,251,250	15,378,347
1/1/2020	-,,	4,307,597	4,307,597		1,925,000	(673,750)	1,251,250	5,558,847
7/1/2020	10,060,000	4,307,597	14,367,597		1,925,000	(673,750)	1,251,250	15,618,847
1/1/2021	10,000,000	4,043,522	4,043,522		1,925,000	(673,750)	1,251,250	5,294,772
7/1/2021	10,585,000	4,043,522	14,628,522		1,925,000	(673,750)	1,251,250	15,879,772
1/1/2022	10,505,000	3,765,666	3,765,666		1,925,000	(673,750)	1,251,250	5,016,916
7/1/2022	11,140,000	3,765,666	14,905,666		1,925,000	(673,750)	1,251,250	16,156,916
1/1/2023	11,110,000	3,473,241	3,473,241		1,925,000	(673,750)	1,251,250	4,724,491
7/1/2023	11,725,000	3,473,241	15,198,241		1,925,000	(673,750)	1,251,250	16,449,491
1/1/2024	11,725,000	3,165,459	3,165,459		1,925,000	(673,750)	1,251,250	4,416,709
7/1/2024	12,340,000	3,165,459	15,505,459		1,925,000	(673,750)	1,251,250	16,756,709
1/1/2025	12,540,000	2,841,534	2,841,534		1,925,000	(673,750)	1,251,250	4,092,784
7/1/2025	12,990,000	2,841,534	15,831,534		1,925,000	(673,750)	1,251,250	17,082,784
1/1/2026	12,990,000	2,841,534	2,500,547		1,925,000	(673,750)	1,251,250	3,751,797
7/1/2026	13,670,000	2,500,547	16,170,547					
1/1/2027	13,070,000	2,300,347	2,141,709		1,925,000 1,925,000	(673,750) (673,750)	1,251,250 1,251,250	17,421,797 3,392,959
7/1/2027	14,390,000						1,251,250	
	14,390,000	2,141,709	16,531,709		1,925,000 1,925,000	(673,750)	1,251,250	17,782,959
1/1/2028	15 145 000	1,763,972	1,763,972		, ,	(673,750)		3,015,222
7/1/2028 1/1/2029	15,145,000	1,763,972	16,908,972		1,925,000 1,925,000	(673,750)	1,251,250	18,160,222 2,617,666
	15,940,000	1,366,416	1,366,416			(673,750)	1,251,250	
7/1/2029	15,940,000	1,366,416	17,306,416		1,925,000	(673,750)	1,251,250	18,557,666
1/1/2030	16765.000	953,850	953,850		1,925,000	(673,750)	1,251,250	2,205,100
7/1/2030	16,765,000	953,850	17,718,850		1,925,000	(673,750)	1,251,250	18,970,100
1/1/2031		527,756	527,756		1,925,000	(673,750)	1,251,250	1,779,006
7/1/2031	17,620,000	527,756	18,147,756		1,925,000	(673,750)	1,251,250	19,399,006
1/1/2032		79,931	79,931	15 650 000	1,925,000	(673,750)	1,251,250	1,331,181
7/1/2032	3,145,000	79,931	3,224,931	15,370,000	1,925,000	(673,750)	16,621,250	19,846,181
1/1/2033			-	10.000	1,387,050	(485,468)	901,583	901,583
7/1/2033			-	19,375,000	1,387,050	(485,468)	20,276,583	20,276,583
1/1/2034			-		708,925	(248,124)	460,801	460,801
7/1/2034			-	20,255,000	708,925	(248,124)	20,715,801	20,715,801
Total	242,675,000	171,284,809	413,959,809 t service payments d	55,000,000	92,977,228	(32,542,030)	115,435,198	529,395,007

\* FY2017 Jurisdiction subsidy requirements include funds for debt service payments due on 1/1/2017 and 7/1/2017.



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#### Jurisdictional Share of Debt

Debt	Total Deb	ot Service	District of	Columbia	Montgome	ry County	Prince Geor	ge County	Alexa	ndria	Arlington	o County	City of I	Fairfax	Fairfax	County	Falls C	hurch
Repayment	Principal	Interest	Principal	Interest	Principal	Interest	Principal	Interest	Principal	Interest	Principal	Interest	Principal	Interest	Principal	Interest	Principal	Interest
FY2018	\$1,639	\$1,764	\$609	\$656	\$279	\$301	\$290	\$312	\$74	\$79	\$137	\$147	\$4	\$5	\$240	\$259	\$5	\$6
FY2019	\$12,508	\$14,340	\$4,649	\$5,330	\$2,133	\$2,445	\$2,215	\$2,540	\$561	\$643	\$1,044	\$1,197	\$32	\$37	\$1,834	\$2,103	\$40	\$45
FY2020	\$19,708	\$22,529	\$7,325	\$8,373	\$3,360	\$3,841	\$3,491	\$3,990	\$884	\$1,011	\$1,645	\$1,881	\$51	\$58	\$2,890	\$3,304	\$62	\$71
FY2021	\$24,337	\$27,336	\$9,045	\$10,160	\$4,150	\$4,661	\$4,310	\$4,842	\$1,092	\$1,226	\$2,032	\$2,282	\$63	\$70	\$3,569	\$4,009	\$77	\$87
FY2022	\$26,064	\$27,969	\$9,687	\$10,395	\$4,444	\$4,769	\$4,616	\$4,954	\$1,169	\$1,255	\$2,176	\$2,335	\$67	\$72	\$3,822	\$4,102	\$82	\$89
Total									<b>63</b> 0			<b>67</b> 0 11		<b>6 6 1 6</b>				<b>***</b>
<b>FY2017-22</b> FY2023	\$84,257	\$93,938	\$31,316	\$34,914	\$14,366	\$16,017	\$14,923	\$16,637	\$3,779	\$4,214	\$7,033	\$7,841	\$217	\$242	\$12,356	\$13,776	\$267	\$297
FY2023 FY2024	\$29,226	\$30,746	\$10,862	\$11,427	\$4,983	\$5,242	\$5,176	\$5,445	\$1,311	\$1,379	\$2,440	\$2,566	\$75	\$79	\$4,286	\$4,509	\$93	\$97 \$04
FY2024	\$30,089 \$30,977	\$29,738 \$28,700	\$11,183 \$11,513	\$11,053 \$10,667	\$5,130 \$5,282	\$5,071 \$4,894	\$5,329 \$5,486	\$5,267 \$5,083	\$1,350 \$1,389	\$1,334 \$1,287	\$2,512 \$2,586	\$2,482 \$2,396	\$77 \$80	\$77 \$74	\$4,413 \$4,543	\$4,361 \$4,209	\$95 \$98	\$94 \$91
FY2026	\$30,977	\$27,632	\$11,853	\$10,007	\$5,282	\$4,094	\$5,486 \$5,648	\$4,894	\$1,389	\$1,239	\$2,580	\$2,390	\$80	\$74	\$4,543	\$4,052	\$98	\$87
FY2027	\$32,833	\$26,532	\$12,203	\$9,861	\$5,598	\$4,524	\$5,815	\$4,699	\$1,473	\$1,190	\$2,002	\$2,307	\$84	\$68	\$4,815	\$3,891	\$101	\$84
FY2028	\$33,803	\$25,399	\$12,563	\$9,440	\$5,764	\$4,331	\$5,987	\$4,498	\$1,516	\$1,139	\$2,822	\$2,120	\$87	\$65	\$4,957	\$3,725	\$107	\$80
FY2029	\$34,800	\$24,233	\$12,934	\$9,007	\$5,934	\$4,132	\$6,163	\$4,292	\$1,561	\$1,087	\$2,905	\$2,023	\$90	\$62	\$5,103	\$3,554	\$110	\$77
FY2030	\$35,828	\$23,033	\$13,316	\$8,561	\$6,109	\$3,927	\$6,345	\$4,079	\$1,607	\$1,033	\$2,991	\$1,923	\$92	\$59	\$5,254	\$3,378	\$113	\$73
FY2031	\$36,886	\$21,797	\$13,709	\$8,101	\$6,289	\$3,716	\$6,533	\$3,860	\$1,655	\$978	\$3,079	\$1,819	\$95	\$56	\$5,409	\$3,197	\$115	\$69
FY2032	\$37,975	\$20,524	\$14,114	\$7,628	\$6,475	\$3,500	\$6,726	\$3,635	\$1,703	\$921	\$3,170	\$1,713	\$98	\$53	\$5,569	\$3,010	\$120	\$65
FY2033	\$39,096	\$19,215	\$14,531	\$7,141	\$6,666	\$3,276	\$6,924	\$3,403	\$1,754	\$862	\$3,263	\$1,604	\$101	\$49	\$5,733	\$2,818	\$120	\$61
FY2034	\$40,250	\$17,866	\$14,960	\$6,640	\$6,863	\$3,046	\$7,129	\$3,164	\$1,805	\$801	\$3,360	\$1,491	\$101	\$46	\$5,903	\$2,620	\$124	\$57
FY2035	\$40,230	\$16,478	\$15,401	\$6,124	\$7,065	\$2,810	\$7,339	\$2,918	\$1,859	\$739	\$3,459	\$1,375	\$104	\$42	\$6,077	\$2,416	\$127	\$52
FY2036	\$42,662	\$15,048	\$15,856	\$5,593	\$7,003	\$2,566	\$7,556	\$2,665	\$1,914	\$675	\$3,561	\$1,256	\$110	\$39	\$6,256	\$2,207	\$135	\$48
FY2037	. ,							· · · · ·				. ,				· · · ·		
FY2038	\$43,921	\$13,577	\$16,324	\$5,046	\$7,489	\$2,315	\$7,779	\$2,405	\$1,970	\$609	\$3,666	\$1,133	\$113	\$35	\$6,441	\$1,991	\$139	\$43
FY2039	\$45,218	\$12,062	\$16,806	\$4,483	\$7,710	\$2,057	\$8,009	\$2,136	\$2,028	\$541	\$3,774	\$1,007	\$116	\$31	\$6,631	\$1,769	\$143	\$38
FY2040	\$46,553	\$10,502	\$17,302	\$3,903	\$7,938	\$1,791	\$8,245	\$1,860	\$2,088	\$471	\$3,886	\$877	\$120	\$27	\$6,827	\$1,540	\$147	\$33
	\$47,927	\$8,896	\$17,813	\$3,306	\$8,172	\$1,517	\$8,488	\$1,576	\$2,150	\$399	\$4,001	\$743	\$123	\$23	\$7,029	\$1,305	\$152	\$28
FY2041	\$49,342	\$7,243	\$18,339	\$2,692	\$8,413	\$1,235	\$8,739	\$1,283	\$2,213	\$325	\$4,119	\$605	\$127	\$19	\$7,236	\$1,062	\$156	\$23
FY2042	\$50,799	\$5,541	\$18,880	\$2,059	\$8,662	\$945	\$8,997	\$981	\$2,279	\$249	\$4,240	\$463	\$131	\$14	\$7,450	\$813	\$161	\$18
FY2043	\$48,906	\$3,789	\$18,177	\$1,408	\$8,339	\$646	\$8,662	\$671	\$2,194	\$170	\$4,082	\$316	\$126	\$10	\$7,172	\$556	\$155	\$12
FY2044	\$27,954	\$2,085	\$10,390	\$775	\$4,766	\$356	\$4,951	\$369	\$1,254	\$94	\$2,333	\$174	\$72	\$5	\$4,099	\$306	\$88	\$7
FY2045	\$14,642	\$1,053	\$5,442	\$391	\$2,497	\$180	\$2,593	\$186	\$657	\$47	\$1,222	\$88	\$38	\$3	\$2,147	\$154	\$46	\$3
FY2046	\$6,698	\$481	\$2,490	\$179	\$1,142	\$82	\$1,186	\$85	\$300	\$22	\$559	\$40	\$17	\$1	\$982	\$70	\$21	\$2
FY2047	\$4,810	\$203	\$1,788	\$75	\$820	\$35	\$852	\$36	\$216	\$9	\$402	\$17	\$12	\$1	\$705	\$30	\$15	\$1
Total	\$968,783	\$486,309	\$360,067	\$180,746	\$165,183	\$82,919	\$171,580	\$86,130	\$43,455	\$21,813	\$80,867	\$40,594	\$2,493	\$1,251	\$142,072	\$71,317	\$3,066	\$1,539

1 Debt maturity is assumed to be 25 years.

**Debt Assumptions** 

Poor initiative to be 25 years.
 Principal repayment structure is based on 14.5 year average age of debt.
 Issuance costs are assumed to equal a fixed \$650,000 payment plus 0.75% of the par value of the issuance.
 Debt issuances projected for June of each fiscal year.
 The jurisdictions will be billed and the first debt service payment will be due the next fiscal year in October and January, respectively.

### **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 WMATA establishes its current and projected Metrobus revenue vehicle fleet size requirements and operating spare ratio. It includes a description of revenue service planned to accommodate growth in Metrobus ridership, as well as an assessment and projection of needs for bus vehicle maintenance.

### **Metrobus Statistics**

	FY2014 Actual	FY2015 Actual	FY2016 Approved	FY2017 Approved
STATISTICS:				
Total Bus Miles (000s)	50,019	51,075	51,424	50,594
Revenue Bus Miles (000s)	39,159	40,451	38,877	38,407
Total Passenger trips (000s)	134,408	132,902	140,100	135,600
Bus Active Fleet Size (Year End)	1,514	1,526	1,537	1,548
Total Passenger Revenue (\$000s)	\$149,825	\$155,171	\$165,560	\$160,945
Total Operating Revenue (\$000s)	\$167,631	\$176,123	\$181,335	\$179,724
Total Operating Expenses (\$000s)	\$567,993	\$582,399	\$634,314	\$653,281
Gross Subsidy (\$000s)	\$400,362	\$406,276	\$452,979	\$473,556
RATIOS:				
Cost Per Total Bus Mile	\$11.36	\$11.40	\$12.33	\$12.91
Passengers Per Bus	90.75	88.19	92.97	87.60
Passengers Per Scheduled Bus Mile	3.43	3.29	3.60	3.53
Cost Per Passenger	\$4.23	\$4.38	\$4.53	\$4.82
Subsidy Per Passenger	\$2.98	\$3.06	\$3.23	\$3.49
Average Passenger Fare*	\$1.11	\$1.17	\$1.18	\$1.19
Percentage of Operating Cost Recovered from Passenger				
Revenues	26.4%	26.6%	26.1%	24.6%
Percentage of Operating Cost Recovered from all Operating				
Revenues	29.5%	30.2%	28.6%	27.5%

\*Average is lower than base fare due to transfers and 7-day pass impact.



### **Active Fleet**

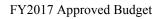
	Maximum Scheduled Fleet	Total Active Fleet
Fiscal 2014 End of Year *	1290	1514
Fiscal 2015 End of Year **	1294	1526
Fiscal 2016 End of Year **	1305	1537
Fiscal 2017 End of Year **	1296	1548

\* Includes 27 strategic buses in accordance with fleet plan
 \*\* Includes 35 strategic buses in accordance with fleet plan

### Age of Fleet

Manufacturer	Year Entered Service	Number of Buses	Average Age
ORION V	2000	6	17
ORION VII - CNG	2005	250	12
HYBRID ELECTRIC	2006	50	11
CLEAN DIESEL	2006	116	11
NEW FLYER - CNG	2007	25	10
NABI	2008	22	9
NEW FLYER - HYBRID	2010	147	7
NEW FLYER - XCELSIOR	2011	100	6
NEW FLYER - XCELSIOR	2012	67	5
ORION VII - HYBRID	2012	25	5
ORION VII - CLEAN DIESEL	2012	27	5
NEW FLYER - XCELSIOR	2013	105	4
FORD	2013	6	4
NABI - BRT	2014	105	3
NEW FLYER XCELSIOR HYBRID	2015	21	2
NEW FLYER XCELSIOR HYBRID	2015	56	2
NEW FLYER XCELSIOR CNG	2015	164	2
NEW FLYER XCELSIOR HYBRID	2016	54	1
TOTAL*		1,548	6.65

\* Includes 35 strategic buses in accordance with fleet plan. \*\* NEW FLYER - HYBRID





#### **Bus Fleet Size by Garage**

	Fiscal 2017 Maximum		
Garage	Scheduled Fleet	Total Fleet	Spare Ratio
Bladensburg	213	262	15.7%
Shepherd Parkway	183	241	14.4%
Northern	125	153	15.4%
Western	101	118	13.7%
Southern Avenue	65	78	15.2%
Four Mile Run	184	222	15.3%
Landover	141	169	16.0%
Montgomery	173	209	15.7%
West Ox	82	96	15.7%
SYSTEM TOTAL	1,267*	1,548	15.4%

\* Maximum scheduled fleet Includes 29 strategic buses

### **Comparison of Bus Miles**

FY2014 Budget	FY2015 Budget	FY2016 Budget	FY2017 Budget
47,968,460	49,740,260	50,080,598	49,278,234
0	0	0	
0	600,000	600,000	600,000
100,000	100,000	100,000	100,000
267,522	277,403	281,025	268,829
449,553	466,158	472,245	451,419
(104,205)	(108,088)	(109,499)	(104,669)
712,869	1,335,473	1,343,772	1,315,579
48,681,329	51,075,733	51,424,370	50,593,813
1,900,948	1,900,948	1,900,948	1,900,948
	Budget           47,968,460           0           0           0           100,000           267,522           449,553           (104,205)           712,869           48,681,329	Budget         Budget           47,968,460         49,740,260           0         0           0         600,000           100,000         100,000           267,522         277,403           449,553         466,158           (104,205)         (108,088)           712,869         1,335,473           48,681,329         51,075,733	BudgetBudgetBudget47,968,46049,740,26050,080,5980000600,000600,000100,000100,000100,000267,522277,403281,025449,553466,158472,245(104,205)(108,088)(109,499)712,8691,335,4731,343,77248,681,32951,075,73351,424,370

\*Strategic Miles included in scheduled miles.



### **Bus Operator Payhours**

	FY201'	7 Bus Operator Wages	
Category	Payhours	Average Hourly Rate	Budget
Scheduled (straight + OT)*	5,408,860	\$27.21	\$147,175,077
Subtotal:	5,408,860		\$147,175,077
Non-Scheduled OT/Special Event	246,722	\$27.21	\$6,713,306
Standing Extra	47,555	\$27.21	\$1,293,972
Utility	62,144	\$27.21	\$1,690,938
Training	269,621	\$18.12	\$4,886,027
Miscellaneous	179,252	\$27.21	\$4,877,447
Guarantees	52,024	\$27.21	\$1,415,573
Funeral Leave	5,901	\$27.21	\$160,566
Jury Duty	5,256	\$27.21	\$143,016
Vacation	355,640	\$27.21	\$9,676,964
Sick	311,100	\$27.21	\$8,465,031
Holiday	230,332	\$27.21	\$6,267,334
Subtotal:	1,765,547		\$45,590,174
Grand Total:	7,174,407	\$26.87	\$192,765,250

\* Pay hours for strategic buses are included in the FY2017 Scheduled Pay Hours. Non-Scheduled OT includes funding for bus bridges, supporting Rail shutdowns and elevator shuttles.



### **Regional and Non-Regional Metrobus Routes**

Metrobus routes are designated as either regional or non-regional. The cost of providing Metrobus service on regional routes is allocated to all of the WMATA 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 WMATA 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
- 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 FY2017 budget, the average cost per platform hour for all routes is \$149.35. For the allocation of the FY2017 operating subsidy, the budgeted cost per platform hour for non-regional routes (which has certain overhead and administrative expenses removed) is \$104.74.

#### Metro Regional and Non Regional Route Summary

	Total Service FY2010	Total Service FY2011	Total Service FY2012	Total Service FY2013	Total Service FY2014	Total Service FY2015	Total Service FY2016	Total Service FY2017
Regional Routes								
District of Columbia	1,615,035	1,616,829	1,637,513	1,701,790	1,691,338	1,755,539	1,783,989	1,756,066
Maryland	828,831	830,288	822,385	874,355	868,570	886,898	893,716	892,750
Virginia	731,804	738,549	743,905	798,923	800,416	823,206	830,318	837,830
Totals for Regional:	3,175,671	3,185,666	3,203,803	3,375,069	3,360,324	3,465,643	3,508,023	3,486,645
Non-Regional Routes								
District of Columbia	417,155	415,015	396,675	394,654	380,811	381,898	368,793	368,025
Maryland	384,846	385,773	387,451	391,759	379,565	379,118	387,432	387,121
Virginia	104,746	104,476	103,320	117,305	111,991	129,831	132,187	132,237
Totals for Non-Regional:	906,747	905,264	887,446	903,718	872,367	890,847	888,413	887,383
Reimbursable Routes								
District of Columbia	-	-	-	-	-	-	-	-
Maryland	-	-	-	-	-	-	-	-
Virginia	-	-	-	-	-	-	-	-
Totals for Reimbursable:	-	-	-	-	-	-	-	-
TOTAL METROBUS ROUTES	4,082,418	4,090,930	4,091,249	4,278,787	4,232,691	4,356,490	4,396,435	4,396,435
OPERATOR SHUTTLES/STRATEGIC BUSES/HEADWAY MANAGEMENT	-	-	-	-	107,651	175,549	118,566	111,647



### **DC Regional Routes - Platform Hours**

Line	Line Name	Routes	Sched Days	FY2010	FY2011	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017
113	Friendship Heights - Southeast	30N,30S	W,Sa,Su			0	0	0	45,539	53,612	53,439
99	Wisconsin Avenue	31,33	W,Sa,Su	29,608	29,616	29,544	30,665	29,480	54,557	59,111	58,799
93	Pennsylvania Avenue	32,34,36	W,Sa,Su	112,534	112,449	112,688	117,081	116,722	89,936	86,020	87,972
58	Naylor Road	34	W,Sa,Su	21,979	22,002	21,958	25,237	25,134	3,757	0	0
100	Wisconsin Avenue Limited	37	W (Sat Hol)	6,413	6,503	6,401	9,557	9,287	11,100	11,134	11,090
42	Pennsylvania Avenue Limited	39	W (Sat Hol)	8,245	8,415	8,283	11,223	10,743	10,700	11,075	11,031
81	Mount Pleasant	42,43	W,Sa,Su	64,897	63,575	63,396	62,404	61,160	61,157	61,473	61,334
52	14th Street	52,53,54	W,Sa,Su	97,970	98,990	99,294	103,195	100,479	101,678	102,571	102,506
43	Fort Totten-Petworth	60,64	W,Sa,Su	41,474	41,503	42,299	42,611	40,743	40,757	40,885	40,797
59	Takoma-Petworth	62,63	W,Sa,Su	31,086	31,048	31,535	31,564	32,316	32,305	32,411	32,209
50	Petworth-11th St	66,68	W,Sa,Su	0	0	0	0	0	0	0	0
118	Georgia Avenue-7th Street	70	W,Sa,Su	0	0	0	76,914	74,017	79,991	80,939	80,925
118	Georgia Avenue-7th Street	70,71	W,Sa,Su	88,060	88,202	88,310	0	0	0	0	0
119	Convention Center- S.W. Waterfront	74	W,Sa,Su	0	0	0	24,609	23,620	23,620	20,125	20,064
107	Georgia Avenue Limited	79	W (Sat Hol)	24,274	25,516	37,181	40,219	47,661	48,900	48,741	48,593
86	North Capitol Street	80	W,Sa,Su	60,743	60,768	60,447	62,707	61,285	62,822	63,038	62,829
130	U Street-Garfield	90,92,93	W,Sa,Su	108,182	107,115	106,788	111,925	110,825	112,344	117,549	117,138
141	Stanton Road	94	W,Sa,Su	11,614	11,634	11,562	11,952	12,424	13,151	11,561	11,502
18	East Capitol Street-Cardozo	96,97	W,Sa,Su	60,464	60,147	59,962	61,563	62,250	62,552	62,694	62,325
581	Anacostia-Congress Heights	A2,6,7,8,42 ,46,48	W,Sa,Su	79,686	79,720	79,526	82,643	79,472	79,656	80,014	79,928
582	Anacostia-Fort Drum	A4,W5	W,Sa,Su	25,168	25,278	25,212	25,517	35,008	36,009	36,192	36,295
111	M.L. King Jr. Avenue Limited Line	A9	W (Sat Hol)	6,460	6,477	6,359	7,768	9,596	9,509	9,584	9,546
150	Bladensburg Road-Anacostia	B2	W,Sa,Su	55,847	55,539	55,324	61,553	59,615	59,931	60,333	60,127
22	Glover Park-Federal Triangle	D1	W (Sat Hol)	0	5,049	4,978	5,719	5,898	5,938	5,886	5,856
55	Sibley Hospital - Stadium-Armory	D1,3,6	W,Sa,Su	67,413	55,492	55,317	0	0	0	0	0
48	Ivy City-Dupont Circle	D3	W (Sat Hol)	0	6,426	6,317	6,048	5,822	5,664	5,539	5,497
37	MacArthur Boulevard-Georgetown	D5	W (Sat Hol)	3,817	4,284	4,192	4,514	4,782	4,780	4,596	4,578
55	Sibley Hospital - Stadium-Armory	D6	W,Sa,Su	0	0	0	57,880	55,737	56,050	56,510	56,404
77	Military Road-Crosstown	E2,3,4	W,Sa,Su	48,968	48,834	48,658	50,472	48,559	48,628	0	0
79	Ivy City - Fort Totten	E2	W,Sa,Su							13,621	13,825
77	Military Road-Crosstown	E4 (E3 Eliminated)	W,Sa,Su							37,298	37,087
89	P Street-LeDroit Park	G2	W,Sa,Su	26,434	26,432	24,125	25,711	25,631	25,716	25,874	25,653

metro

#### FY2011 FY2012 FY2010 **FY2013** FY2014 FY2015 Line Line Name Routes **Sched Days FY2016 FY2017** 101 Rhode Island Avenue G8 W,Sa,Su 34,477 32,588 34,653 39,574 37,858 37,821 37,945 37,744 62 Brookland-Potomac Park H1W (Sat Hol) 4,913 4,922 4,836 5,258 5,680 5,690 5,388 5,368 35 Crosstown H2,3,4 W,Sa,Su 55,726 55,744 55,387 58,346 56,068 56,024 54,577 54,406 32 Connecticut Avenue L1,2 W,Sa,Su 43,479 43,507 46,115 43,360 41,276 40,484 40,621 40,483 75 Massachusetts Avenue N2,3,4,6 W,Sa,Su 44,353 44,597 43,676 43,505 41,577 41,535 40,296 40,158 98 Navy Yard Shuttle N22 W 0 0 0 0 0 0 0 0 109 16th Street-Potomac Park S1W (Sat Hol) 12,261 12,215 12,031 12,613 12,278 12,293 13,711 13,696 108 16th Street S2,4 W,Sa,Su 110,630 110,187 109,954 112,351 109,308 109,843 110,749 110,020 112 16th Street Limited S9 W (Sat Hol) 18,692 19,049 18,720 23,391 24,757 24,760 25,722 25,202 134 Minnesota Avenue-Anacostia 0 U2 W, Sa 11,934 11,960 11,747 13,962 13,332 13,987 0 134 Deanwood-Minnesota Ave U7 W,Sa,Su 10,216 10,142 132 Benning Heights- M Street W V1 8,047 8,015 133 Capitol Heights-Minnesota Avenue V2,4 W,Sa,Su 55,105 55,467 57 Fairfax Village-L'Enfant Plaza V5 W (Sat Hol) 5,474 5,483 5,388 5,455 5,212 4,448 4,466 4,449 114 Minnesota Avenue-M Street V7,8,9 W,Sa,Su 44,752 43,206 43,240 48,717 48,089 43,429 0 0 95 Deanwood-Alabama Avenue W4 W,Sa,Su 43,244 46,358 46,138 48,630 52,058 54,392 54,777 54,704 587 South Capitol St. Limited W9 W 0 0 0 0 3,149 4,060 3,973 3,958 151 Benning Road X1,3 W (Sat Hol) 10,829 10,863 10,776 11,819 11,631 11,862 11,884 12,013 14 Benning Road-H Street X2 W,Sa,Su 69,759 71,090 69,969 71,975 69,541 72,808 72,123 71,634 11 Benning Road-H St Express X9 W 0 0 11,257 11,585 11,257 11,257 11,302 11,257 SUBTOTAL Regional DC 1,616,829 1,615,036 1,637,513 1,701,790 1,691,338 1,731,440 1,759,290 1,756,066

**DC Regional Routes - Platform Hours** 

Line	Line Name	Routes	Sched Days	FY2010	FY2011	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017
107	Georgia Avenue Metro Extra	79	W	12,505	12,505	0	0	0	0	0	0
23	Woodley Park-U Steet Loop	98	W,Sa,Su	0	0	0	0	0	0	0	0
49	Fort Lincoln Shuttle	B8,9	W (Sat Hol)	6,350	6,350	6,250	6,432	6,250	5,217	5,237	5,217
51	Glover Park-Dupont Circle	D2	W,Sa,Su	18,473	18,489	18,424	19,015	18,282	18,280	18,335	18,282
56	Ivy City-Franklin Square	D4	W,Sa,Su	16,452	18,420	18,408	19,169	18,404	18,406	18,462	18,407
45	Hospital Center	D8	W,Sa,Su	43,923	42,706	41,642	42,019	40,443	40,483	40,559	40,409
71	Chevy Chase	E6	W (Sat Hol)	5,920	5,916	5,827	5,997	5,827	5,827	5,851	5,827
34	Brookland-Fort Lincoln	H6	W,Sa,Su	18,970	19,009	19,430	20,124	19,336	19,336	19,397	19,336
91	Park Road-Brookland	H8,9	W,Sa,Su	33,113	33,013	32,817	32,881	31,734	31,528	32,499	32,401
551	Takoma-Walter Reed	K1	W (Sat Hol)	3,825	3,825	3,765	0	0	0	0	0
583	Takoma-Fort Totten	K2	W (Sat Hol)	4,352	4,361	4,143	4,170	4,813	4,824	4,844	4,821
64	Fairfax Village-Naylor Road	M2	W (Sat Hol)	1,879	1,887	1,849	1,903	1,849	0	0	0
84	Nebraska Avenue	M4	W (Sat Hol)	10,799	10,659	10,492	10,726	10,436	10,498	10,322	10,380
46	Fairfax Village	M6	W,Sa,Su	14,483	14,505	14,465	15,434	14,936	14,900	14,941	14,895
82	Congress Heights Shuttle	M8,9	W (Sat Hol)	7,863	7,854	7,739	8,007	7,798	0	0	0
79	Tenleytown-Glover Park	N8	W (Sat Hol)	10,502	10,506	4,728	0	0	0	0	0
544	Anacostia-Eckington	P6	W,Sa,Su	43,851	43,933	43,941	45,040	43,256	43,105	43,417	43,285
78	Sheriff Road-River Terrace	U4	W,Sa,Su	12,594	12,523	12,463	12,549	11,997	12,150	12,261	12,223
135	Mayfair-Marshall Heights	U5,6	W,Sa,Su	29,661	29,717	29,652	29,832	28,827	28,875	29,394	29,315
44	Capitol Heights-Benning Heights	U8	W,Sa,Su	36,519	36,547	35,708	36,555	34,955	34,953	19,593	19,406
82	Shipley Terrace-Ft. Drum	W1	W					0	0	12,254	12,203
158	United Medical Center-Anacostia	W2,3	W,Sa,Su	37,890	37,921	37,889	38,909	37,366	12,205	37,735	37,631
15	Garfield-Anacostia Loop	W6,8	W,Sa,Su	29,670	29,586	29,559	30,462	29,346	37,500	28,594	28,517
587	L'Enfant-Coast Guard	W9	W	-	-	-	-	0	28,310	0	0
25	Maryland Avenue	X8	W,Sa,Su	8,701	8,685	8,699	9,061	8,720	8,767	8,795	8,767
	Subtotal Schools		W	8,862	6,098	8,785	6,368	6,237	6,733	6,302	6,704
	SUBTOTAL Non-Regional DC			417,155	415,015	396,675	394,654	380,811	381,898	368,793	368,025

Appendix G - Operating Statistics

### Maryland Regional Routes - Platform Hours

Line	Line Name	Routes	Sched Days	FY2010	FY2011	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017
74	College Park	81,82,83,86	W,Sa,Su	48,038	48,053	47,781	49,880	48,312	48,331	49,540	49,380
542	Rhode Island Avenue-New Carrollton	84	W,Sa,Su	17,228	17,246	16,944	17,593	16,992	17,104	0	0
90	Martin Luther King Jr. Highway	A11,12	W,Sa,Su	33,803	33,931	33,760	35,032	33,691	35,392	35,746	35,264
13	Greenbelt-Twinbrook	C2,4	W,Sa,Su	99,603	99,753	90,553	94,211	94,462	94,726	95,178	95,204
642	Greenbelt-Glenmont	C7,9	W	0	0	0	0	0	0	0	0
103	College Park-White Flint	C8	W,Sa	26,241	26,327	26,269	28,253	27,091	27,087	27,184	27,093
29	Clinton	C11,13	W (Sat Hol)	5,015	5,024	5,003	5,149	5,003	5,066	5,056	5,112
63	Hillcrest Heights	C12,14	W,Sa	10,183	10,202	10,237	10,926	10,600	10,600	10,640	10,600
584	Oxon Hill-Suitland	D12,13,14	W,Sa,Su	46,953	47,037	47,022	54,802	52,846	53,462	54,458	54,346
28	Chillum Road	F1,2	W,Sa,Su	20,536	20,556	20,433	21,184	20,417	20,429	20,493	20,426
97	New Carrollton-Silver Spring	F4	W,Sa,Su	0	0	0	49,324	48,622	50,063	49,402	49,246
97	New Carrollton-Silver Spring	F4,6	W,Sa,Su	53,833	54,286	54,022	0	0	0	0	0
98	New Carrollton-Fort Totten	F6	W	0	0	0	16,541	17,761	17,909	18,000	17,926
73	Marlow Heights-Temple Hills	H11,12,13	W,Sa,Su	15,737	15,740	15,644	16,024	17,431	19,368	19,402	19,337
16	Bethesda-Silver Spring	J1,2,3	W,Sa,Su	57,603	57,465	61,053	62,472	60,097	60,131	60,541	60,450
629	College Park-Bethesda Limited	J4	W (Sat Hol)	10,379	10,379	10,216	11,819	11,994	12,027	12,079	12,081
85	New Hampshire Avenue-Maryland	K6	W,Sa,Su	42,147	42,158	42,089	44,639	45,561	45,173	47,007	46,962
83	New Hampshire Avenue-Limited	К9	W (Sat Hol)	0	0	0	3,954	8,749	10,329	13,024	13,020
47	Forestville	K11,12,13	W,Sa,Su	19,205	19,206	19,234	20,006	19,295	19,433	21,004	20,925
41	Eastover-Addison Road	P12	W,Sa,Su	46,144	46,200	46,173	47,819	50,606	50,952	46,702	46,347
88	Oxon Hill-Fort Washington	P17,18,19	W (Sat Hol)	25,164	25,169	25,029	25,864	24,947	24,942	25,249	25,225
123	Veirs Mill Road	Q1,2,4,5,6	W,Sa,Su	69,824	69,736	69,468	71,088	68,933	68,967	69,051	68,851
800	Riggs Road	R1,2	W,Sa,Su	29,434	29,461	29,163	27,325	26,591	26,652	27,134	27,048
542	Rhode Island AveNew Carrollton	T14	W,Sa,Su	0	0	0	0	0	0	17,232	17,206
9	Annapolis Road	T18	W,Sa,Su	21,614	21,629	21,584	22,981	23,382	26,313	27,691	27,593
790	District Heights-Suitland	V11,12	W,Sa,Su	16,364	16,371	0	0	0	0	0	0
790	District Heights-Suitland	V12	W,Sa,Su	0	0	16,428	17,135	16,458	16,474	19,093	19,216
580	Bock Road	W13,14	W (Sat Hol)	13,664	13,821	13,575	14,302	13,939	13,982	14,352	14,072
40	Camp Springs-Indian Head Highway	W15	W (Sat Hol)	4,403	4,488	4,426	4,904	4,790	4,694	0	0
53	Georgia Avenue-Maryland	Y4,7,8	W,Sa,Su	59,124	59,395	59,579	63,235	63,681	70,975	71,952	73,614
147	Fairland	Z8	W,Sa,Su	36,594	36,655	36,701	37,892	36,321	36,319	36,504	36,206
	SUBTOTAL Regional MD			828,831	830,288	822,385	874,355	868,570	886,898	893,716	892,750

### Maryland Non Regional Routes - Platform Hours

Line	Line Name	Routes	Sched Days	FY2010	FY2011	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017
526	Laurel Express	87	W (Sat Hol)	9,809	9,818	9,584	9,965	9,663	8,594	9,183	9,144
525	Laurel	89,89M	W (Sat Hol)	8,228	8,236	8,015	8,377	8,143	8,990	10,218	10,838
20	Bowie State University	B21,22	W (Sat Hol)	7,348	7,344	7,258	8,022	7,824	7,790	7,821	7,790
19	Bowie-Belair	B24,25	W (Sat Hol)	10,574	10,583	10,366	10,797	10,398	10,331	10,506	10,482
65	Bowie-New Carrollton	B27	W	3,472	3,468	3,418	3,517	3,418	3,340	3,473	3,501
634	Crofton-New Carrollton	B29,31	W (Sat Hol)	3,222	3,213	3,171	3,212	3,104	3,104	3,116	3,104
647	Greenbelt-BWI Airport Express	B30	W,Sa,Su	17,469	17,480	17,452	18,187	17,441	17,441	17,491	17,441
152	Central Avenue	C21,22, 25,26,29	W,Sa,Su	27,162	27,175	0	0	0	0	0	0
152	Central Avenue	C21,22,26, 29	W,Sa,Su	0	0	27,022	28,590	27,845	27,839	28,062	28,024
252	Central Avenue Extra service	C27	W,Sa,Su	0	0	0	382	595	299	2,038	2,038
26	Pointer Ridge	C28	W (Sat Hol)	6,005	6,018	5,911	6,199	6,298	6,298	6,323	6,295
96	Prince George's-Langley Park	F8	W,Sa,Su	18,019	18,030	17,951	18,702	18,045	18,070	18,028	17,970
10	Ardwick Industrial Park Shuttle	F12	W (Sat Hol)	6,864	6,860	6,756	7,059	6,863	6,946	6,973	6,948
149	Cheverly-Washington Business Park	F13	W (Sat Hol)	8,934	8,925	8,793	9,188	9,150	9,150	9,186	9,150
105	Sheriff Road-Capitol Heights	F14	W,Sa	20,197	20,242	20,058	20,844	20,129	20,110	20,123	20,046
527	Greenbelt-New Carrollton	G12,13,14, 16	W,Sa	0	0	31,531	33,010	32,147	32,199	32,320	32,319
67	Twinbrook-Silver Spring	J5	W (Sat Hol)	4,127	4,131	4,062	4,180	4,062	4,062	4,078	4,062
6	I-270 Express	J7,9	W (Sat Hol)	8,364	8,288	8,145	8,586	8,421	8,421	8,455	8,421
72	Marlboro Pike	J11,12,13	W,Sa,Su	0	0	12,622	13,085	12,530	12,484	12,524	12,576
72	Marlboro Pike	J11,12,13,1 4,15	W,Sa,Su	12,675	12,675	0	0	0	0	0	0
33	Connecticut Avenue-Maryland	L8	W (Sat Hol)	20,591	20,604	20,457	21,323	20,729	20,728	20,835	20,753
7	National Harbor	NH1	W,Sa,Su	14,405	14,437	14,452	15,171	14,661	15,052	18,340	18,297
801	Greenbelt-Prince George's Plaza	R3	W,Sa,Su	15,291	15,305	15,157	4,683	4,672	4,669	4,687	4,669
802	Queens Chapel Road	R4	W,Sa,Su	12,183	12,259	12,207	12,649	12,208	12,208	12,359	12,362
36	Kenilworth Avenue	R11,12	W,Sa	0	0	16,662	17,267	16,655	16,839	16,883	0
36	Kenilworth Avenue-New Carrollton	R12	W,Sa	25,626	25,676	0	0	0	0	0	16,739
102	River Road	Т2	W (Sat Hol)	19,984	19,992	19,582	20,337	19,775	19,827	19,913	19,835
132	Greenbelt	T16,17	W,Sa	17,336	17,364	0	0	0	0	0	0
38	District Heights-Seat Pleasant	V14,15	W,Sa,Su	16,977	16,989	17,109	17,958	17,387	17,512	17,469	17,576
645	Indian Head Express	W19	W (Sat Hol)	12,929	12,929	12,726	11,511	10,444	10,480	10,548	10,334

#### Maryland Non Regional Routes - Platform Hours

Line	Line Name	Routes	Sched Days	FY2010	FY2011	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017
30	Colesville-Ashton	Z2	W (Sat Hol)	11,539	11,526	11,354	12,042	11,625	11,596	11,642	11,596
146	Calverton-Westfarm	Z6	W (Sat Hol)	22,512	22,644	22,188	22,272	21,555	21,199	21,226	21,219
104	Laurel-Burtonsville Express	Z9,29	W (Sat Hol)	10,604	10,965	10,919	11,374	10,824	10,634	10,676	10,705
531	Greencastle-Briggs Chaney Express	Z11,13	W (Sat Hol)	12,402	12,597	12,525	13,269	12,955	12,905	12,938	12,887
	SUBTOTAL Non- Regional MD			384,845	385,773	387,451	391,759	379,565	379,118	387,432	387,121

Line	Line Name	Routes	Sched Days	FY2010	FY2011	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017
137	Wilson Boulevard	1A,B,E,F,Z	W,Sa,Su	41,388	42,816	42,757	44,247	0	0	0	0
137	Wilson Boulevard-Vienna	1A,B,E,Z	W,Sa,Su	0	0	0	0	44,863	47,690	48,122	47,379
139	Fair Oaks-Dunn Loring	1C	W,Sa,Su	17,261	17,282	17,405	18,087	0	0	0	0
139	Fair Oaks-Fairfax Boulevard	1C	W,Sa,Su	0	0	0	0	19,212	21,224	21,466	21,424
126	Washington Boulevard-Dunn Loring	2A	W,Sa,Su	0	0	0	0	34,249	29,557	29,496	29,926
126	Washington Boulevard	2A,B,C,G	W,Sa,Su	39,648	40,519	40,724	41,810	0	0	0	0
128	Fair Oaks-Jermantown Road	2B	W,Sa	0	0	0	0	9,070	17,254	17,025	16,669
127	Tysons Corner-Dunn Loring	2T	W,Sa,Su	14,969	15,037	15,030	15,766	15,006	14,154	13,918	13,876
69	Lee Highway- Falls Church	3A	W,Sa,Su	0	0	0	0	31,881	31,577	32,097	12,708
69	Lee Highway	3A,B,E	W,Sa,Su	33,709	33,819	33,147	34,571	0	0	0	0
121	Pimmit Hills	3T	W,Sa	18,623	18,664	18,544	17,839	18,302	20,017	20,372	20,541
138	Lee Highway-Farragut Square	3Y	W	3,345	3,341	3,292	4,921	4,886	4,865	4,884	5,651
94	Pershing Drive-Arlington Blvd	4A,B	W,Sa,Su	0	0	0	0	27,161	26,764	26,956	26,845
94	Pershing Drive-Arlington Boulevard	4A,B,E,H	W,Sa,Su	24,746	24,797	24,247	28,533	0	0	0	0
129	DC-Dulles	5A	W,Sa,Su	23,177	24,046	23,969	25,039	24,177	24,098	24,699	24,620
70	Lincolnia-North Fairlington	7A,B,C,D,E,F ,H,P,W,X	W,Sa,Su	42,044	42,084	0	0	0	0	0	0
70	Lincolnia-North Fairlington	7A,E,F,Y	W,Sa,Su	0	0	34,212	35,433	0	0	0	0
70	Lincolnia-North Fairlington	7A,F,Y	W,Sa,Su	0	0	0	0	34,718	35,227	35,636	36,053
76	Lincolnia-Park Center-Pentagon	7B,C,H,P,W, X	W (Sat Hol)	0	0	14,759	14,249	14,333	14,350	0	0
76	Lincolnia-Park Center-Pentagon	7C,H,P,W,X	W (Sat Hol)	0	0	14,759	14,249	14,333	14,350	12,897	12,876
106	Foxchase-Seminary Valley	8S,W,X,Z	W (Sat Hol)	12,601	12,623	12,588	12,948	0	0	0	0
106	Foxchase-Seminary Valley	8S,W,Z	W (Sat Hol)	0	0	0	0	12,109	10,242	9,981	9,942
31	Huntington-Pentagon	9A,E	W,Sa,Su	23,702	23,719	23,721	25,838	24,939	21,809	21,918	21,853
2	Hunting Point-Pentagon	10A,E,R,S	W,Sa,Su	22,866	22,267	23,055	26,108	25,076	27,749	27,729	27,633
156	Hunting Point-Ballston	10B	W,Sa,Su	29,046	29,368	29,363	32,317	33,893	30,175	30,266	30,173
157	Mt Vernon Express	11Y	W (Sat Hol)	6,171	6,171	6,074	6,251	6,118	6,997	7,326	7,329
39	National Airport-Pentagon-Washington	13A,B,F,G	W,Sa,Su	12,764	11,017	0	0	0	0	0	0
39	National Airport-Pentagon-Washington	13F,G	Sa,Su	0	0	804	863	806	0	0	0
39	Arlington Union Station	13Y	Sa,Su					0	776	804	808
27	Chain Bridge Road	15K,L	W (Sat Hol)	5,750	6,095	5,873	6,113	6,129	7,466	8,135	8,091
24	George Mason-Tysons Corner	15M	W (Sat Hol)	6,082	5,891	5,815	5,984	7,057	8,270	8,303	8,270

Line Line Name

142

142

Columbia Pike

Columbia Pike

54 McLean-Crystal City

54 McLean-Crystal City

3 Landmark-Ballston

23 Leesburg Pike Limited

4 Alexandria-Fairfax

12 Ballston-Farragut Square

131 Richmond Highway Express

SUBTOTAL Regional VA

58 Braeburn Drive - Pentagon Express

29K,N

29W

38B

REX (R99)

W,Sa

W,Sa,Su

W,Sa,Su

W

20,539

37,448

37,214

731,805

20,588

37,481

37,377

738,549

20.522

37,436

37,411

743,906

21,479

38,495

42,276

798,923

23,971

36,794

41,035

800,416

29,225

41,800

43,490

959,253

29,706

4,208

43,748

44,030

855,017

29,642

4,192

42,718

43,811

837,830

5 Leesburg Pike

5 Leesburg Pike

110 Skyline City

8 Annandale

8 Annandale

120 Ballston-Pentagon

142 Columbia Pike

#### FY2014 FY2015 Routes **Sched Davs FY2010** FY2011 **FY2012 FY2013 FY2016 FY2017** 16A,B,D,E,F, 0 0 0 J,P W,Sa,Su 56,853 57,709 0 0 0 16A,B,D,E,J, Р W,Sa,Su 0 0 54,426 56,498 54,048 53,665 0 0 W,Sa,Su 0 54,426 56,498 54,048 16A, B, E, J, P0 53,665 55,709 55,553 144 Columbia Pike-Federal Triangle W (Sat Hol) 0 0 0 0 16F 0 9,651 0 0 143 Columbia Heights West-Pentagon City 16G,H,K W,Sa,Su 35,590 34,454 34,360 34,479 33,521 33,533 34,066 34,513 521 Annandale-Skyline City-Pentagon 1,849 1,832 16L W 1,768 1,760 1,900 2,174 4,502 4,556 144 Columbia Pike-Federal Triangle 16X W 0 0 0 10,108 9,396 9,595 9,632 9,615 522 Columbia Pike-Farragut Square 16Y W (Sat Hol) 10,481 10,634 10,421 13,270 13,914 14,014 14,070 14,014 512 Barcroft-South Fairlington 22A,B W,Sa 15,791 15,749 19,254 19,907 19,169 19,175 0 0 512 Barcroft-South Fairlington 22A,B,C,F W,Sa 15,791 19,254 19,907 19,169 19,175 31,185 31,376 15,749 23A,C W,Sa,Su 48,784 0 0 48,702 48,635 52,005 49,799 0 23A,B,T W,Sa,Su 0 46,763 46,986 46,833 0 0 24P W 1,906 0 0 0 0 0 92 Ballston-Bradlee-Pentagon 25A,C,D W,Sa,Su 19,577 19,542 19,550 0 0 0 0 0 92 Ballston-Bradlee-Pentagon 25A,C,D,E W,Sa,Su 0 0 0 20,604 19,866 19,993 0 0 W,Sa 16,152 16,397 19,099 25B 16,084 18,806 18,284 28,780 28,783 692 Annandale-East Falls Church 26A W 0 0 0 0 3,808 8,379 12,136 7,685 28A W,Sa,Su 0 0 44,503 50,906 63,698 0 61,200 63,672 48,255 28A,X W,Sa,Su 42,010 48,514 0 0 0 0 0 28F,G W (Sat Hol) 4,488 4,694 5,875 4,480 5,264 5,131 4,416 5,895 122 Tysons Corner-West Falls Church 28T 10,232 W (Sat Hol) 10,404 10,404 10,530 10,239 1,551 0 0 28X W (Sat Hol) 0 0 0 14,603 14,896 14,599 14,541 15,446 29C,E,G,H,X 20,324 19,695 W (Sat Hol) 20,311 21,207 21,702 24,759 0 0 29C,G W (Sat Hol) 20,311 20,324 19,695 21,207 21,702 13,427 13,286 24,759

Virginia Regional Routes - Platform Hours

Line	Line Name	Routes	Sched Days	FY2010	FY2011	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017
124	Vienna Oakton	2W	W	0	0	0	0	0	0	0	0
80	Mark Center-Pentagon	7M	W (Sat Hol)	0	0	0	11188.7	10467.9	9238.32	9273.6	9,166
155	Centreville South	12A,E,F,G *	W	0	0	0	0	0	0	0	0
145	Centreville North	12C,D *	W	0	0	0	0	0	0	0	0
153	Little rocky Run-Vienna	12L,M *	W	0	0	0	0	0	0	0	0
154	Stringfellow Road-Vienna	12R,S *	W	0	0	0	0	0	0	0	0
66	Kings Park	17A,B,F,M	W (Sat Hol)	15,003	14,994	14,989	14,364	13,853	13,957	14,057	14,200
61	Kings Park Express	17G,H,K,L	W (Sat Hol)	23,762	23,537	23,226	23,619	22,718	22,599	22,741	23,049
116	Springfield	18E,F	W (Sat Hol)	4,526	4,539	4,455	4,662	4,550	5,218	5,355	5,334
87	Orange Hunt	18G,H,J	W(Sat Hol)	11,063	11,067	10,889	11,236	10,110	9,361	9,429	9,392
541	Burke Centre	18P,R,S	W (Sat Hol)	18,020	17,825	17,771	18,655	17,813	17,019	17,311	17,246
60	Chantilly-Greenbriar	20,F,W,X	W	0	0	0	0	0	0	0	0
68	Landmark-Pentagon	21A,D	W (Sat Hol)	5,402	5,432	5,350	5,669	5,511	5,874	5,961	5,938
511	Pentagon-Army-Navy Drive-Shirley Park	22B	W	0	0	0	0	0	0	0	0
140	McLean Hamlet-East Falls Church	24T	W (Sat Hol)	4,097	4,106	4,033	4,349	4,064	620	0	0
148	Metroway Potomac Yard	MW-1	W (Sat Hol)	10,051	10,047	9,894	10,300	10,012	31,114	34,901	34,806
640	Springfield Circulator	TAGS (S80,91)	W (Sat Hol)	12,822	12,929	12,713	13,262	12,892	12,873	13,159	13,109
	West Park Shuttle			0	0	0	0	0	1,958	0	0
	SUBTOTAL Non-Regional VA			104,746	104,476	103,320	117,305	111,991	129,831	132,187	132,237

Appendix G - Operating Statistics

#### Metrorail Revenue Railcar Fleet Management Plan

The Metrorail Revenue Revenue Fleet Management Plan is a statement of the processes and practices by which WMATA establishes its current and projected Metrorail revenue railcar 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 WMATA faces in meeting its service and maintenance goals.

#### **Metrorail Statistics**

	FY2014 Actual	FY2015 Actual <sup>*</sup>	FY2016 Approved	FY2017 Approved
STATISTICS:				
Total Railcar Miles (000s)	89,502	99,124	99,366	98,489
Total Revenue Service Miles (000s)	87,902	97,524	97,766	96,889
Total Passengers (000s)	204,067	206,396	209,900	203,500
Total Passenger Revenue (000s)	\$596,734	\$629,055	\$635,951	\$621,018
Total Operating Revenue (000s)	\$681,551	\$721,986	\$748,164	\$710,330
Total Operating Expense (000s)	\$963,139	\$965,392	\$1,058,513	\$972,504
Gross Subsidy (000s)	\$281,588	\$243,406	\$310,349	\$262,173
Net Local Subsidy (000s)	\$261,326	\$223,144	\$290,087	\$262,173
RATIOS:				
Passengers Per Revenue Service Mile	2.32	2.12	2.15	2.10
Cost Per Total Railcar Mile	\$10.76	\$9.74	\$10.65	\$9.87
Cost Per Passenger	\$4.72	\$4.68	\$5.04	\$4.78
Net Subsidy Per Passenger	\$1.38	\$1.18	\$1.48	\$1.29
Average Passenger Fare Percentage of Operating Cost Recovered from Passenger	\$2.92	\$3.05	\$3.03	\$3.05
Revenues Percentage of Operating Cost Recovered from all Operating	62.0%	65.2%	60.1%	63.9%
Revenues	70.8%	74.8%	70.7%	73.0%

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



#### **Railcar Miles**

	Total Service FY2014	Total Service FY2015	Total Service FY2016	Total Service FY2017
Red Line	27,921,100	27,916,500	28,011,000	27,886,100
Blue Line	12,438,200	12,848,700	13,858,400	12,953,100
Orange Line	15,742,200	14,595,100	14,368,900	14,421,400
Yellow Line	9,254,400	10,630,700	10,390,300	10,332,800
Green Line	11,991,300	12,276,900	12,132,400	12,101,000
Silver Line	7,998,000	16,698,700	16,447,300	16,637,300
Scheduled Revenue Service Miles	85,345,200	94,966,600	95,208,300	94,331,700
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
Six-Car vs Four-Car off Peak*	0	0	0	0
Rush Plus				
50% 8-car Train Program**				
Sub-Total Revenue Service Miles	87,902,483	97,523,883	97,765,583	96,888,983
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	89,502,483	99,123,883	99,365,583	98,488,983

\* Includes miles for Red Line turn back and Yellow Line extension \*\* Previously named "6000 / Metro Matters Car Deployment"



#### **Payhours for Rail Operators**

	FY2017	7 Train Operator Wages	
Category	Payhours	Average Hourly Rate	Budget
Scheduled F/T	1,123,241	\$31.11	\$34,944,028
Scheduled P/T (1)	46,800	\$33.21	\$1,554,228
Car Testing/Start Up	24,960	\$31.11	\$776,506
Interlocking Pay Hours	112,731	\$37.03	\$4,174,172
Subtotal	1,307,732		\$41,448,933
NonScheduled Overtime/Special Event	203,602	\$46.66	\$9,501,087
Standing Extra	12,565	\$31.11	\$390,889
Utility	50,542	\$36.27	\$1,833,144
Training	62,257	\$31.11	\$1,936,828
Retraining	33,530	\$31.11	\$1,043,132
Miscellaneous	39,931	\$31.11	\$1,242,263
Funeral/Other	1,997	\$31.11	\$62,123
Vacation	76,563	\$31.11	\$2,381,884
Sick	61,475	\$31.11	\$1,912,477
Holiday	40,766	\$31.11	\$1,268,215
Subtotal	583,228		\$21,572,044
Total	1,890,960		\$63,020,977

1 Maximum 30-hour work week.

#### **Payhours for Station Managers**

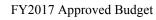
	FY201	7 Station Manager Wages	1
Category	Payhours	Average Hourly Rate	Budget
Scheduled F/T	1,028,656	\$32.53	\$33,462,180
Subtotal	1,028,656		\$33,462,180
NonScheduled Overtime/Special Event	103,828	\$48.79	\$5,065,766
Standing Extra	11,586	\$32.53	\$376,883
Utility	51,429	\$38.42	\$1,975,908
Training	35,727	\$32.53	\$1,162,215
Retraining	29,903	\$32.53	\$972,737
Miscellaneous	32,610	\$32.53	\$1,060,800
Funeral/Other	1,783	\$32.53	\$57,990
Vacation	69,860	\$32.53	\$2,272,548
Sick	55,085	\$32.53	\$1,791,928
Holiday	36,529	\$32.53	\$1,188,280
Subtotal	428,340		\$15,925,055
Total	1,456,996		\$49,387,234
GRAND TOTAL	1,456,996		\$112,408,211



#### **Rail Peak Period Service Levels**

	Total Service FY2014	Total Service FY2015	Total Service FY2016	Total Service FY2017
Red Line	Glenmont/Shady Grove Silver Sping/Grosvenor	Glenmont/Shady Grove Silver Sping/Grosvenor	Glenmont/Shady Grove Silver Sping/Grosvenor	Glenmont/Shady Grove Silver Sping/Grosvenor
Blue Line	Largo/Franconia-Springfield New Carrollton/Vienna	Largo/Franconia-Springfield	Largo/Franconia-Springfield	Largo/Franconia-Springfield
Orange Line Yellow Line	Largo/Vienna <sup>1</sup> Huntington/Mt.Vernon Square Franconia-Springfield/ Greenbelt	New Carrollton/Vienna Huntington/Mt.Vernon Square Franconia-Springfield/ Greenbelt	New Carrollton/Vienna Huntington/Mt.Vernon Square Franconia-Springfield/ Greenbelt	New Carrollton/Vienna Huntington/Mt.Vernon Square 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
<b>RUSH HOURS</b>	TRAINS			
Red Line	41	41	41	41
Blue Line	16	12	12	12
Orange Line	33	22	22	22
Yellow Line	17	21	21	21
Green Line	20	18	18	18
Silver Line	-	26	26	26
Gap	5	3	3	3
Start-up	1	-	-	-
TOTAL	133	143	143	143

1 Service discontinued once the service began on the Silver line (July 2014).



256



#### **Rail Service Levels**

		Total Service FY2014	Total Service FY2015	Total Service FY2016	Total Service FY2017
RUSH HOUR HEADWAY	YS (MINUTES BETWEEN TRAINS) BY I	LINE			
Red Line	Glenmont-Shady Grove Silver Spring-Shady Grove	6 6	6 6	6 6	6 6
Orange Line <sup>*</sup>	Vienna - New Carrollton Vienna - Largo	6 18	6	6	6
Blue Line	Largo/Franconia-Springfield	6/12	12	12	12
Yellow Line	Huntington - Mt. Vernon Square Greenbelt-Franconia Springfield	6 18	6 12	6 12	6 12
Green Line*	Greenbelt/Branch Ave.	6	6	6	6
Silver Line	Weihle-Reston East/Largo		6	6	6
NON-RUSH HOUR HEADWA	YS BY LINE (MIDDAY-WEEKDAY/SAT/SUN/LA	TE NIGHT)			
Red Line	Glenmont-Shady Grove Silver Spring-Shady Grove	12/12/15/15 12/15/15	12/12/15/15 12/15/15	12/12/15/15 12/15/15	12/12/15/15 12/15/15
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
AVERAGE COMBINED	HEADWAYS FOR KEY SEGMENTS FO	R FY2017			
				Mid-day	
Red	Silver Spring to Grosvenor	3	6	6	7.5
Orange/Blue/Silver	Rosslyn to Stadium Armory	2-4	4	4	5
Yellow/Green	L'Enfant Plaza to Mount Vernon	2-4	6	6	7.5
Yellow/Blue	King Street to Pentagon	2-4	6	6	7.5

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



#### **Rail Service Levels**

	Total Service FY2014	Total Service FY2015	Total Service FY2016	Total Service FY2017
PEAK SCHEDULED RAILCARS				
Red Line	288	288	288	288
Blue Line	96	84	84	84
Orange Line	222	154	154	154
Yellow Line	102	126	126	126
Green Line	140	128	128	128
Silver Line		156	156	156
50% 8-Car Train Program <sup>1</sup>	34	-	-	-
Option Cars	-	-	-	-
Gap	30	18	18	18
Total Scheduled Car	912	954	954	954
Spares <sup>2</sup>	182	146	146	146
Revenue Collection	4	4	4	4
Total Car Requirement	1,098	1,104	1,104	1,104
HOURS OF OPERATION				
Weekday (Mon-Thur)	19	19	19	19
Friday	22	22	22	22
Saturday	20	20	20	20
Sunday	17	17	17	17
DAYS OF OPERATION				
Weekday	252	251	252	251
Saturday	56	57	57	57
Sunday	57	57	57	57

Previously, the "6000 Series".
 Spares were 20% of Total Scheduled Car for FY2014; and 15% for FY2015 - FY2017

	Total Service	Total Service	Total Service	Total Service
	FY2014	FY2015	FY2016	FY2017
CARS PER TRAIN RUS	SH HOUR			
Red Line	20-6's/21-8's	20-6's/21-8's	20-6's/21-8's	20-6's/21-8's
Blue Line	16-6's	6-6's/6-8's	6-6's/6-8's	6-6's/6-8's
Orange Line	21-6's/12-8's	11-6's/11-8's	11-6's/11-8's	11-6's/11-8's
Yellow Line	17-6's	21-6's	21-6's	21-6's
Green Line	10-6's/10-8's	8-6's/10-8's	8-6's/10-8's	8-6's/10-8's
Silver Line		26-6's	26-6's	26-6's
Gap	5's-6's	3's-6's	3's-6's	3's-6's
CARS PER TRAIN WE	EKDAY BASE/NIGHT (AFTER	8 P.M.)		
Red Line	6/6	6/6	6/6	6/6
Blue Line	6/6	6/6	6/6	6/6
Orange Line	6/6	6/6	6/6	6/6
Yellow Line	6/6	6/6	6/6	6/6
Green Line	6/6	6/6	6/6	6/6
Silver Line		6/6	6/6	6/6



#### **Railcar Fleet Profile**

Manufacturer	Series	Number Owned	Years Purchased	Number for Services <sup>*</sup>
Rohr Industries	1000	300	1974-1978	270
	2000	76	1983-1984	76
Breda Construzioni Ferroviarie	3000	290	1984-1988	280
	4000	100	1992-1994	100
Construcciones y Auxiliar de Ferrocarriles, S.A. (CAF)	5000	192	2001-2004	186
Alstom	6000	184	2006-2008	182
Kawasaki	7000	116	2014-Present	100
Total		1,258		1,194

\* There are four(4) 1000 series vehicles dedicated for revenue collection, 22 vehicles decommissioned, 22 vehicles accident damaged; and 16 7000 series vehicles in use for training. As of April 4,2016, 116 7000 series cars have been delivered, 100 have been accepted and 100 are in service.

#### **Railcar Fleet Storage Capacity**

Location	Existing Storage Capacity	Current Fleet Need	Net Storage Capacity
Alexandria	176	176	0
Branch Ave	166	92	74
Brentwood	86	106	-20
Glenmont	132	78	54
Greenbelt	284	190	94
Largo	42	44	-2
New Carrollton	114	140	-26
Shady Grove	168	168	0
West Falls Church	148	178	-30
Total	1,316	1,172	144



#### WMATA Park and Ride

#### **Base and Surcharge Fees**

		Parking	Base	Revenue
(as of July 1, 2016)		Fee	Revenue	То
Station / Region	Capacity (parking spaces)	To Customer	To WMATA	Reserve Fund
Station / Region	(Par mig spaces)			
MONTGOMERY COUNTY				
Grosvenor	1,894	\$5.10	\$3.60	\$1.50
White Flint	1,270	\$5.10	\$3.60	\$1.50
White Flint-Non-Metro		\$8.60	\$7.10	\$1.50
Twinbrook	1,097	\$5.10	\$3.60	\$1.50
Twinbrook-Non-Metro		\$8.60	\$7.10	\$1.50
Rockville	524	\$5.10	\$3.60	\$1.50
Shady Grove	5,745	\$5.10	\$3.60	\$1.50
Glenmont	2,998	\$5.10	\$3.60	\$1.50
Wheaton	977	\$4.35	\$3.60	\$0.75
Forest Glen	596	\$5.10	\$3.60	\$1.50
PRINCE GEORGE'S COUNTY				
New Carrollton	3,519	\$5.10	\$3.85	\$1.25
New Carrollton-Non Metro		\$8.85	\$7.60	\$1.25
Landover	1,866	\$4.60	\$3.85	\$0.75
Cheverly	500	\$5.10	\$3.85	\$1.25
Addison Road	1,268	\$4.60	\$3.85	\$0.75
Capitol Heights	372	\$5.10	\$3.85	\$1.25
Greenbelt	3,399	\$5.10	\$3.85	\$1.25
College Park	1,820	\$5.10	\$3.85	\$1.25
P.G. Plaza	1,068	\$4.60	\$3.85	\$0.75
West Hyattsville	453	\$5.10	\$3.85	\$1.25
Southern Avenue	1,980	\$5.10	\$3.85	\$1.25
Naylor Road	368	\$5.10	\$3.85	\$1.25
Suitland Garage	1,890	\$5.10	\$3.85	\$1.25
Branch Avenue	3,072	\$5.10	\$3.85	\$1.25
Morgan Blvd.	608	\$5.10	\$3.85	\$1.25
Largo	2,200	\$5.10	\$3.85	\$1.25
DISTRICT OF COLUMBIA				
Deanwood	194	\$4.60	\$4.60	
Minnesota Ave.	333	\$4.60	\$4.60	
Rhode Island Ave.	221	\$4.60	\$4.60	
Fort Totten	408	\$4.60	\$4.60	
Anacostia Garage	808	\$4.60	\$4.60	
NORTHERN VIRGINIA				
Huntington	3,617	\$4.85	\$3.60	\$1.25
West Falls Church	2,009	\$4.85	\$3.85	\$1.00
Dunn Loring	1,326	\$4.85	\$3.60	\$1.00
Vienna	5,169	\$4.85	\$3.60	\$1.25
Franconia	5,069	\$4.85	\$3.60	\$1.25
Van Dorn	361	\$4.85	\$4.35	\$0.50
East Falls Church	422	\$4.85	\$3.85	\$1.00
System Total	59,421			
System Lotar	37,421			

Note: The parking facility at the new Silver Line station at Wiehle-Reston East in Northern Virginia has approximately 2300 spaces available for Metrorail riders, but the facility is not owned/operated by WMATA.



#### 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**

	FY2014 Approved	FY2015 Approved	FY2016 Approved	FY2017 Approved
STATISTICS:				
MetroAccess - Dedicated Fleet:	600	650	675	700
Total Van Miles (000s)	25,284	25,645	27,000	28,000
Revenue Miles per Van (000s)	42.1	39.5	40.0	40.0
Total Passenger/trips	2,126,318	2,234,809	2,335,000	2,420,000
Passengers per Van	3,544	3,438	3,459	3,486
Total Passenger Revenue (000s)	\$7,542	\$9,045	\$8,500	\$9,972
Total Revenue (000s)	\$7,542	\$9,045	\$8,500	\$9,972
Total Operating Expense (000s)	\$106,215	\$113,424	\$121,201	\$119,563
RATIOS:				
Cost Per Passenger	\$49.95	\$50.75	\$51.91	\$49.41
Subsidy Per Passenger*	\$46.41	\$46.71	\$48.27	\$45.29
Percentage of Operating Cost Recovered from Passenger				
Revenues	7.1%	8.0%	7.0%	8.3%

\* 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**

	FY2014	FY2015	FY2016	FY2017
Total # of Vans in Fleet	582	634	659	684
Total # of Low Floor Vans in Fleet	16	16	16	16
Total # of Shuttles in Fleet	2	0	0	0
Total Fleet	600	650	675	700
Spare Ratio	11.0%	11.5%	15.0%	15.0%

\* Fleet mix (Vans/Low Floor Vans) for FY17 is a projection.

#### **MetroAccess Statistics - Age**

Manufacturer	Entered Service	Number of Vans	Vehicle Type
FORD	2017	160	Vans
FORD	2016	165	Vans
FORD	2015	120	Vans
FORD	2014	120	Vans
FORD	2013	119	Vans
MV1/VPG	2013	2	Low Floor Vans
MV1/VPG	2012	14	Low Floor Vans
Total Fleet Vehicles at End of FY2017*		700	

Average age of the fleet in FY2017 will be approximately 2.5 years.

262



# **Appendix H - Vital Signs Report**



# Annual Vital Signs Report, January – December 2015 Annual Report Published: January 2016

#### Highlights

- Bus on-time performance (OTP) showed mixed results depending on the type of route, but system wide at 77.7 percent was practically the same as 2014. High ridership routes improved by one percent. Priority corridor routes experienced slightly lower OTP (0.5 percent).
- Rail OTP fell to 84 percent in 2015 from almost 91 percent in 2014 as railcar, power and track equipment problems led to longer and more variable travel times for customers.
- Fleet reliability was below target most of the year as Metro faced numerous ongoing challenges with its fleets. Bus service interruptions due to mechanical failures increased by three percent compared to 2014. Rail fleet reliability was 13 percent worse than 2014 as the higher Silver Line car requirement strained the maintenance program.
- Escalator and elevator availability both surpassed targets in 2015. At 93.3 percent, escalator availability was the highest since the measure was first reported in 2010, despite taking more units out of service for rehabilitation. Elevator availability was 96.9 percent.
- Customer injuries rose this year and were worse than target, driven by an increase from the January 12 smoke incident at L'Enfant Plaza. Injuries improved in Metrobus and MetroAccess. Despite improvements as the year progressed, employee injuries were worse than 2014 and target.
- In 2015, Part-1 crimes were 13 percent lower (246 fewer crimes) than the target, although slightly up from 2014. Crimes counted are classified as "Part 1" crimes as defined by the FBI.
- Customer satisfaction did not meet target in 2015. Bus was on par with last year while rail customers were markedly less satisfied with service.



### Goal: Meet or exceed customer expectations by consistently delivering quality service

Goal: Build and maintain a premier safety culture and system

Goal: Ensure financial stability and invest in our people and assets

Goal: Improve regional mobility and connect communities

#### Introduction

#### Vital Signs

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.

The report is organized by the Board-adopted strategic goals that align actions to improve performance and deliver results.

Vital Signs is different from most public performance reports in that it provides systematic, data-driven, analysis of KPIs by answering two questions:

#### Why did performance change?

#### What actions are being taken to improve it?

The answers reveal the challenges and complexities of our operation.

#### Targets

Targets are set for every Vital Signs KPI to identify success. Realistic targets deliver continuous improvement and keep the ball moving forward.

Metro's executive leaders set targets annually and present them to the Board to gauge progress.

Target setting takes into account factors like historical trends, planned activities, resource constraints, and external factors that influence results – e.g., roadway construction projects in bus corridors.

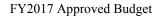
Metro values benchmarking to share best practices in the industry that lead to improved performance.



#### A Balanced Scorecard

A Balanced Scorecard approach is used in Vital Signs, but the focus is on Metro's core business of quality service delivery.

Mission-critical functions such as safety, security and finance provide in-depth reporting separately to the Board.





### **KPI: Bus On-Time Performance**

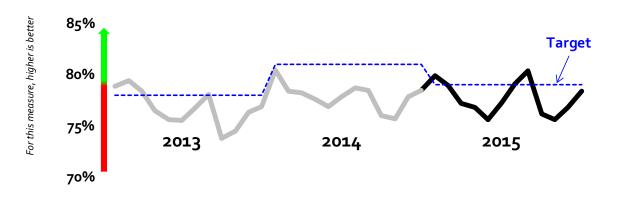
Although Bus On-Time Performance (OTP) in 2015 was nearly the same as the year before (77.7 percent in 2015 compared to 77.9 percent in 2014), Metrobus service levels increased 4 percent this year.

#### Why did performance change?

- The frequency of buses running ahead of schedule and arriving early at bus stops declined or improved by 17 percent; however, the rate at which buses ran behind schedule increased or worsened by 8 percent.
- Results were mixed. OTP for high ridership routes improved by one percent. Numerous schedule changes occurred on these routes to: provide additional service, reduce crowding and improve on-time performance. However, OTP for priority corridor routes was slightly lower by 0.5 percent compared to last year.

- In response to numerous complaints about buses running early, street supervisor presence was increased to reduce late and early arrivals.
- Other 2015 events that impacted OTP included: transitioning service to the new Shepherd Parkway bus garage, four more recorded inclement weather conditions and an increase in special events and road construction projects compared to 2014.





# Key Actions to Improve Performance *Data driven decision making*

- In the year ahead, Bus Service will implement the organization's first Bus StreetStat meeting to help supervisors use data to make decisions about how to improve service.
- Continue the daily tracking and monitoring efforts of the Performance Improvement Team (PIT), which monitors and implements real-time solutions (primarily for low performing routes), assesses service impacts, conducts ride-alongs and provides operator guidance.

#### Collaboration

• Work to increase jurisdictional collaborative efforts to increase initiatives like traffic priority signaling and additional service adjustments.

#### Fewer service disruptions, less congestion

- Evaluate the effectiveness of the new post-incident drug testing procedures that became effective November 2015 and which should result in less service disruptions.
- Assign additional articulated buses to congested ridership areas during the weekdays.



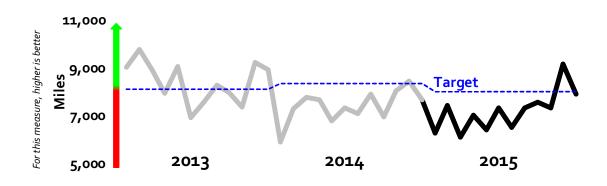
### **KPI: Bus Fleet Reliability**

Customers experienced less reliable bus service this year compared to prior years as a result of numerous fleet and parts manufacturer-related challenges that troubled the entire industry.

#### Why did performance change?

- Bus fleet reliability did not meet its 2015 target 8,000 miles, service interruptions increased by three percent or 234 mechanical failures compared to 2014.
- Service interruptions fluctuated throughout the year as a result of delayed delivery of new buses; temperature/ weather-induced challenges; defective parts; failures due to older (less reliable) buses experiencing end of useful life issues; and the receipt of new buses impaired by door system, exhaust clamp failures, low coolant level sensor and fire suppression sensor failures.
- Service interruptions began to decline towards the later part of the year as the condition of the Hybrid fleet began to improve and selected targeted campaigns came to a close.
- Staff is investigating a November mileage discrepancy and will modify November's fleet reliability results accordingly.





#### Key Actions to Improve Performance Better parts and new buses

- Bus Services will complete a number of part and manufacturer initiatives in 2016, such as the in-depth failure analysis of the top 5 service interruptions causes, and continue to develop detailed action plans.
- In continued compliance with the bus maintenance Federal Transit Administration (FTA) materials procurement processes, standard operating procedures will be implemented to ensure optimal incoming parts inspections and materials discrepancy reporting.
- In efforts to retire older, less-reliable buses and reduce the average age of the bus fleet, Bus Maintenance will complete the accelerated delivery of additional new buses by the end of 2016.

#### Better failure analysis

- Improve data analysis through the mandated use of component code reporting for all work order tasks to allow for a better assessment of trend failures and a more-targeted engineering approach to reducing service interruptions.
- Continue to participate in peer exchange exercises to better understand how failures impact the entire industry and possible solutions.



### **KPI: Rail On-Time Performance**

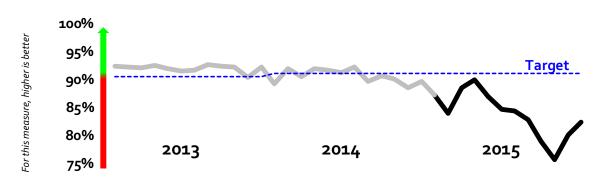
On-Time Performance (OTP) was well below the target of 91 percent in 2015, falling to 75 percent in October, the lowest rail OTP ever published in Vital Signs. Causes included: railcar failures and shortages, a power transformer fire leading to months of intentional service reductions on Orange and Silver Lines and scheduled work to improve long-term track reliability.

#### Why did performance change?

- Rail OTP fell from almost 91 percent in 2014 to 84 percent in 2015 as railcar, power and track equipment problems led to longer, and more variable travel times for customers.
- In Q1/2015, low winter temperatures and snow led to railcar and track problems.
- The daily railcar service requirement was not met for most of 2015 meaning trains were routinely shortened from 8 to 6 cars, or slots were completely missed resulting in gaps in the headways (time between trains).

- The September power transformer failure at Stadium-Armory reduced service on Orange and Silver Lines through December, bringing Orange and Silver Line OTP to lows of 50-60 percent.
- To improve long-term track reliability, Metro reinitiated scheduled mid-day track work beginning in June which immediately worsened mid-day OTP through December.





# Key Actions to Improve Performance *GM Priority*

- Conduct weekly GM/CEO meetings to address leading causes of railcar performance and other challenges to reliability.
- Better schedule track work to make most effective use of limited access window and minimize customer travel time (e.g., pre-stage equipment; evaluate travel time impact of track work schedule).
- Implement asset management strategies in adherence with new FTA requirements expected to be released in 2016, addressing how Metro provides reliable service to customers by managing asset performance, risk and cost over the life of an asset.



### **KPI: Rail Fleet Reliability**

2015 Rail Fleet Reliability was 13 percent worse than 2014 as the higher Silver Line car requirement strained the maintenance program. Not enough railcars were available to depart end-of-line stations, leading to longer waits for customers and more crowded trains.

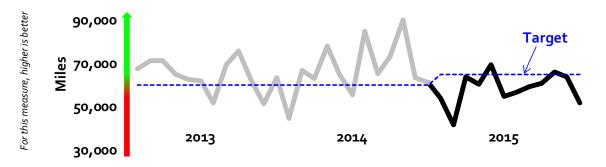
#### Why did performance change?

- Metro began 2015 without the 64 additional cars needed to operate Silver Line service (delivery timeline delayed by 2011 earthquake and tsunami in Japan). More of the existing fleet was put into regular service ("spare ratio" decreased from 20 percent to 14 percent).
- 2015 Rail Fleet Reliability was 13 percent worse than last year, as more aging railcars were removed from service for causes including propulsion, door and brake issues. Maintenance staff had limited flexibility to change out equipment with more reliable components due to the decreased spare ratio and parts shortages.
- When the number of railcars removed from service exceeds the available spares, Metro shortens 8-car trains to 6-car trains. This rail car shortening can lead to crowding and, when car availability drops further, trains are unavailable for departure from end-of-line stations, which increases headways (time between trains). This

was particularly pronounced in 2015 due to winter weather-related door and propulsion problems, an unplanned summer door inspection campaign (4000 series), a summer maintenance initiative that purposefully removed railcars from service and a parts shortage.

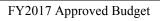
• By the end of 2015, 64 of the new 7000 series cars were put in service. Reliability of these new railcars is expected to increase after the initial break-in (per contract).





#### Key Actions to Improve Performance Improve reliability and availability of fleet

- Replenish parts inventories and improve procurement processes to reduce the number of cars out of service due to parts shortages.
- Implement identified engineering solutions by conducting railcar component change-out campaigns when parts are received.
- Introduce new 7000-series railcars following testing and certification
- Continue delivery of the 364 7000-series railcars ordered, testing to ensure cars meet quality standards. Following certification, place into service to replace Metro's older, less-reliable cars.



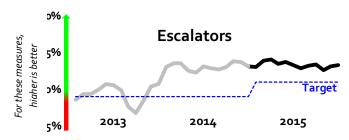


### KPI: Elevator and Escalator System Availability

Elevator and escalator availability continued to improve for customers this year, surpassing targets.

#### Why did performance change?

- Escalator availability was 93.3 percent for 2015, the highest since reporting on this measure began in 2010. Metro beat its target despite taking more units out of service for multi-month rehabilitations or replacements (61 percent of all outages).
- Escalators were more reliable in 2015, running about 12 hours longer before breaking down. This improved condition is a result of a multi-year emphasis on preventive maintenance and prioritizing the most troublesome units for rehabilitation or replacement. Better condition also led to less-intensive repairs when units did break down. Overall, units were out of service for unscheduled repairs 15 percent less than in 2014.
- Elevator availability also surpassed target, at 96.9 percent for 2015. About 55 percent of outages were for scheduled, multi-month rehabilitations. Metro completed 17 rehabs in 2015, 50 percent more than 2014.



#### Key Actions to Improve Performance Modernize escalator and elevator fleet

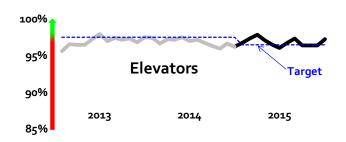
- Replace 137 of the system's 618 escalators by 2020 and rehabilitate up to an additional 144 escalators and 90 elevators. Modernized units are be more reliable and energy efficient.
- From 2011 through 2015, 149 escalators and 49 elevators have been modernized.
- In 2016, replace 23 escalators and rehabilitate 8 escalators and 20 elevators.

#### Improve reliability

• Through CY2020, install canopies at 11 Metrorail entrances where units are currently exposed to the elements.

• Technicians were able to keep availability high for customers by addressing unscheduled breakdowns almost 3 hours faster than in 2014, thanks to a staff reorganization that improved flexibility and less-intensive repairs resulting from better condition.





• Conduct more sophisticated analysis of failures to engineer better maintenance solutions.

#### Implement remote monitoring

• Consolidate and enhance the elevator and escalator operations center and remote monitoring operations to improve response time to outages and enable more accurate availability reporting.

#### Train staff

• Train senior staff to mentor younger mechanics and journeymen in order to improve skills and employee engagement.



# **KPI: Customer Satisfaction**

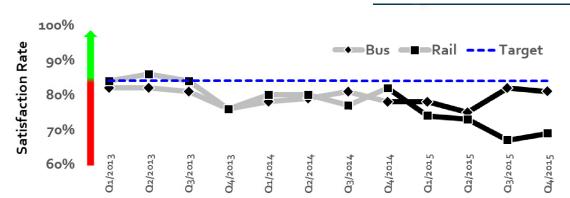
Bus customer satisfaction is comparable to last year, while rail customer satisfaction is down year-over-year.

#### Why did performance change?

- Overall, customer satisfaction did not meet the target of 84 percent.
- Bus customer satisfaction is consistent with previous quarter at 81 percent and statistically comparable to last year at this time.
- Bus customers saw no change in the average number of problems they experienced during a trip this quarter (1.60 per trip). This has remained consistent with the previous quarter (1.62 per trip).
- Rail customers' satisfaction (69 percent) also remained consistent with previous quarter and statistically down compared to last year at this time.
- While less than half of customers rated rail reliability positively this quarter, the average number of problems a rail customer may experience during a trip declined to levels experienced at the beginning of 2015 (approximately 2.7 per trip).
- Compared to Q4/2014, bus customers are experiencing:
  - Improved operator courteousness;

- Slightly more trouble purchasing their fare; and
- More concern for safety at bus stops.
- Compared to Q4/2014, rail customers are experiencing:
  - Better announcements on trains;
  - Less crowding in stations;
  - Uncomfortable temperatures on trains; and
  - Less safe conditions on trains.





# Key Actions to Improve Performance *Bus*

- Review automatic fare collection (AFC) maintenance of on-board equipment for add-value transactions.
- Reinforce the positive aspects of good customer service.
- To address crime, Metro Transit Police will focus on increased collaborative solutions at the federal, state and local levels.

#### Rail

- Develop standard scripts and pinch-point announcements for train operators/rail operations control center (ROCC).
- Operate trains consistently as station crowding is an indicator to all customers of unreliable service.
- Deploy additional staff to assist customers and manage excessive crowding during service disruptions.

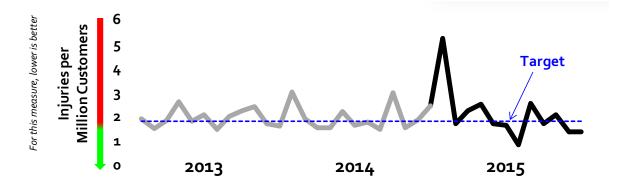


# **KPI: Customer Injury Rate**

The customer injury rate rose this year and was worse than target, driven by an increase in rail injuries associated with the January 2015 smoke incident at L'Enfant Plaza.

#### Why did performance change?

- The higher rate was driven by a significant increase in Metrorail customer injuries occurring while on-board trains. Sixty-nine customers were injured and one customer died during the January 12, 2015 smoke incident at L'Enfant Plaza.
- There were also over 70 percent more injuries sustained when train doors closed on passengers, most frequently as they attempted to exit crowded trains.
- Customer injury rates on Metrobus and MetroAccess improved compared to 2014, reflecting sustained efforts to upgrade escalator condition, provide better training and coaching to bus operators, and encourage safe behavior among customers through targeted outreach.
- Almost 20 fewer customers required medical attention after slipping or falling on escalators, in Metrorail stations, or in parking lots. About 40 fewer bus customers were injured, leading to a 9 percent decrease in the bus customer injury rate.
- The MetroAccess customer injury rate decreased by almost 30 percent, driven by a drastic decline in the number of non-collision-related injuries.



#### Key Actions to Improve Performance Conduct customer outreach

• Deploy additional staff to assist customers and manage excessive crowding during service disruptions.

#### Enhance safety features of vehicles

- Review Metrobus interior design to identify opportunities to improve customer safety.
- Work with Virginia Legislature to allow installation of strobe lights on Metrobuses to improve pedestrian safety.
- Evaluate the effectiveness of reflective chevrons on decreasing collisions.
- Install closed circuit television (CCTV) cameras on MetroAccess vehicles.
- Install new public safety radio systems and cell phone cabling for telecom providers in stations and tunnels.

• Improve station lighting to reduce slips, trips and falls and enhance personal security.

#### Coach staff

- Reduce the number and severity of collisions by implementing a revamped and expanded bus operator training.
- Schedule safety blitzes at incident hotspots to reinforce safe behavior and address unsafe conditions.
- Improve rail operator response to customer emergency intercom calls.

#### Comply fully with federal and state regulations

- Submit for closure all NTSB and FTA safety recommendations.
- Respond to FTA rulemaking to ensure compliance with all aspects of integrating a Safety Management System with Asset Management.



# **KPI: Employee Injury Rate**

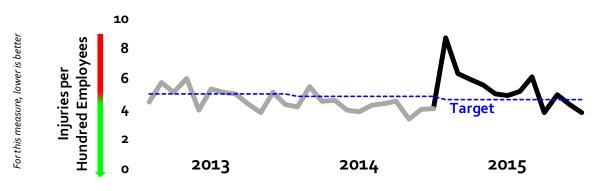
Despite recent improvements, the employee injury rate rose this year, performing worse than 2014 and target, driven by winter weather and an increase in crime-related injuries.

### Why did performance change?

- The total 2015 employee injury rate was worse than target and worse than 2014, at 5.4 injuries per 200,000 hours worked. The number of injuries rose to almost 630, up nearly 30 percent compared to 2014.
- Slips, trips and falls (25 percent) and collisions (19 percent) were the two most common types of injuries and were particularly high during the winter of 2015, as employees worked in wet and icy conditions. Declines in these injury types drove improvements in spring, summer and fall.
- Crime-related injuries were significantly higher in all but one month this year compared to 2014, and accounted for about 16 percent of all injuries. Almost 30 police officers were injured while pursuing and arresting criminals, about 25 percent more than in 2014.

• More employees were assaulted by customers (with 35 requiring medical attention) compared to 2014, and the number of employees seeking treatment for work-related stress stemming from violence witnessed or experienced more than quadrupled. Stress injuries for non-crime-related reasons also grew over 2014, reflecting increased medical staff outreach.





# Key Actions to Improve Performance *Build safety culture*

- Design and execute a safety strategy focused on changing behavior and bolstering the safety culture, in line with the Federal Transit Administration's (FTA) Safety Management Systems (SMS) approach.
  - Conduct regular executive, departmental and local safety committee meetings that involve front-line staff and focus on operational risks and employee information.
  - Monitor and respond to leading indicators.
  - Expand Confidential Close Call Reporting program to bus employees in March 2016.

#### Analyze and address root causes of injuries

- Conduct thorough injury investigations, including identifying key factors and mitigating any hazards.
- Recommend actions to management based on analysis of injury data, safety observations and training attendance.
- Establish a task force to better understand and address stress-related injuries.
- Implement plan to reduce Bus Operator assaults, including use of shields, cameras and enhanced police patrols.



**KPI: Crime** 

# by the FBI.

Appendix H - Vital Signs Report

#### Why did performance change?

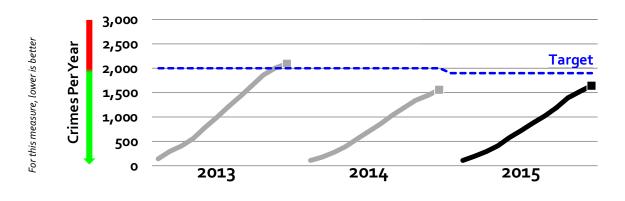
• Similar to the District of Columbia's 2015 violent crime rate, overall Part 1 crimes on Metro increased slightly compared to 2014 primarily as a result of increased robberies. These crimes were largely attributed to forcibly taking mobile phones.

In 2015, Part-1 crimes were 13 percent lower (246 fewer

• Although crimes that occurred in Metro facilities and parking lots declined by 17 percent, bus stop crimes nearly doubled; these crimes generally involved various forms of robbery.

- Unlike bus stop crimes, crimes that occurred on buses declined approximately four percent. During 2015, there was an increase in deployment of uniformed personnel and improved camera systems used to deter bus crimes.
- Metrorail crimes increased by approximately five percent; primarily driven by an increase in pickpockets. Pickpockets increased more than 40 percent.





# Key Actions to Improve Performance *MTPD tactics*

- Collaboration will be key in 2016 to reduce both violent and non-violent crimes throughout the region. MTPD will focus on increased collaborative solutions at the federal, state and local levels, as well as Metrorail and Metrobus partnerships.
- Assaults on bus operator increased 9 percent compared to 2014. Although these assaults are not categorized as a Part-1 crime, MTPD will continue a surge of High Intensity Targeted Enforcement initiatives in 2016 to reduce assaults against both customers and employees.
- Although not a component of Part 1 crime reporting, MTPD is mindful of both national and international events that dictate a heightened security posture in Metrorail and on Metrobus. In addition to an increased presence of uniformed offers, the MTPD will conduct quarterly, full-scale exercises to improve emergency response, expand on active shooter training for Metro employees, and refine response capabilities to threats against the Metro system.

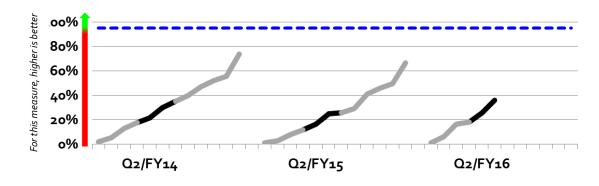


#### **Business Operations - Finance**

#### **Capital Funds Invested**

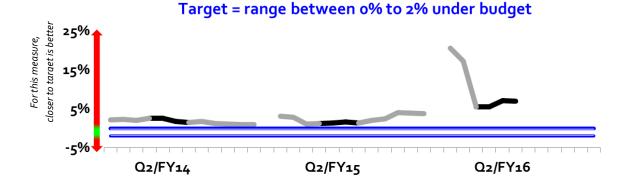
- Metro is budgeted to receive slightly more than \$1.2 Billion in fiscal 2016 to be invested in infrastructure renewal.
- This measure tracks the rate at which these funds are invested.
- This utilization is slightly above the rate in fiscals 2014 and 2015.
- The fourth quarter of each fiscal year is typically the time of high funds utilization.





#### **Operating Budget Variance**

- The measure calculates the percentage variance between actual and budgeted spending each month.
- The rate shown below is cumulative year-to-date.
- The target for this measure is a range between 0 percent and -2 percent under budget.



274



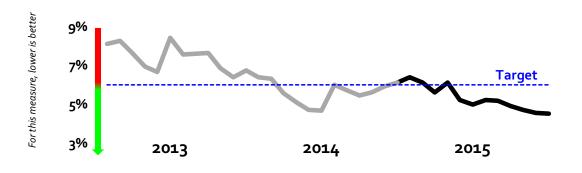
# **Business Operations – Human Resources**

#### Vacancy Rate

- By the end of 2015 the overall vacancy rate had successfully declined to 4.5 percent which is well below the target of six percent.
- In keeping with the Board's request to focus on Operations-Critical vacancies a subset of the overall vacancy KPI is now being measured. As of the end of 2015 these positions are running an 11.1 percent vacancy rate which is not on target. The target has been set at 9 percent.
- Proactive sourcing and workforce planning are the key strategies being worked to control these vacancy rates.

• GM/CEO holding bi-weekly meetings to review vacancies.





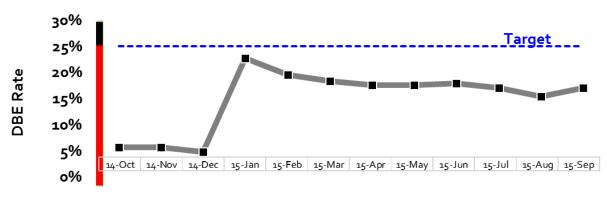
#### **Disadvantaged Business Enterprise (DBE) Contracts**

DBEs are for-profit small businesses wherein socially and economically disadvantaged individuals (including ethnic minorities, women, and other individuals evaluated on a case-by-case basis) own at least a 51 percent interest, control management and daily business operations, and possess a DBE certification from the relevant state – generally through the state Uniform Certification Program (UCP).

The KPI for DBE awards calculates the percentage of contracts awarded to DBEs. Each Federal Fiscal Year

(FFY), Metro sets a target for the percentage of contracts to be awarded to DBEs.

- In recent Federal Fiscal Years (FFY), the target has been 25 percent.
- Metro achieved a rate of 17 percent for FFY2015, falling below target.
- For DBE FFY2015 completed contracts payments, see data tables on p26.



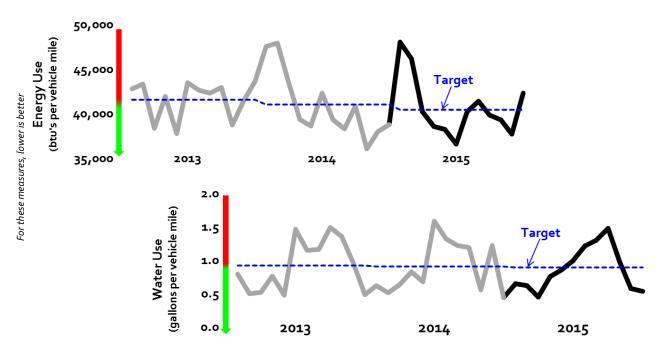


# **Business Operations – Environmental Sustainability**

Meeting sustainability targets helps reduce costs and improve service while expanding the environmental benefits Metro already brings to the region.

#### **Energy and Water Usage**

- Energy comes in many forms including electricity, natural gas, diesel and gasoline. All can be converted to a common unit called the "BTU" [British thermal unit] and tracked based on the number of bus and train miles operated annually
- Metro consumes large quantities of water for its operation. Rail stations are cooled using water chiller plants and all buses and trains are washed on a regular basis. Like energy, water usage is also tracked on a per mile basis.
- Both of these measures have targets established to reduce consumption. By 2025 energy use is targeted to decrease 20 percent and water use is targeted to decrease 15 percent from 2013 levels.
- Metro consumed energy at the same rate as last year, failing to continue the savings achieved in 2014 (2 percent reduction compared to 2013). Metro did not meet its ambitious annual target. Metro had several efforts that significantly reduced energy usage in its facilities (e.g., LED lighting, more energy-efficient equipment), but these savings were negated by declining efficiency in the aging CNG bus fleet and increases in traction power usage (in part, due to heavier, more crowded cars on the red, orange, blue and silver lines see *p15*).
- Water usage declined in 2015 to .86 gallons per vehicle mile, better than target. Metro used 3.5 percent fewer gallons of water as a result of measures taken to reduce consumption, including installing new management systems for station cooling towers.



#### Key Actions to Improve Performance

- Complete project to install LED lighting in all parking garages, reducing Metro energy consumption by at least 1 percent.
- Invest in more energy-efficient equipment, such as switch heaters.
- Complete installation of FleetWatch in non-revenue vehicles to reduce gasoline consumption, e.g., by monitoring idling
- Perform an energy audit to identify further opportunities for savings



#### **Board Service Standard**

Crowded railcars can lead to dissatisfied customers and can pose a safety risk.

#### **Passengers Per Car**

- Crowding levels on railcars is monitored in accordance with Board standards.
- Trained Metro observers are strategically placed around the system during its busiest times to monitor and report on crowding.
- This measurement helps prioritize and guide where to deploy additional service in the form of more or longer trains.

• Crowding increased on Red, Orange, Blue and Silver Lines as not enough railcars were available for service.



Optimal PPC of 100, with minimum of 80 and maximum of 120 PPC
---

	Ma	ax Load Points	Aug-14	Sep-14	<b>Oct-14</b>	Aug-15	Sep-15	Oct-15
	Red	Gallery Place	87	91	91	89	91	102
	Reu	Dupont Circle	85	83	87	92	90	93
		Pentagon	95	106	97	94	113	85
	Blue	Rosslyn	88	103	83	80	113	87
sh		L'Enfant Plaza	53	66	56	54	57	62
Rush	Orange	Court House	78	86	93	92	106	133
AM	Orange	L'Enfant Plaza	62	62	77	62	64	74
◄	Yellow	Pentagon	73	75	74	68	74	86
	Green	Waterfront	77	78	85	82	86	90
	Green	Shaw-Howard	68	70	76	71	73	81
	Silver	Rosslyn	77	80	83	88	104	98
	511701	L'Enfant Plaza	56	63	76	59	57	73
	Red	Metro Center	84	90	88	98	103	102
	Reu	Farragut North	82	73	80	91	85	94
		Rosslyn	111	103	111	112	127	103
	Blue	Foggy Bottom-GWU	96	97	91	100	117	95
Ļ		Smithsonian	59	39	54	57	57	61
Rush	Orange	Foggy Bottom-GWU	77	75	81	93	112	117
ΡM	Orange	Smithsonian	60	53	65	69	52	84
٩	Yellow	L'Enfant Plaza	74	69	72	73	70	75
	Green	L'Enfant Plaza	94	77	78	76	81	81
	Green	Mt. Vernon Sq.	71	71	66	75	60	83
	Silver	Foggy Bottom-GWU	75	78	77	84	85	107
	Jiver	Smithsonian	48	63	62	64	50	80



#### **Board of Directors Measures**

In the Momentum strategic plan, the Board identified performance measures to track and review annually for the Connect Communities goal.

#### Annually Reported Board Measures Bus Stop Accessibility

- 2015 target = 100 stops made accessible, per year
- 2015 actual Results = 255 completed
- Jurisdictions continue to improve stops at a brisk pace.
- Also, Metro is improving stops throughout the region using grant funds.
- Coordination between Metro and the jurisdictions on bus stop improvements continues for resources prioritization (Metro shares data related to inaccessible bus stops near conditionally-eligible MetroAccess customers and high-frequency pick-up and drop-off locations).



#### **Regional Development**

- Households and jobs within walking distance to transit generate walk ridership, which costs Metro very little to facilitate.
- This indicator measures the combined effect of regional growth within areas located near transit and how well Metro connects growth in these transit-accessible communities to other areas in the system.
- Factors that influence this indicator are: how growth occurs near transit; growth in the provision of transit; growth in the accessibility of transit.
- For this indicator, there are two metrics. In each case, higher (or more) is better.

#### Growth Near Transit

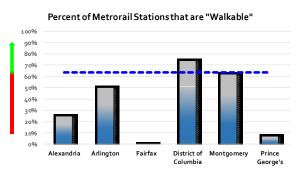
• Local jurisdictions routinely forecast the number of Percent of Metrorail Stations Meeting Density Targets



households and jobs planned for their jurisdictions over the next 25 years. This growth can occur anywhere within the jurisdictional boundaries. However, more growth/density at Metro stations or proximate to bus routes means there is a better chance jobs, housing and retail will be better connected by transit on either end of a trip.

- This indicator seeks to measure how well our local partners are planning for future growth to be served by transit, both by proposing new development and by estimating growth to take place in existing transit-served areas. It also is a leading indicator of the extent to which market forces value transit-proximity if private developers believe that transit proximity is valuable, they will propose more transit-oriented development.
- The measure focuses on growth in rail station areas, evaluating households and jobs growth projections within a <sup>1</sup>/<sub>2</sub> mile of stations as a share of the jurisdictions' overall growth projections.

#### Rail Station Walk Score



- By removing barriers to entry, Metro can realize more ridership originating on foot or by bicycle. Staff have calculated a "walkshed coverage ratio" for each station that represents the percent of the area within ½ mile of a station that is actually accessible by foot.
- The calculation is based on the pedestrian network within the station area, rather than the typical "planning circle" shown to represent the station planning area.



# Appendix I - Glossary of Terms

AAC (Accessibility Advisory Committee)	Metro's committee that was 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 Metro 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 Metro.
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 Metro; 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 expenses accounted for in one fund assigned to another fund. For example, certain operating expenses of a division may be charged to a capital project as overhead cost.
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.
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. Paper farecards are no longer sold in stations (as of December 2015) and will not be accepted at faregates for payment as of March 2016.
	Metrobus pass valid for unlimited use for a designated seven-day period.
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 Metro.
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)	KPIs 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.
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. In compliance, MetroAccess operates a fleet of over 600 vans and sedans. The vans are equipped with passenger lifts and wheelchair tie-downs.
Metrobus	The operating unit of Metro that provides regional and non-regional bus services on 175 lines with 299 route variations throughout the Metro region, utilizing a fleet of over 1500 buses.
Metrorail	The operating unit of Metro that provides heavy rail service over 118 route miles (subway, aerial and surface) and 91 passenger stations with a fleet of over 1100 rail cars.
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 Metro Board.
RAC (Riders' Advisory Council)	A committee established by the Metro 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.
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 <sup>®</sup>	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 ( <i>Tristate Oversight Committee</i> )	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)
 WMATA (Washington Metropolitan Area Transit Authority)
 The acronym used for Washington Metropolitan Area Transit Authority on Metropolitan Area Transit Authority (Mashington Metropolitan Area Transit Authority)

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	air conditioning or 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
BAFO	best and final offer
BDA	bi-directional amplifiers
BEAC	budget estimate at completion
BOCC	
	bus operations control center
BRT	bus rapid transit

### С

B

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
ССР	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
СМ	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
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

НСМ	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



# 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

#### Μ

MAP-21	Moving Ahead for Progress in the 21 <sup>st</sup> 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

# Ν

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

0

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

Р

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
PSS	Program Station Stop, or Public Safety System

Q

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



ROD	record of decision, or revenue operations date
ROW	right of way
RTU	remote terminal unit

S

S&I	storage/service and inspection
SAP	System Access/Capacity Program, or safety awareness program
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

# Т

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

metro

### 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
WMATA	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

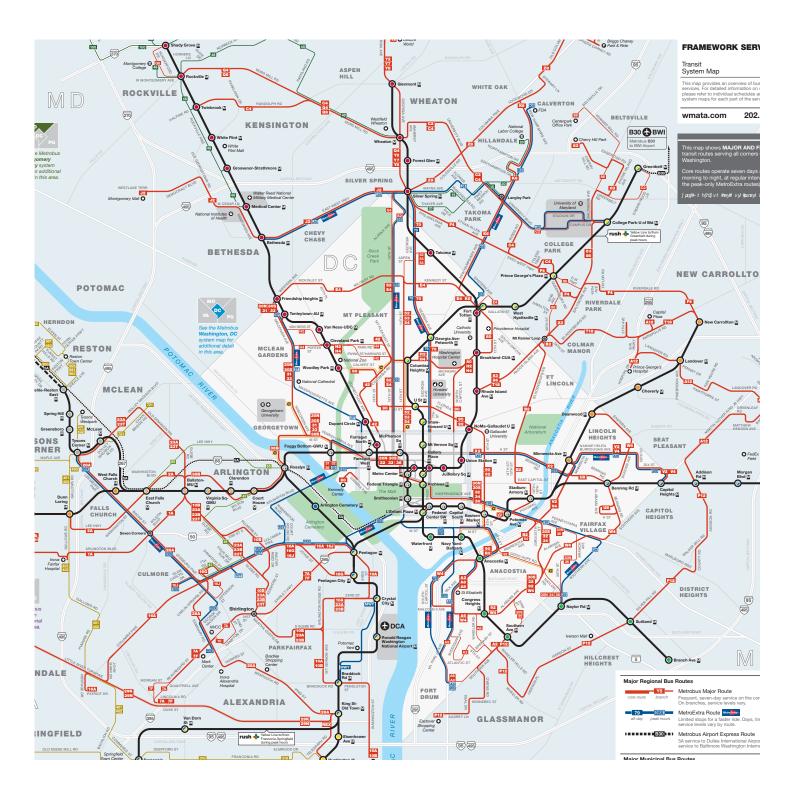
#### MetroAccess

301-562-5360 (TTY 301-588-7535) or toll free at 800-523-7009 MetroAccess Paratransit Service

# **Transit Police** 202-962-2121



# Serving the National Capital Region



Focusing on the Customer: Prioritizing Safety, Service Reliability, and Financial Responsibility

