

MAINTAINING MOMENTUM

# FY2016 APPROVED BUDGET

EFFECTIVE JULY 1, 2015



WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY





## **Washington Metropolitan Area Transit Authority**

### ***Strengthening Safety Culture, Service Delivery & Financial Management***

Fiscal Year 2016 Approved Budget

#### **Interim General Manager's Message**

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The Washington Metropolitan Area Transit Authority (WMATA) maintains the second largest heavy rail system, sixth largest bus system, and fifth largest paratransit system in the nation. This multimodal transit network carries over 1.1 million passenger trips each weekday and serves as a backbone to the Washington region's economy. As the system has expanded over the decades, it has spurred over \$235.0 billion of economic development at or adjacent to Metro property.

In order to maintain this role in the future growth and success of the region, WMATA must strengthen its safety culture, improve service delivery, and focus on financial management. This FY2016 approved budget provides the resources necessary to achieve these priorities.

The FY2016 budget funds both ongoing and new safety improvements, including the investments necessary to begin implementing 2015 National Transportation Safety Board (NTSB) and Federal Transit Administration (FTA) safety recommendations, as well as a pioneering fatigue management program – a first for any transit agency in the United States. The budget also provides for an expanded Customer Care initiative, a program to improve customer satisfaction through human capital management and better service delivery. Finally, the FY2016 budget supports a vastly strengthened financial management organization with improved financial controls and enhanced compliance monitoring.

Without increasing passenger fares, the FY2016 operating budget fully funds all current WMATA rail, bus and paratransit services – including the first full fiscal year of Silver Line Metrorail service – that are critical to the quality of life of residents and that support regional employment and tourism. The FY2016 operating budget of \$1.8 billion represents an increase of less than 3.4 percent over FY2015, which is made possible by a range of cost reduction initiatives that include increased employee pension cost-sharing and more than \$5.0 million in cost savings through the elimination of 50 non-safety sensitive positions.

The FY2016 capital budget continues WMATA's multi-year program to improve safety and state of good repair and includes funding to implement both pending and new NTSB and FTA safety recommendations arising from the January 2015 smoke incident outside L'Enfant Plaza station. In

addition to investments that will enhance training and operations at the Rail Operations Control Center, improve rail station and tunnel ventilation, and strengthen standards for electrical connections on the third rail, the program includes the replacement of the oldest rail cars in Metro's fleet, modernizes buses and paratransit vehicles, and continues the replacement and rehabilitation of aging elevators, escalators, tracks, bridges, and rail stations. The capital budget also funds the future acquisition of 220 additional 7000 Series cars (with an initial milestone payment to be made in FY2016). This will enable WMATA to retire rather than rebuild the existing 5000 Series cars, as well as operate all Red Line trains to the end of the line rather than turning back trains at Grosvenor and Silver Spring. In FY2016, the capital program is scheduled to deliver:

- 144 new 7000 Series rail cars
- 168 new buses
- 12 major station rehabilitations
- New train control software that improves on time performance
- 21 new escalators, fully rehabilitate and restore 17 escalators and 17 elevators
- 175 new Metro Access vehicles

Finally, to ensure safety, improve service delivery, and fulfill the commitments of the capital safety and state of good repair program, the multi-year capital improvement program requires a continuing level of effort of federal funding, as well as continued local investments from the jurisdictions. A renewed Capital Funding Agreement (CFA) between Metro and its jurisdictional partners will be negotiated during FY2016 and will formalize these funding agreements.



Jack Requa  
Interim General Manager and  
Chief Executive Officer



## WMATA Board of Directors

*(As of May 28, 2015)*

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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.



Mortimer L. Downey, Chair, joined the Board in January 2010 as the first member appointed by the federal government. He 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.



Michael Goldman, First Vice Chair, was appointed to the Board in June 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, Second Vice Chair, joined the Board in January 2004 as an Alternate Director. She was appointed as Principal Director in 2008 representing Fairfax County, Virginia. Mrs. Hudgins was first elected to the Fairfax County Board of Supervisors in November 1999.



Jack Evans was appointed to the Board as a Principal Director in January 2015 representing the District of Columbia. Mr. Evans has served on the Council of the District of Columbia (Ward 2) since 1991.



Harriet Tregoning joined the Board in November of 2014 as a Principal Director representing the federal government. She is currently the Director of HUD's Office of Economic Resilience. She is also the former director of the District of Columbia's Office of Planning.



Jim Corcoran was appointed as a Principal Director to the Board in February 2015 representing the Commonwealth of Virginia. Since April 2010, he has served as President & CEO of the Fairfax County Chamber of Commerce ("Fairfax Chamber"). Under Jim Corcoran's leadership the Fairfax Chamber has grown to a \$2.5 million Chamber of significant influence.



Keturah Harley was appointed to the Board as a Principal in April of 2015 representing Maryland. She 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).



Corbett A. Price was appointed to the Board in March 2015 as a Principal Director representing the District of Columbia. He currently serves as Chairman and CEO of Quantix Health Capital, LLC.



Anthony R. Giancola, P.E. joined the Board in February 2007 as Alternate Director representing the District of Columbia, and was designated an Alternate Director for the federal government in April 2011. From 1993 to 2011, Mr. Giancola served as the Executive Director of the National Association of County Engineers.



Kathy Porter joined the Board in January 2011 as an Alternate Director from Montgomery County, Maryland. She was Mayor of the City of Takoma Park, Maryland, from 1997 to 2007.



William D. Euille joined the Board in July 2000 as Alternate Director representing the City of Alexandria, Virginia. Mr. Euille is currently the Mayor of Alexandria, and he has served on the Alexandria City Council since May 1994.



Leif A. Dormsjo joined the Board in March of 2015 after being appointed as an Alternate Director representing the District Department of Transportation (DDOT). Mr. Dormsjo recently served as Deputy Secretary of the Maryland Department of Transportation (MDOT) since 2012.



Anthony E. Costa joined the Board in July 2014 as an Alternate Director representing the federal government. He is currently Senior Advisor to the Administrator of the General Services Administration and is leading GSA's efforts to help direct future real estate activities to encourage the provision of environments where communities, and employees, can live, work and thrive.



Mary Hynes was appointed by the Northern Virginia Transportation Commission to the Board in January 2011 as a Principal Director, and currently serves as a Virginia Alternate Member, representing Arlington. She was elected to the Arlington County Board in November 2007.



Tom Bulger was appointed to the Board in July 2011 as an Alternate Director for the District of Columbia. He is President of Government Relations Inc., and has been a federal advocate and policy consultant.



As of May 28, the Maryland Alternate Director board seat was vacant.





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# Chapter 1 – Introduction to Metro



*Wiehle-Reston East Station, Virginia*





## **Introduction to the Washington Metropolitan Area Transit Authority**

### **Metro 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.

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

Metro completed the originally planned 103-mile Metrorail system in early 2001. In 2004, Metro expanded the system, opening the Blue Line extension to Largo Town Center and New York Ave-Florida Ave-Gallaudet U station on the Red Line. The expansion increased the Metrorail system to 86 stations and 106.0 miles.

In March 2009, the Dulles Transit Partners (DTP), under the direction of the Metropolitan Washington Airports Authority (MWAA), started construction on a 23.1 mile rail extension in Fairfax and Loudoun counties in Virginia, dubbed the Silver Line. Funded by a full-funding grant agreement, toll revenues, and other revenues from funding partners, the first phase of 11.6 miles and five (5) new stations extending service to Reston, Virginia, opened July 26, 2014. Phase 2, an additional 11.5 miles with six new stations will provide service to Dulles International airport and Loudoun County. Construction on Phase 2 is estimated to be completed in 2019. The Silver Line is the largest rail expansion project since the opening of the National Airport to Stadium Armory segment in 1977, and brings the Metrorail system to 91 stations and 118 linear miles of service.

#### ***Metro Facts***

- Metro maintains the second largest heavy rail system, the fifth largest bus system and the fifth largest paratransit service in the nation
- Metro service area size is 1,500 square miles with a population of five million people
- Metro'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 1.2 million

- More than half of Metrorail stations serve federal facilities and approximately 20 percent of Metro's peak period customers are federal employees
- Metro has spurred over \$235.0 billion of economic development at or adjacent to Metro property
- The approved FY2016 budget totals \$3.1 billion, including \$1.8 billion approved operating budget, \$47.3 million operating reimbursable, a \$1.2 billion Capital Improvement Program budget and a \$73.7 million capital reimbursable program budget

### ***Metrorail***

The Metrorail system is a rapid transit system that consists of 118.0 route miles and 91 passenger stations and a fleet of over 1,100 rail cars. Service is operated from 5 AM to midnight. Monday through Thursday, from 5 AM to 3 AM on Friday, from 7 AM to 3 AM on Saturday, or from 7 AM to midnight on Sunday. In FY2016, Metrorail is projected to provide approximately 216.4 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 58.0 miles and 38 stations, and the elevated sections consist of 9.2 route miles and six (6) stations. While there are three types of structures, they operate as one unified system providing seamless service to passengers.

The system is extensively equipped with communication systems that facilitate the flow of information to and from the passenger. All stations are equipped with digital signs that show next train arrival times, system status and time of day. The system operations control center is equipped with two-way radios for constant communication with all train operators in service, as well as hotlines to the police and fire departments in all of the jurisdictions served by Metro. Public address systems on all trains and platforms facilitate communications from Metrorail train operators and station managers. Also, 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.

Metrorail service is currently operated over six lines: Blue, between Franconia-Springfield & Largo Town Center, Green, between Branch Avenue & Greenbelt, Orange, between New Carrollton & Vienna, Red, between Glenmont and Shady Grove, Yellow, between Huntington & Fort Totten, and Silver, between Wiehle-Reston and Largo Town Center. Phase 1 of the Silver line opened in calendar year 2014. All Metrorail stations and rail cars are accessible to disabled passengers.

### ***Vertical Transportation***

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.

Metro is the single largest vertical transportation operator in North America. Metro operates more than 900 vertical transport facilities (613 escalators and 313 elevators) and delivers over three

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 long) 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.

### *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 the Stadium-Armory. This added 11.8 miles and 17 new stations to Metro's rail operation. With continued development, in 1983 the Yellow line was added with service from Gallery Place-Chinatown to the Pentagon, adding 3.3 miles and one station. In 1991, the Green line was added providing service from Gallery Place to U St/African-American Civil War Memorial/Cardozo. In 2001, the Green Line was extended to Branch Avenue. In 2004, the current system was completed with the openings of the Largo Town Center and Morgan Boulevard on the Blue line and the New York Avenue station on the Red line, respectively. Table 1.1 provides a list of all openings. Currently, the Silver line, along the Dulles corridor, is being constructed in two phases. Phase 1 opened in CY2014. This phase includes five stations on 11.6 miles of track between East Falls Church and Wiehle Avenue in Fairfax County. Phase 2 includes an additional six stations on 11.5 miles of track between Wiehle Avenue and Route 772 in Loudoun County, and is scheduled to be completed in CY2019.

Table 1.1

Line	Segment	Stations	Miles	Date
Red	Farragut North to Rhode Island Ave	5	4.5	3/29/1976
Red	Gallery Pl-Chinatown	1	none	12/15/1976
Red	To DuPont Circle	1	1.1	1/17/1977
Blue/Orange	National Airport to Stadium-Armory	17	11.8	7/1/1977
Red	To Silver Spring	4	5.7	2/6/1978
Orange	To New Carrollton	5	7.4	11/20/1978
Orange	To Ballston- MU	4	3.0	12/1/1979
Blue	To Addison Road	3	3.6	11/22/1980
Red	To Van Ness- UDC	3	2.1	12/5/1981
Yellow	Gallery PL - Chinatown to Pentagon	1	3.3	4/30/1983
Blue	To Huntington	4	4.2	12/17/1983
Red	To Grosvenor	5	6.8	8/25/1984
Red	To Shady Grove	4	7.0	12/15/1984
Orange	To Vienna/Fairfax-GMU	4	9.1	6/7/1986
Red	To Wheaton	2	3.2	9/22/1990
Green	To U St/African-Amer Civil War Memorial/Cardozo	3	1.7	5/11/1991
Blue	To Van Dorn Street	1	3.9	6/15/1991
Green	To Anacostia	3	2.9	12/28/1991
Green	To Greenbelt	4	7.0	12/11/1993
Blue	To Franconia-Springfield	1	3.3	6/29/1997
Red	To Glenmont	1	1.4	7/25/1998
Green	Columbia Heights to Fort Totten	2	2.9	9/18/1999
Green	To Branch Ave	5	6.5	1/13/2001
Red	New York Avenue	1	0.0	11/20/2004
Blue	To Largo Town Center	2	3.2	12/18/2004
Silver	To Wiehle-Reston East	5	11.6	7/26/2014

***Metrobus***

Metrobus operates bus service on 175 lines with 304 route variations covering over 280.0 linear miles of services throughout ten jurisdictions in the Metro region. Weekday ridership averages 455,000 riders utilizing 11,083 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. The entire bus fleet is equipped with two-way radio links to the operations control center, emergency radio silent alarms, and automatic vehicle locators. The Next Bus 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 Metro buses. Currently, the fleet is comprised of 1,526 buses to support maintenance of the fleet and meet peak weekday service requirements if 1,294 buses with varying sizes and capacities. In FY2016, approximately 140.8 million trips are projected to be taken on Metrobus.

***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, MetroAccess paratransit service is provided 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 Metro more agility and control in managing the service with greater efficiency and lower cost.

MetroAccess customers take over two million trips each year, and the demand for this type of service increases with the growth of the disabled population in the region and across the nation. For this reason, it is critical for Metro to accommodate as many customers as possible on its fixed-route services, and thanks to our free ride program, over 1.4 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 our system and taking full advantage of our many accessibility and safety features. Additionally, improvements to the accessibility of bus stops in the region will further enhance this benefit for customers, and Access Services is working in partnership with jurisdictions to accomplish that.

To keep MetroAccess sustainable for future years, Access Services has embarked on a campaign to improve regional coordination of specialized transportation services, recognizing that “it takes a village” to meet the tremendous demand for these services in the region. The first pilot program launched in Montgomery County in October 2013 in partnership with the State of Maryland and will cut the State’s cost in half for the human services agency clients who had previously been relying on MetroAccess. A second pilot started in 2014 using taxis to perform dialysis trips for MetroAccess customers who live in the District of Columbia, and a third was launched in Prince George’s County in 2015. Metro’s regional market share of specialized transportation has increased from 25 percent to 33 percent, and only through partnering with human services agencies



and other transportation providers will we be able to remain sustainable while absorbing the inevitable increases in ridership.

### **Oversight**

Metro 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 Tri-state Oversight Committee (TOC)
- The Office of Inspector General (OIG)
- The Office of Internal Compliance (OIC)

#### ***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 monitors grants to state and local transit providers, primarily through its ten regional offices. 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.

#### ***Tri-State Oversight Committee***

Metro's Tri-state Oversight Committee was created by state-level agencies in Virginia, Maryland and the District of Columbia to jointly oversee rail safety and security at Metro. The TOC reviews and approves Metro's safety and security plans, rail accident investigation procedures and final accident reports and conducts audits among other oversight activities. In addition, the TOC independently evaluates the overall compliance of Metro's rail safety and security efforts with its plans and procedures. In doing so, this committee fulfills the states' responsibilities under U.S. Code of Federal Regulations, 49 CFR, Part 659, which requires such oversight programs for rail transit systems like Metro that receive federal funding. For any deficiencies identified by TOC, Metro is required to propose corrective action plans for TOC's approval and implement them to TOC's satisfaction.

#### ***Metro Office of the Inspector General***

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

## ***Office of Internal Compliance***

The Office of Internal Compliance 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 value-added assessments of financial reporting and operational risks. The OIC partners with departments to review and evaluate business processes efficiency and effectiveness.

## **Advisory**

Metro advisory organizations include:

- The Riders' Advisory Council (RAC)
- The Accessibility Advisory Committee (AAC)
- The Jurisdictional Coordinating Committee (JCC)

### ***Riders' Advisory Council***

On September 22, 2005, the Metro Board established a Riders' Advisory Council. 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.

### ***Accessibility Advisory Committee***

Metro'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 consists of 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 staff. Meeting agendas are established by Metro staff and the JCC chairman and include items referred by the Board or Metro staff, as well as items requested by JCC members.

## Momentum - A Strategic Plan for Metro

In 2013, following extensive involvement with regional stakeholders, community groups, customers and members of the public and business leaders, the Board of Directors adopted Momentum, the strategic plan to guide the Authority through 2025.

Building on the Board of Director's governance improvements, a renewed performance management culture, and the accomplishments of Metro Forward, Momentum ensures that the organization will produce the transit system that the Washington area region needs to deliver hundreds of millions of trips to residents and visitors each year. It provides a vision and a guide for decision-making so that Metro can efficiently meet the needs of today and proactively plan to support the future needs of a healthy, prosperous, and livable region.

Immediately following adoption of the Plan, Management developed a three-year business plan that contained more than a 1,000 actions and initiatives needed to make progress toward achieving the Plan's four goals and defined specific measures and targets to evaluate success. These actions are funded in the Authority's multi-year operating and capital budgets. An annual progress report is planned for FY 2016.

### Our Vision:

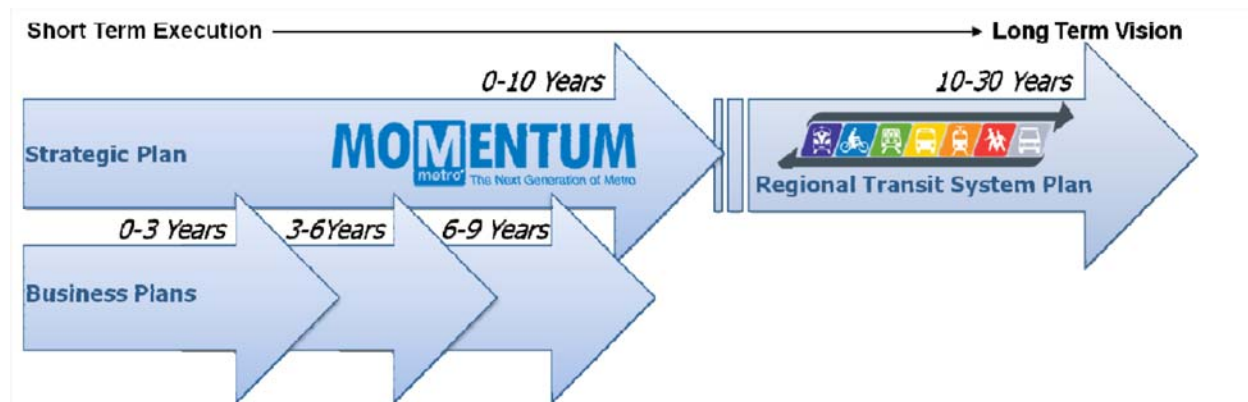
Metro moves the region forward by connecting communities and improving mobility for our customers.

### Our Mission:

Metro provides safe, equitable, reliable and cost-effective public transit.

### Our Goals:

- Build and maintain a premier safety culture and system
- Meet or exceed customer expectations by consistently delivering quality service
- Improve regional mobility and connect communities
- Ensure financial stability and invest in our people and assets



## 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 FY2016, region-wide ridership on Metrorail, Metrobus and MetroAccess is budgeted at approximately 350 million trips.

Metro, as the primary transit operator providing service across jurisdictional boundaries, is an integral member of the regional transportation planning process. Article VI of the Metro Compact gives Metro the power to adopt a Mass Transit Plan for the Metro service zone and directs Metro to participate in the region's continuous, comprehensive transportation planning process. Metro's regional planning function encompasses the preparation of transit system plans in partnership with other regional transit providers, conducting system-planning analysis and transportation studies, communication of transit needs to regional planning bodies, and participation in planning processes at the regional and sub-regional levels. Metro has a particular responsibility to ensure that the region's transit provider's needs, both capital and operating, are reflected during the establishment of the Mass Transit Plan and that the region achieves a balanced system of transportation.

Metro coordinates with its regional partners to determine transit-based priorities and projects. The Metro 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 meeting schedules. 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. Metro is one of the implementing agencies in the TPB planning process and is a voting member of the TPB. Metro 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.

In addition to activities at the TPB, Metro coordinates with jurisdictional partners in multiple venues. The Northern Virginia Transportation Authority (NVTA) is responsible for developing a Northern Virginia Regional Transportation Plan, allocating transportation funds and providing interagency coordination in Northern Virginia. The Northern Virginia Transportation Commission (NVTC) coordinates transit finance and operations in Northern Virginia. Metro 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. Metro also works with Departments of Transportation (DOT) and planning staffs in DC, MD, and VA on important

local plans and project development initiatives to enhance public transit service and ensure integration of transit with roadway investments.

## **Demographics**

Based on the 2010 Census, the population of the Compact jurisdictions currently served by Metro 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**

Located in the nation's capital, Metro's operations are directly influenced by the economic conditions of the District of Columbia (DC) and the surrounding jurisdictions of Maryland and Virginia, and overall trends in the Authority'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 most 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 is impacting not just transit ridership, but office and commercial vacancy rates, local jurisdictional tax revenues, and overall incomes in the region.

***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. Residential construction has moderated after several years of rapid growth, particularly in the multifamily segment, but 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 2007-2009 financial crisis and recession, since 2012 the region's economic picture 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 the Authority:

- ***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 Metro'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 to \$130/month in 2014, while the federal parking benefit remained at \$250/month, this negatively impacted Metrorail ridership by changing the 'rail vs. driving' decision for some commuters. The Authority, working in cooperation with other major transit agencies, has not yet been successful in convincing Congress to bring the transit subsidy back to parity with the parking subsidy.
- ***Telecommuting:*** Federal agencies have offered telecommuting options as a benefit to their employees for many years. Recently, however, the federal government (through the General Services Administration and the Office of Personnel Management) is implementing stronger telecommuting requirements on agencies in order to reduce real estate costs. The telecommuting requirements reduce trip-taking by employees on all modes, including Metrorail and Metrobus.



## Executive Summary

Metro's approved \$3.1 billion FY2016 budget, which includes Operating, Capital and Reimbursable budgets, funds transit services that provide over 1.2 million trips each weekday. The budget enables Metro 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 Metro's overall budget is \$1.8 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 Metro's state and local government partners.

The reimbursable portion of Metro's overall budget is \$121.0 million for both operating and capital, which provides for personnel and services needed for unique projects requested on behalf of Metro's jurisdictions and outside partners. The approved operating reimbursable budget is \$47.3 million and the capital reimbursable budget is \$73.7 million.

The \$1.2 million approved FY2016 capital budget provides for the assets and infrastructure to support Metrobus, Metrorail, and MetroAccess service. Funding for the capital budget comes from federal grants, Metro's state and local government partners, debt and other sources. The FY2016 capital budget also includes an approved investment to begin to acquire 220 new 7000 Series railcars that will replace the existing 5000 Series fleet, as well as continued investments to upgrade the power systems on the Orange and Blue Lines.

Priorities for the FY2016 budget include:

- Delivery of safer service through the implementation of pending and new recommendations from FTA and NTSB, as well as continuing the fatigue management program, supporting employee close call reporting, and enhancing customer awareness of safety and security;
- Implementation of a new comprehensive Customer Care program;
- Operation of the first full fiscal year of Silver Line Phase 1 service; and
- Delivery of approximately 144 new 7000 Series railcars

All of these priorities include performance of business actions to achieve the Board's strategic goals. The approved budget includes a 3.4 percent expense increase, paired with no anticipated growth in ridership.

## **FY2016 Budget Overview**

- The \$3.1 billion approved budget for fiscal year 2016 seeks authority to obligate and spend funds. It includes all the operating, capital, and debt service requirements of Metro for the fiscal year, July 1, 2015 to June 30, 2016.
- The \$1.8 billion operating budget is funded with passenger fares and parking (45.0 percent), State and Local Government subsidy contributions (49.0 percent) and other revenue sources (6.0 percent). The Operating budget supports Metrobus, Metrorail, and MetroAccess operations across the District of Columbia, Maryland, and Virginia.
- The FY2016 Operating expense budget represents a 3.4 percent increase over FY2015 levels. The majority of the growth (\$59.2 million) is due to personnel cost increases associated with the negotiated Collective Bargaining Agreements (CBAs) between WMATA and its labor unions as well as fringes, and OPEB contribution increases. The approved budget also includes \$7.0 million in initiatives that will continue fatigue management and enhance employee development. The FY2016 budget also contains approximately \$1.0 million in non-personnel increases; \$5.3 million associated with anticipated increases in paratransit ridership offset by lower propulsion and diesel fuel rates.
- The \$1.2 billion Capital Improvement Program (CIP) budget is focused on the implementation of federal recommendations for safety improvements, the rebuilding of the Metro system, and improving the effectiveness of the current rail and bus networks. Significant investments planned for FY2016 include, but are not limited to:
  - Implementing new NTSB and FTA recommendations following the January 12, 2015 L'Enfant incident;
  - Continuing work to address pending NTSB recommendations including the replacement of track circuits, power cables and train control software system
  - Replacing 1000 Series railcars with new 7000 Series railcars
  - Aggressively rehabilitating track and structures, in particular along the Red and Orange/Blue Lines
  - Continuing rehabilitation of Alexandria, Brentwood, and New Carrollton rail yards
  - Fully rehabilitating 12 Metro stations and enhancements at another 12 Metro stations
  - Replacing 21 escalators, rehabilitation of 17 escalators and 17 elevators
  - Replacing approximately 168 buses and rehabilitation of an additional 100
  - Rehabilitating the Western, Northern, Landover, and Bladensburg bus facilities
  - Replacing 150 MetroAccess vehicles and the addition of 25 new vehicles for anticipated growth
  - In addition to these investments, Metro will invest in 220 new rail cars for replacement of 5000 Series and fleet expansion, continued upgrades to traction power systems, installing new power cables, and activities to add capacity at rail yards in preparation for future 8-car train operations.

Table 1.2

**Summary of Funding by Program and Source**

(\$s in Millions)	FY2015 <u>Approved</u>	FY2016 <u>Approved</u>
<b>Operating Budget</b>		
• Passenger Fares & Parking	\$ 896.3	\$ 859.0
• State and Local Funds <sup>2</sup>	\$ 799.3	\$ 866.5
• Business Revenues	\$ 43.0	\$ 45.0
• Other Sources	\$ 6.8	\$ 34.0
Subtotal	\$ 1,745.4	\$ 1,804.5
<b>Reimbursable Budget</b>		
• State and Local Funds	\$ 20.8	\$ 26.2
• Other Sources	\$ 121.2	\$ 94.8
Subtotal	\$ 142.0	\$ 121.0
<b>Capital Budget</b>		
• Federal Formula/Other Grants <sup>1</sup>	\$ 347.9	\$ 455.7
• Federal Dedicated Funds (PRIIA)	\$ 168.8	\$ 193.6
• Federal ARRA and Safety & Security	\$ 0.2	\$ -
• State and Local Funds	\$ 402.5	\$ 443.4
• Metro 2025 Investment	\$ 75.0	\$ 32.6
• Other Sources	\$ 21.3	\$ 39.9
• Interim Funding Sources	\$ 30.3	\$ -
• Planned Long-Term Financing	\$ -	\$ -
Subtotal	\$ 1,046.0	\$ 1,165.2
<b>Total</b>	<b>\$ 2,933.4</b>	<b>\$ 3,090.7</b>

<sup>1</sup> Although used to support the operating budget, federal preventive maintenance funding is included with capital budget funding sources.<sup>2</sup> Includes Net Subsidy and Debt Service

Table 1.3

<b>Summary of Expenditures by Program</b>		
(Dollars in Millions)	FY2015 <u>Approved</u> <sup>1</sup>	FY2016 <u>Approved</u>
<b>Operating Budget</b>		
• Metrobus	\$ 618.5	\$ 634.3
• Metrorail	\$ 1,022.6	\$ 1,058.5
• MetroAccess	\$ 113.7	\$ 121.2
Subtotal - Authorized Operating Expense	\$ 1,754.8	\$ 1,814.0
• Debt Service	\$ 21.3	\$ 21.2
• Preventive Maintenance Credit	\$ (30.7)	\$ (30.7)
Subtotal- Operating Budget	\$ 1,745.4	\$ 1,804.5
<b>Reimbursable Budget</b>		
• Operating Reimbursable Projects	\$ 54.0	\$ 47.3
• Capital Reimbursable Projects <sup>(2)</sup>	\$ 88.0	\$ 73.7
Subtotal	\$ 142.0	\$ 121.0
<b>Capital Budget</b>		
• Capital Improvement Program	\$ 1,045.8	\$ 1,165.2
• Safety & Security Program <sup>(3)</sup>	\$ 0.2	\$ -
Subtotal	\$ 1,046.0	\$ 1,165.2
<b>Total</b>	<b>\$ 2,933.4</b>	<b>\$ 3,090.7</b>

1) FY2015 figures for Operating are approved budget; figures for Capital are current forecast.

2) For the purposes of this table, Capital Reimbursable Project amounts reflect total forecasted expenditures for FY2016. Per WMATA Board policy, however, reimbursable project budgets are obligation based.

3) The Safety and Security Program is an obligation based program for which all projects are scheduled for completion in FY2015. Federal FY2010 and later Safety and Security grant awards are included in the CIP and operating reimbursables rather than a separate capital program.

Table 1.4 - Summary of Budgeted Positions

	FY2014 Approved Budget	FY2015 Approved Budget	FY2016 Approved Budget	Change from FY2015 to FY2016
Positions	12,689	12,905	12,995	90

Figure 1.1

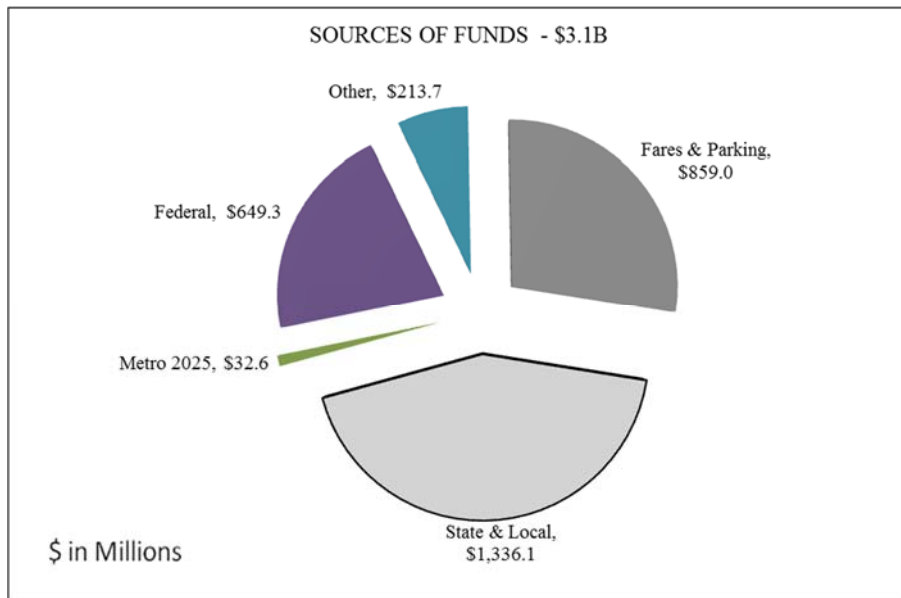
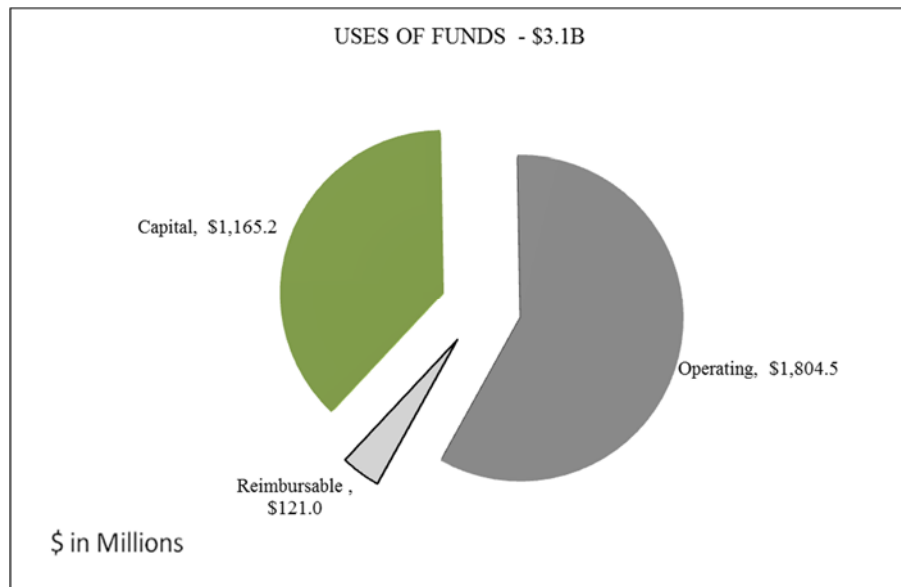


Figure 1.2





## Chapter 2 - Approved FY2016 Budget



*Metrobus, 8000 Series*





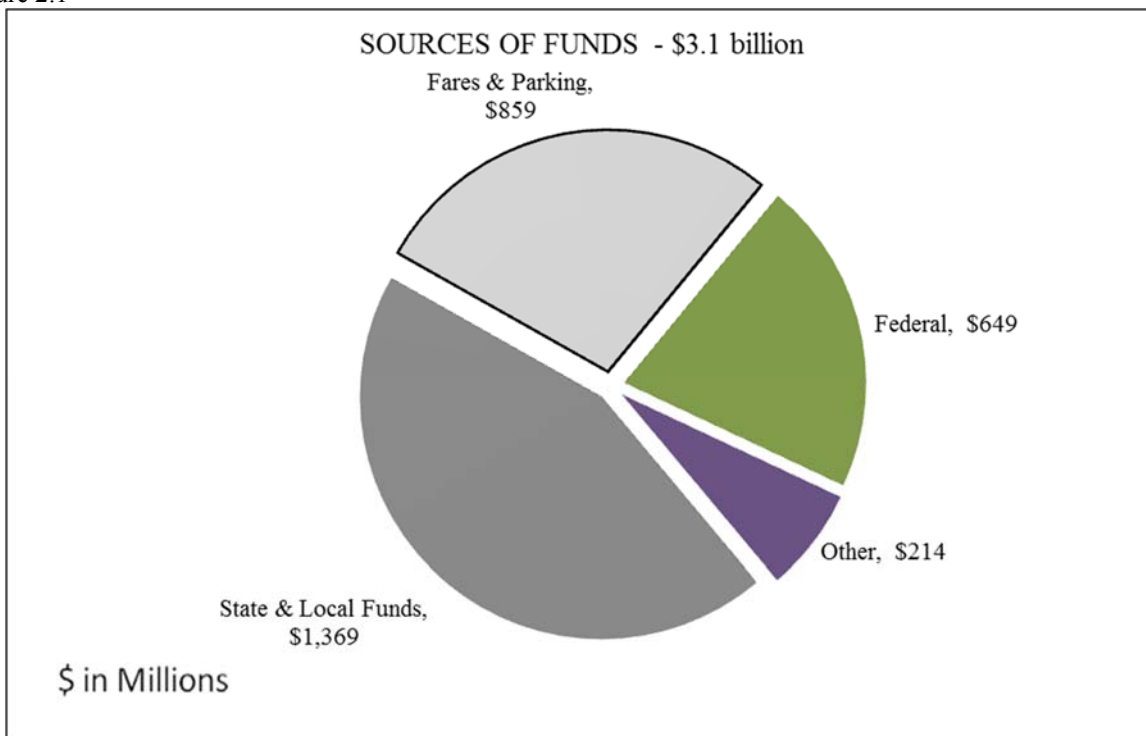
## FY2016 Approved Budget

This section provides information on the sources of funds for the Fiscal Year 2016 Approved Annual Budget. An explanation of the allocation of the operating subsidy and capital budget contribution provided to Metro by state and local government partners is also included.

A total of \$3.1 billion has been approved for the operating (\$1.8 billion), reimbursable (\$121 million) and capital (\$1.2 billion) budgets. The funding for the operating, reimbursable, and capital budgets is comprised of the following sources:

- Passenger fares and parking fees of \$859.3 million;
- State and local funding of \$1.4 billion, consisting of \$866.5 million in operating funds, \$26.2 million for the reimbursable budget, and \$476.0 million in capital investments which includes \$32.6 million of previously received Metro 2025 funding;
- Federal funding of \$649.3 million, consisting of \$455.7 million in formula and other grants (including resiliency grants) and \$193.6 million in dedicated PRIIA funding;
- Other funding, including advertising, joint development, fiber optic revenues, reimbursable support from MWAA for the Silver Line, and other sources totaling \$213.7 million.

Figure 2.1



**Approved Fiscal Year 2016 Operating Revenues**

The approved operating revenue for FY2016 is \$938.0 million, consisting of projected passenger fares and parking fees of \$859.0 million; business revenues of \$45.0 million from advertising, joint development, and fiber optic leases; and other non-passenger revenues of \$34.0 million, which includes one-time revenues of \$27.0 million from the now-closed Transit Infrastructure Investment Fund (TIIF) to support Metrorail expenses, as well as \$7.0 million of other miscellaneous revenues.

Table 2.1

<b>Operating Revenue</b>						
<i>(\$ in Millions)</i>	<b>Actual</b>	<b>Actual<sup>3</sup></b>	<b>Approved</b>	<b>Approved</b>	<b>Variance to FY15</b>	
	<b><u>2013</u></b>	<b><u>2014</u></b>	<b><u>2015</u></b>	<b><u>2016</u></b>	<b><u>\$ Chg.</u></b>	<b><u>% Chg.</u></b>
Passenger Fares <sup>1</sup>	\$ 760.2	\$ 754.1	\$ 847.8	\$ 810.0	(\$ 37.8)	-4%
Parking	\$ 45.6	\$ 46.6	\$ 48.4	\$ 49.0	\$ 0.6	1%
Advertising	\$ 16.7	\$ 19.8	\$ 20.0	\$ 20.5	\$ 0.5	3%
Joint Development	\$ 6.6	\$ 7.4	\$ 7.0	\$ 8.0	\$ 1.0	14%
Fiber Optics	\$ 15.6	\$ 15.5	\$ 16.0	\$ 16.5	\$ 0.5	3%
Other Nontransit Sources <sup>2</sup>	\$ 8.8	\$ 10.1	\$ 6.8	\$ 34.0	\$ 27.2	400%
<b>Total Revenue</b>	<b>\$ 853.6</b>	<b>\$ 853.4</b>	<b>\$ 946.0</b>	<b>\$ 938.0</b>	<b>(\$ 8.0)</b>	<b>-1%</b>

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

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

<sup>3</sup> FY2014 year-end financial audit not yet complete as of the approval of the FY2016 budget.

**Approved Fiscal Year 2016 Ridership**

The approved FY2016 budget uses the FY2015 approved ridership as a baseline, modified for the anticipated ridership impacts of both internal service delivery decisions as well as external variables that affect passenger trip-making.

Table 2.2

<b>Ridership by Service</b>				
<i>(Trips in thousands)<sup>1</sup></i>	<b>FY2013</b>	<b>FY2014</b>	<b>FY2015</b>	<b>FY2016</b>
	<b><u>Actual</u></b>	<b><u>Actual</u></b>	<b><u>Approved</u></b>	<b><u>Approved</u></b>
Metrorail	208,969	204,067	222,868	209,900
Metrobus	132,065	134,408	139,124	140,100
MetroAccess	2,033	2,126	2,123	2,335
<b>Total</b>	<b>343,068</b>	<b>340,601</b>	<b>364,115</b>	<b>352,335</b>

<sup>1</sup> 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.

## **FY2016 Revenue and Ridership**

FY2016 projected revenue has been modified from the FY2015 base to account for changes in external factors that impact Metro's ridership, including changes to employment in the District of Columbia and the region, population growth rates, and other economic factors. Following the system-wide fare changes that were implemented for FY2015, and in keeping with the Board's stated policy to consider fare changes on a biannual basis, no broad fare changes have been included in this approved budget. However, the budget does include an increase in the daily parking fee at one station, as well as changes to the hours of collection for weekday parking fees.

Metro uses a set of econometric forecasting models to develop its ridership projections for Metrorail, Metrobus, and MetroAccess. The models use economic data from a variety of sources, including projections from Moody's Analytics for key inputs and an assessment of current and future economic conditions. Two of the strongest indicators for forecasting ridership trends are population and employment expectations for the District of Columbia. The models also utilize other variables that capture both trend and seasonality effects, including the number of hotel rooms sold in the regional core and the number of construction jobs in the District of Columbia.

### **Passenger Revenue**

#### ***Metrorail***

The approved Metrorail passenger revenue budget for FY2016 is \$636.0 million, a decrease of \$39.6 million or approximately 5.8 percent below the approved FY2015 budget level. Through the first ten months of FY2015, ridership on Metrorail has been below budget as a result of a number of factors. The primary causes appear to be the reduction in the federal transit benefit, the ongoing stagnation and decline in federal employment in the region, and the recent decline in gas prices.

- The reduction of the federal transit benefit to well below parity with the federal parking benefit (currently at \$130 per month for transit compared to \$250 per month for parking) raises the out-of-pocket cost of commuting by transit, particularly for suburban commuters making longer-distance trips and those who park-and-ride to access the Metrorail system. Rather than supplementing the lower subsidy with their own funds, some riders are choosing not to ride Metrorail and are either traveling by another mode (e.g., driving and parking) or are no longer traveling as frequently.
- Federal employment in the region (both direct employees and contractors) continues to stagnate and decline, as demonstrated by detailed employment data provided by Moody's Analytics. This decline is due to a number of causes, including sequestration, an increasing number of retirements of older employees (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 being felt by Metro.
- More recently, beginning in the fall of 2014, gas prices dropped to levels not seen since 2009-10 just after the financial crisis and recession. All else equal, this price decline can make driving a more attractive option, and ridership during the fall and winter of 2014 in particular appears to have been negatively affected.

There are a number of other factors that are also having a smaller negative impact on rail ridership, including telecommuting and alternative work schedules, which are heavily promoted by federal departments and agencies (and ridership on Fridays in particular shows the impact of these policies), and mode shifts to other non-automobile, non-Metrorail modes including bus and biking, particularly due to the success of Capital Bikeshare for short trips in the urban core.

### ***Metrobus***

The approved Metrobus passenger revenue budget for FY2016 is \$165.6 million, an increase of \$1.3 million or 0.8 percent over the approved FY2015 budget. Metrobus performance in the years following the 2009-2010 recession has been good, as passengers have responded positively to the combination of low fares and high quality service (e.g., new bus fleet, improved reliability and on-time performance). Demand for Metrobus has been particularly strong in certain corridors such as 16<sup>th</sup> Street in the District of Columbia, where adding capacity and improving travel time has been a major initiative. In addition, the Kids Ride Free program for District of Columbia students continues to be successful, carrying 20,000 - 25,000 student rides on an average weekday. (Total budgeted revenue associated with the DC school subsidy program is approximately \$11.0 million, of which the majority is associated with the bus mode.)

### ***MetroAccess***

MetroAccess forecasted passenger revenue for FY2016 is \$8.5 million, an increase of \$0.5 million over the FY2015 approved budget. MetroAccess registrations and ridership are projected to increase in FY2016, continuing the current trend dating back to FY2014. As the population continues to age and disability rates continue to rise, the utilization of MetroAccess is also expected to continue to grow. Metro is working cooperatively with the local jurisdictions to encourage alternate travel options for MetroAccess patrons, including taxicabs in the District of Columbia (through a pilot program for dialysis patients) and human services agencies in Maryland. These alternative approaches have the potential to save money for the jurisdictions and to offer more flexible and specialized services for riders.

### **Parking**

Total parking revenue for FY2016 is budgeted at \$49.0 million, a slight increase of \$0.6 million compared to FY2015 based on the increased hours of parking fee collection. Parking utilization continues to vary substantially by location across the region, with increases in utilization in Montgomery County and the District of Columbia while utilization in Prince George's County has declined slightly, partly as a result of the additional \$0.50 surcharge increase that was imposed as part of the FY2015 budget. Parking in Northern Virginia along the Orange Line has shifted substantially as a result of the opening of the Silver Line and the addition of 2300 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 to 75 percent (comparing September YTD in FY2014 to FY2015).

## **Non-Passenger Revenue**

### ***Advertising***

Total advertising revenue in FY2016 is projected at \$20.5 million, an increase of \$0.5 million over the FY2015 budget. A new multi-year advertising contract that commenced in FY2015 is bringing in additional revenue, and the upcoming implementation of digital advertising is expected to provide additional revenue growth in FY2017 and beyond. However, this growth may be offset by a temporary ban on the sale of issue-oriented advertising which represents three to five percent of annual transit advertising revenue.

### ***Joint Development***

The FY2016 Joint Development revenue allocated to the operating budget is \$8.0 million, a \$1.0 million increase from the FY2015 budget. FY2014 revenues in this category were \$7.4 million. These revenues tend to grow moderately over time as leases are renegotiated. However, there is limited opportunity for major growth 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 Metro Fiber Optic Program, initiated in September 1986, has allowed for the installation, operation, and maintenance of a fiber optic-based telecommunication network that utilizes excess capacity within the Metro right-of-way. Metro also receives a number of fibers for its own use as part of the compensation package. For FY2016, fiber optic revenue is projected at \$16.5 million, a \$0.5 million increase from the FY2015 approved budget.

### ***Other Revenue***

Other revenue in the approved FY2016 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 \$7.0 million to FY2016 non-passenger revenues, an increase of \$0.2 million from the FY2015 budget. In addition, as noted above, this category also includes one-time revenues of \$27.0 million from the now-closed Transit Infrastructure Investment Fund (TIIF) to support Metrorail expenses.

Table 2.3

<b>OPERATING BUDGET REVENUES</b>					
<i>(figures in thousands)</i>					
	<u>Actual 2013</u>	<u>Actual 2014</u>	<u>Approved 2015</u>	<u>Approved 2016</u>	<u>Change</u>
<b>Metrobus</b>					
Passenger	\$138,734	\$141,421	\$155,675	\$156,835	\$1,160
Other Passenger	3,262	8,404	8,554	8,725	171
Parking	0	0	0	0	0
Advertising	11,143	13,297	13,361	13,695	334
Joint Development	0	0	0	0	0
Fiber Optics	0	0	0	0	0
Other	3,659	1,900	2,030	2,080	51
<b>Subtotal</b>	<b>\$156,798</b>	<b>\$165,022</b>	<b>\$179,619</b>	<b>\$181,335</b>	<b>\$1,717</b>
<b>Metrorail</b>					
Passenger	\$605,538	\$593,324	\$671,743	\$632,133	(\$39,610)
Other Passenger	4,376	3,410	3,818	3,818	0
Parking	45,640	46,614	48,410	49,000	590
Advertising	5,589	6,549	6,633	6,805	172
Joint Development	6,601	7,360	7,000	8,000	1,000
Fiber Optics	15,634	15,467	16,000	16,500	500
Other	5,101	8,153	4,769	31,909	27,140
<b>Subtotal</b>	<b>\$688,480</b>	<b>\$680,876</b>	<b>\$758,374</b>	<b>\$748,165</b>	<b>(\$10,209)</b>
<b>MetroAccess</b>					
Passenger	\$8,280	\$7,542	\$8,041	\$8,500	\$459
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	76	(1)	0	0	0
<b>Subtotal</b>	<b>\$8,356</b>	<b>\$7,542</b>	<b>\$8,041</b>	<b>\$8,500</b>	<b>\$459</b>
<b>Total</b>					
Passenger	\$752,552	\$742,288	\$835,459	\$797,468	(\$37,991)
Other Passenger	7,638	11,814	12,372	12,543	171
Parking	45,640	46,614	48,410	49,000	590
Advertising	16,732	19,846	19,994	20,500	506
Joint Development	6,601	7,360	7,000	8,000	1,000
Fiber Optics	15,634	15,467	16,000	16,500	500
Other	8,835	10,052	6,799	33,989	27,191
<b>Grand Total</b>	<b>\$853,633</b>	<b>\$853,439</b>	<b>\$946,033</b>	<b>\$938,000</b>	<b>(\$8,033)</b>



## FY2016 Approved Operating Subsidy

The FY2016 approved jurisdictional operating funding is \$866.5 million, an increase of \$87 million over the FY2015 approved subsidy budget (including debt service and prior year surplus). This includes:

- FY2016 net operating subsidy for Metrobus, Metrorail, and MetroAccess of \$845 million, an increase of \$67 million from FY2015.
- Debt service payments of \$21.2 million, approximately the same as FY2015.

Table 2.4

(millions)	Jurisdictional Operating Subsidy			
	Approved FY2013	Approved FY2014	Approved FY2015	Approved FY2016
<b>Net Subsidy<sup>1</sup></b>	\$669	\$732	\$778	<b>\$845</b>
Year over year growth	7.6%	9.5%	6.2%	<b>8.6%</b>
<b>Total Subsidy<sup>2</sup></b>	\$707	\$735	\$779	<b>\$867</b>
Year over year growth	5.4%	3.9%	6.0%	<b>11.2%</b>
<sup>1</sup> Excluding debt service and application of prior year surpluses				
<sup>2</sup> Including debt service and application of prior year surpluses				

Table 2.5

FISCAL YEAR 2016 BUDGET									
SUMMARY OF STATE/LOCAL OPERATING REQUIREMENTS									
	Total	District of Columbia	Montgomery County	Prince George's County	City of Alexandria	Arlington County	City of Fairfax	Fairfax County	City of Falls Church
<b>Metrobus Operating Subsidy</b>									
Regional Bus Subsidy	\$369,385,178	\$155,440,859	\$53,255,459	\$63,632,858	\$17,203,468	\$27,444,632	\$597,936	\$50,581,291	\$1,228,675
Non-Regional Bus Subsidy	\$73,155,110	\$30,543,873	\$9,079,092	\$22,400,030	\$1,924,927	\$1,968,157	\$0	\$7,239,031	\$0
Subtotal	\$442,540,287	\$185,984,732	\$62,334,551	\$86,032,888	\$19,128,395	\$29,412,789	\$597,936	\$57,820,321	\$1,228,675
Percent of Total	100%	42.0%	14.1%	19.4%	4.3%	6.6%	0.1%	13.1%	0.3%
<b>Metrorail Operating Subsidy</b>									
Base Allocation	\$282,889,722	\$96,268,902	\$52,270,898	\$46,185,130	\$13,348,059	\$27,648,485	\$913,840	\$45,400,669	\$853,740
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	\$290,086,582	\$96,957,323	\$55,473,851	\$47,646,663	\$13,641,264	\$27,835,196	\$974,247	\$46,665,929	\$892,108
Percent of Total	100%	33.4%	19.1%	16.4%	4.7%	9.6%	0.3%	16.1%	0.3%
<b>MetroAccess Subsidy</b>									
Percent of Total	\$112,701,400	\$29,299,375	\$21,310,504	\$45,982,391	\$1,067,486	\$1,000,732	\$268,822	\$13,661,240	\$110,850
	100%	26.0%	18.9%	40.8%	0.9%	0.9%	0.2%	12.1%	0.1%
<b>Net Operating Subsidy</b>									
	\$845,328,269	\$312,241,431	\$139,118,905	\$179,661,942	\$33,837,145	\$58,248,716	\$1,841,005	\$118,147,491	\$2,231,634
	100%	36.9%	16.5%	21.3%	4.0%	6.9%	0.2%	14.0%	0.3%
Metro Matters Debt Service	\$21,174,506	\$10,671,951	\$4,944,247	\$5,505,372	\$0	\$0	\$0	\$0	\$52,936
Total Debt Service	\$21,174,506	\$10,671,951	\$4,944,247	\$5,505,372	\$0	\$0	\$0	\$0	\$52,936
<b>Jurisdictional Operating Funding</b>									
	\$866,502,775	\$322,913,382	\$144,063,152	\$185,167,314	\$33,837,145	\$58,248,716	\$1,841,005	\$118,147,491	\$2,284,570

## Capital Funding Sources

Metro's approved FY2016-2021 Capital Improvement Program (CIP) financial plan relies on a forecasted investment of \$6.2 billion from the federal government, state and local governments, and other sources. Of the \$6.2 billion six-year plan: \$2.8 billion comes from federal funding; state and local contributions total \$2.3 billion, this includes the planned use of Metro 2025 funding; other sources constitute \$108.0 million; and net financing during the period totals \$984.4 million. A more detailed discussion of the capital funding sources can be found in Chapter 4, FY2016 Approved Capital Budget.

Table 2.6

Washington Metropolitan Area Transit Authority FY2016-2021 Capital Improvement Program (CIP) Financial Plan (dollars in millions)								
		Six-Year Plan						
	FY2015 Forecast	FY2016 Budget	FY2017 Forecast	FY2018 Forecast	FY2019 Forecast	FY2020 Forecast	FY2021 Forecast	FY16-FY21 Total
<b>Federal</b>								
Federal Formula Programs	\$ 242.7	\$ 421.5	\$ 287.3	\$ 287.3	\$ 287.3	\$ 287.3	\$ 287.3	\$ 1,857.9
Federal PRIIA	\$ 123.7	\$ 193.6	\$ 159.6	\$ 150.0	\$ 150.0	\$ 150.0	\$ 150.0	\$ 953.2
Resiliency Grant	\$ 0.2	\$ 3.9	\$ 8.0	\$ 6.0	\$ -	\$ -	\$ -	\$ 17.9
Other Federal Grants	\$ 13.2	\$ 30.2	\$ 0.6	\$ 5.5	\$ 5.9	\$ 3.6	\$ 3.6	\$ 49.5
Subtotal Federal	\$ 379.8	\$ 649.3	\$ 455.5	\$ 448.8	\$ 443.2	\$ 440.9	\$ 440.9	\$ 2,878.5
<b>State and Local</b>								
Match to Federal Formula	\$ 60.9	\$ 105.4	\$ 71.8	\$ 71.8	\$ 71.8	\$ 71.8	\$ 71.8	\$ 464.5
System Performance	\$ 127.6	\$ 118.6	\$ 117.2	\$ 122.9	\$ 129.0	\$ 135.4	\$ 142.1	\$ 765.3
State and Local PRIIA	\$ 123.7	\$ 193.6	\$ 159.6	\$ 150.0	\$ 150.0	\$ 150.0	\$ 150.0	\$ 953.2
Match to Resiliency Grant	\$ 0.1	\$ 1.3	\$ 2.7	\$ 2.0	\$ -	\$ -	\$ -	\$ 6.0
Rail Power System Upgrades	\$ -	\$ 17.7	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 17.7
Other State and Local	\$ 1.3	\$ 6.7	\$ 0.2	\$ 1.4	\$ 1.5	\$ 0.9	\$ 0.9	\$ 11.5
Subtotal State and Local	\$ 313.6	\$ 443.4	\$ 351.4	\$ 348.1	\$ 352.3	\$ 358.1	\$ 364.8	\$ 2,218.2
<b>Other Sources</b>								
MetroMatters	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Insurance Proceeds	\$ 1.8	\$ 9.2	\$ 3.4	\$ -	\$ -	\$ -	\$ -	\$ 12.6
Land Sale Proceeds	\$ 1.5	\$ 27.3	\$ 3.7	\$ -	\$ -	\$ -	\$ -	\$ 31.0
Joint Development Proceeds	\$ -	\$ 3.5	\$ 11.1	\$ 13.5	\$ 8.9	\$ 3.5	\$ 23.5	\$ 64.0
Miscellaneous	\$ 15.0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Subtotal Other Sources	\$ 18.4	\$ 39.9	\$ 18.2	\$ 13.5	\$ 8.9	\$ 3.5	\$ 23.5	\$ 107.6
<b>Financing</b>								
Planned Long-Term Financing	\$ -	\$ -	\$ 355.0	\$ 235.9	\$ 165.9	\$ 140.3	\$ 87.3	\$ 984.4
Subtotal Financing	\$ -	\$ -	\$ 355.0	\$ 235.9	\$ 165.9	\$ 140.3	\$ 87.3	\$ 984.4
<b>Metro 2025 Investment</b>								
Metro 2025 Investment	\$ 42.5	\$ 32.5	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 32.5
Subtotal Metro 2025	\$ 42.5	\$ 32.5	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 32.5
<b>Total</b>	<b>\$ 754.2</b>	<b>\$ 1,165.2</b>	<b>\$ 1,180.1</b>	<b>\$ 1,046.2</b>	<b>\$ 970.3</b>	<b>\$ 942.8</b>	<b>\$ 916.5</b>	<b>\$ 6,221.2</b>



## Chapter 3 – FY2016 Approved Operating Budget



*Route 30N - Friendship Heights (NW) to Naylor Road (SE)*



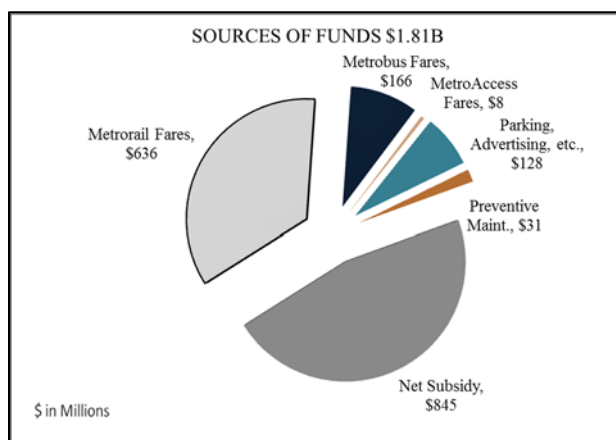
## FY2016 Approved Operating Budget

This section provides information on Metro's three primary transit services – Metrobus, Metrorail and MetroAccess. Operating expenses, anticipated revenues and subsidy are provided for each service. Operating expenses for each service include a proportional share of administrative costs.

### *Sources of Funds*

The largest source of funding is from the net local subsidy of \$845.0 million or 47.0 percent of total expenses. The second largest source of funding comes from passenger fare revenue at \$810.0 million or 45.0 percent, from Metrobus, Metrorail and MetroAccess. The remaining \$128.0 million comes from parking, advertising, fiber optic leases and other revenues, including the use of federal grant funding for preventive maintenance.

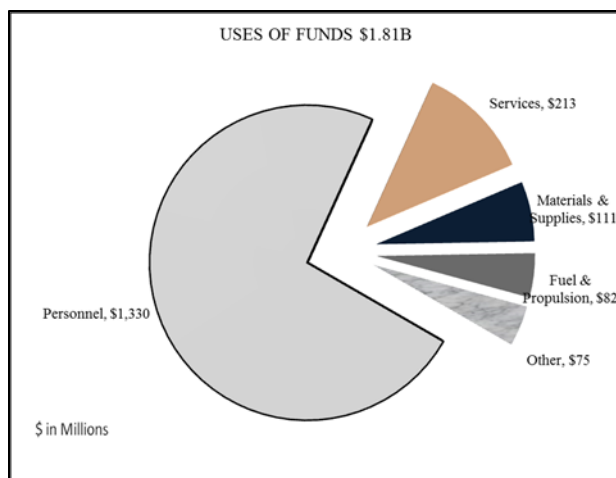
Figure 3.1



### *Uses of Funds*

The largest operating budget expenditure area is Personnel at \$1,330.0 million or 74.0 percent, followed by Services with expenses totaling \$213.0 million or 12.0 percent.

Figure 3.2



*Note: Does not include Operating Reimbursable projects*

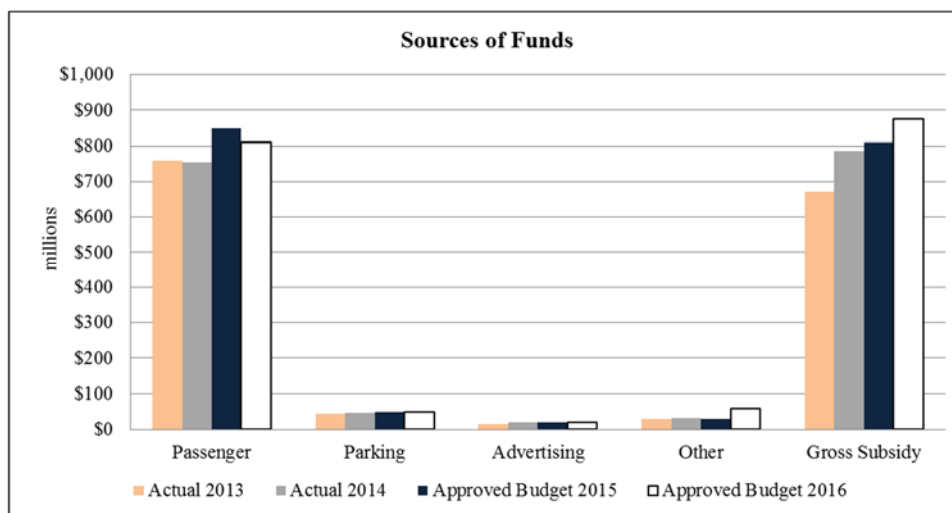
Table 3.3

WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY REVENUE, EXPENSE & FUNDING SOURCES SUBSIDIZED BY ACCOUNT (DOLLARS IN THOUSANDS)					
	Actual <u>2013</u>	Actual <u>2014</u>	Approved Budget <u>2015</u>	Approved Budget <u>2016</u>	<u>\$ Variance</u>
Passenger	752,552	742,288	835,459	797,468	(37,991)
Other Passenger	7,638	11,814	12,372	12,543	171
Parking	45,640	46,614	48,410	49,000	590
Charter	0	0	0	0	0
Advertising	16,732	19,846	19,994	20,500	506
Joint Development	6,612	7,360	7,000	8,000	1,000
Other	8,635	10,071	6,318	33,989	27,672
Employee Parking	145	137	150	0	(150)
Interest	45	(156)	331	0	(331)
Fiber Optics	15,634	15,467	16,000	16,500	500
Total Revenues	\$853,633	\$853,439	\$946,033	\$938,000	(\$8,033)
EXPENSES					
Personnel	1,078,701	1,195,686	1,272,169	1,330,379	58,210
Services	202,773	179,235	209,653	213,250	3,597
Materials & Supplies	96,411	108,815	105,702	111,041	5,340
Fuel & Propulsion Power	75,592	78,955	89,619	81,574	(8,045)
Utilities	33,066	36,102	39,732	42,400	2,668
Casualty & Liability	33,838	34,046	29,568	24,305	(5,264)
Leases & Rentals	4,802	5,769	6,766	6,796	29
Miscellaneous	436	961	1,576	4,282	2,706
Total Expenses	\$1,525,618	\$1,639,570	\$1,754,786	\$1,814,028	59,242
GROSS SUBSIDY	\$671,985	\$786,131	\$808,753	\$876,028	\$67,276
Preventive Maintenance	(\$30,700)	(\$30,700)	(\$30,700)	(\$30,700)	\$0
Net Local Subsidy	\$641,285	\$755,431	\$778,053	\$845,328	\$67,276
Cost Recovery Ratio	56.0%	52.1%	53.9%	51.7%	



From FY2013 to FY2016, passenger fares have continued to be a primary source of revenue, growing by \$49.8 million or 6.6 percent. Gross subsidy has increased by \$114.1 million or 17.0 percent from FY2013 to FY2014 and is budgeted to grow by \$67.2 million or 8.3 percent from FY2015 to FY2016.

Figure 3.4



FY2016 personnel costs for the operating budget are \$1.3 billion, a projected increase of \$58.2 million or 4.6 percent over FY2015. These cost increases are driven by a combination of service increases including the continuation of Silver Line service, Bus Priority Corridors and the Bus “State of Good Operations” initiative, benefit increases, as well as the fiscal impacts associated with new collective bargaining agreements between Metro and all unions whose combined membership represents the majority of Metro’s employees. Offsetting these personnel increases is a reduction of 50 non-safety sensitive positions to manage employee expense growth. Benefits are budgeted to increase by \$20.3 million or 4.9 percent. FY2016 service expenses for the operating budget are \$213.2 million, an increase of \$3.6 million, or 1.7 percent, over FY2015. This increase is due mainly to projected growth in the Paratransit service contract as a result of increased ridership.

Figure 3.5

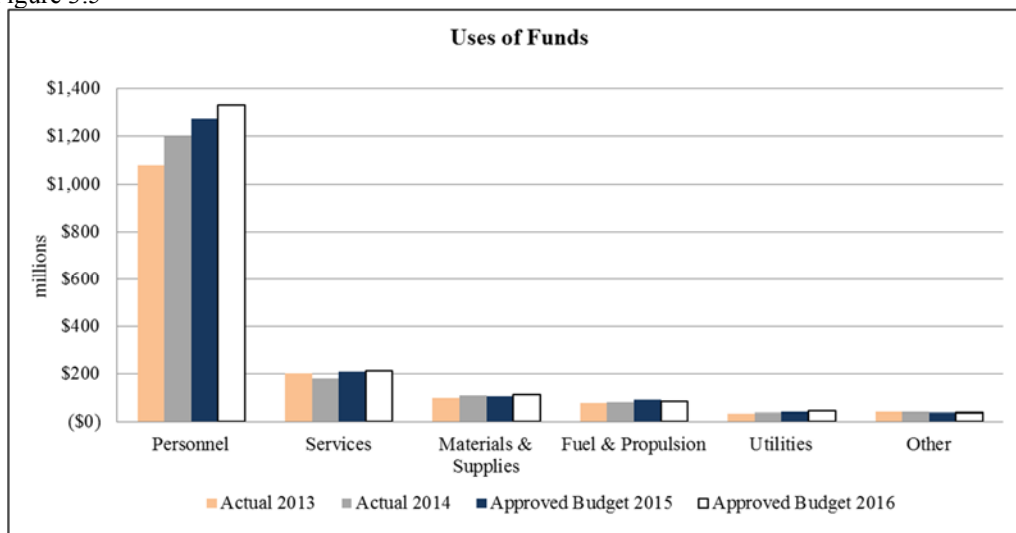


Table 3.6

OPERATING BUDGET REVENUES AND EXPENSES				
<i>(Dollars in Thousands)</i>	<b>Approved Budget 2016</b>	<b>BUS Budget 2016</b>	<b>RAIL Budget 2016</b>	<b>ACCESS Budget 2016</b>
<b>REVENUES</b>				
Passenger	\$797,468	\$156,835	\$632,133	\$8,500
Other Passenger	\$12,543	\$8,725	\$3,818	\$0
Parking	\$49,000	\$0	\$49,000	\$0
Advertising	\$20,500	\$13,695	\$6,805	\$0
Joint Development	\$8,000	\$0	\$8,000	\$0
Fiber Optics	\$16,500	\$0	\$16,500	\$0
Other	\$33,989	\$2,080	\$31,909	\$0
<b>Total Revenues</b>	<b>\$938,000</b>	<b>\$181,335</b>	<b>\$748,164</b>	<b>\$8,500</b>
<b>EXPENSES</b>				
Personnel	\$1,330,379	\$507,695	\$812,880	\$9,805
Services	\$213,250	\$37,582	\$77,181	\$98,487
Materials & Supplies	\$111,041	\$35,850	\$64,254	\$10,938
Fuel & Propulsion Power	\$81,574	\$29,728	\$51,847	\$0
Utilities	\$42,400	\$8,948	\$33,354	\$99
Casualty & Liability	\$24,305	\$9,421	\$14,429	\$454
Leases & Rentals	\$6,796	\$2,250	\$3,253	\$1,294
Miscellaneous	\$4,282	\$2,841	\$1,316	\$126
<b>Total Expenses</b>	<b>\$1,814,028</b>	<b>\$634,314</b>	<b>\$1,058,513</b>	<b>\$121,201</b>
<b>GROSS SUBSIDY</b>				
Preventive Maintenance	(\$30,700)	(\$10,438)	(\$20,262)	\$0
<b>Net Local Subsidy</b>	<b>\$845,328</b>	<b>\$442,540</b>	<b>\$290,087</b>	<b>\$112,701</b>
<b>Cost Recovery Ratio</b>	<b>51.7%</b>	<b>28.6%</b>	<b>70.7%</b>	<b>7.0%</b>

Table 3.7

FY2016 APPROVED OPERATING EXPENSE BUDGET						
AUTHORITY WIDE						
2016						
(Dollars in Thousands)	Actual 2013	Actual 2014	Approved Budget 2015	Approved Budget 2016	\$ Variance	% Change
<b>Salaries (Total)</b>	<b>\$231,674</b>	<b>\$254,170</b>	<b>\$265,160</b>	<b>\$292,731</b>	<b>\$27,571</b>	<b>10.4%</b>
Full-Time Salaries	\$217,827	\$240,906	\$261,426	\$286,020	\$24,594	
Salary Lapse	\$0	\$0	(\$6,541)	(\$7,243)	(\$702)	
Overtime Salaries	\$13,848	\$13,264	\$10,275	\$13,955	\$3,679	
<b>Wages (Total)</b>	<b>\$511,471</b>	<b>\$553,140</b>	<b>\$596,759</b>	<b>\$607,096</b>	<b>\$10,336</b>	<b>1.7%</b>
Operator/StaMgr Wages	\$213,952	\$224,268	\$256,709	\$256,605	(\$104)	
Operator/StaMgr Overtime	\$43,721	\$45,626	\$43,508	\$43,503	(\$5)	
Full Time Wages	\$231,473	\$264,057	\$283,267	\$296,422	\$13,155	
Wage Lapse	\$0	\$0	(\$7,868)	(\$9,773)	(\$1,905)	
Overtime Wages	\$22,325	\$19,190	\$21,143	\$20,339	(\$804)	
<b>TOTAL SALARIES AND WAGES</b>	<b>\$743,146</b>	<b>\$807,310</b>	<b>\$861,920</b>	<b>\$899,827</b>	<b>\$37,908</b>	<b>4.4%</b>
<b>Fringes (Total)</b>	<b>\$335,555</b>	<b>\$388,376</b>	<b>\$410,249</b>	<b>\$430,552</b>	<b>\$20,303</b>	<b>4.9%</b>
Fringe Health	\$212	\$184	\$164,360	\$173,282	\$8,922	
Fringe Pension	\$0	\$0	\$147,408	\$149,543	\$2,136	
Other Fringe Benefits	\$318,768	\$370,262	\$74,482	\$83,333	\$8,851	
Workers Compensation	\$16,576	\$17,930	\$23,999	\$24,393	\$394	
<b>TOTAL PERSONNEL COST</b>	<b>\$1,078,701</b>	<b>\$1,195,686</b>	<b>\$1,272,169</b>	<b>\$1,330,379</b>	<b>\$58,210</b>	<b>4.6%</b>
<b>Services (Total)</b>	<b>\$202,773</b>	<b>\$179,235</b>	<b>\$209,653</b>	<b>\$213,250</b>	<b>\$3,597</b>	<b>1.7%</b>
Management Fee	\$1,697	\$129	\$166	\$166	\$0	
Professional & Technical	\$25,668	\$17,259	\$29,803	\$28,861	(\$942)	
Temporary Help	\$2,337	\$2,112	\$2,697	\$2,706	\$9	
Contract Maintenance	\$44,180	\$43,377	\$48,436	\$48,774	\$338	
Custodial Services	\$30	\$25	\$133	\$83	(\$50)	
Paratransit	\$93,302	\$85,276	\$87,673	\$92,957	\$5,284	
Other	\$35,558	\$31,056	\$40,746	\$39,703	(\$1,043)	
<b>Materials &amp; Supplies (Total)</b>	<b>\$96,411</b>	<b>\$108,815</b>	<b>\$105,702</b>	<b>\$111,041</b>	<b>\$5,340</b>	<b>5.1%</b>
Fuel and Lubricants	\$5,628	\$14,913	\$18,685	\$22,035	\$3,350	
Tires	\$5,442	\$5,725	\$6,735	\$6,915	\$180	
Other	\$85,340	\$88,176	\$80,282	\$82,092	\$1,810	
<b>Fuel &amp; Propulsion (Total)</b>	<b>\$75,592</b>	<b>\$78,955</b>	<b>\$89,619</b>	<b>\$81,574</b>	<b>(\$8,045)</b>	<b>-9.0%</b>
Diesel Fuel	\$27,360	\$27,499	\$30,409	\$26,784	(\$3,625)	
Propulsion Power	\$48,347	\$48,218	\$56,755	\$55,383	(\$1,372)	
Clean Natural Gas	(\$115)	\$3,238	\$2,455	(\$593)	(\$3,048)	
<b>Utilities (Total)</b>	<b>\$33,066</b>	<b>\$36,102</b>	<b>\$39,732</b>	<b>\$42,400</b>	<b>\$2,668</b>	<b>6.7%</b>
Electricity and Gas	\$27,949	\$29,461	\$32,478	\$33,401	\$923	
Utilities - Other	\$5,117	\$6,642	\$7,254	\$8,999	\$1,745	
<b>Casualty &amp; Liability (Total)</b>	<b>\$33,838</b>	<b>\$34,046</b>	<b>\$29,568</b>	<b>\$24,305</b>	<b>(\$5,264)</b>	<b>-17.8%</b>
Insurance	\$16,466	\$16,158	\$16,807	\$17,419	\$612	
Claims	\$17,373	\$17,888	\$12,761	\$6,885	(\$5,876)	
<b>Leases (Total)</b>	<b>\$4,802</b>	<b>\$5,769</b>	<b>\$6,766</b>	<b>\$6,796</b>	<b>\$29</b>	<b>0.4%</b>
Property	\$1,972	\$2,046	\$2,610	\$2,610	\$0	
Equipment	\$2,830	\$3,723	\$4,157	\$4,186	\$29	
<b>Miscellaneous (Total)</b>	<b>\$436</b>	<b>\$961</b>	<b>\$1,576</b>	<b>\$4,282</b>	<b>\$2,706</b>	<b>171.7%</b>
Dues And Subscriptions	\$366	\$315	\$455	\$483	\$27	
Conferences and Meetings	\$114	\$142	\$242	\$243	\$0	
Business Travel/Public Hrg	\$320	\$380	\$779	\$727	(\$52)	
Interview & Relocation	\$586	\$834	\$24	\$729	\$706	
Advertising	\$2,624	\$2,970	\$2,495	\$2,472	(\$23)	
Other	\$1,633	\$1,015	\$1,039	\$2,905	\$1,866	
Reimbursements	(\$5,208)	(\$4,695)	(\$3,458)	(\$3,277)	\$182	
<b>TOTAL NONPERSONNEL COST</b>	<b>\$446,917</b>	<b>\$443,884</b>	<b>\$482,617</b>	<b>\$483,649</b>	<b>\$1,032</b>	<b>0.2%</b>
<b>TOTAL COST</b>	<b>\$1,525,618</b>	<b>\$1,639,570</b>	<b>\$1,754,786</b>	<b>\$1,814,028</b>	<b>\$59,242</b>	<b>3.4%</b>

Table 3.8

OPERATING COST BY MODE AUTHORITY-WIDE APPROVED FY2016 BUDGET				
<i>(Dollars in Thousands)</i>	<u>TOTAL</u>	<u>BUS</u>	<u>RAIL</u>	<u>MetroAccess</u>
<b>Salaries (Total)</b>	<b>\$292,731</b>	<b>\$81,075</b>	<b>\$205,117</b>	<b>\$6,540</b>
Full-Time Salaries	\$286,020	\$80,209	\$199,277	\$6,534
Salary Lapse	-\$7,243	-\$2,284	-\$4,836	-\$123
Overtime Salaries	\$13,955	\$3,150	\$10,676	\$129
<b>Wages (Total)</b>	<b>\$607,096</b>	<b>\$260,150</b>	<b>\$346,755</b>	<b>\$191</b>
Operator/StaMgr Wages	\$256,605	\$160,390	\$96,215	\$0
Operator/StaMgr Overtime	\$43,503	\$24,350	\$19,153	\$0
Full Time Wages	\$296,422	\$71,127	\$225,108	\$187
Wage Lapse	-\$9,773	-\$2,544	-\$7,225	-\$4
Overtime Wages	\$20,339	\$6,827	\$13,504	\$8
<b>TOTAL SALARIES AND WAGES</b>	<b>\$899,827</b>	<b>\$341,224</b>	<b>\$551,872</b>	<b>\$6,731</b>
<b>Fringes (Total)</b>	<b>\$430,552</b>	<b>\$166,470</b>	<b>\$261,008</b>	<b>\$3,073</b>
Fringe Health	\$173,282	\$68,053	\$103,887	\$1,342
Fringe Pension	\$149,543	\$56,708	\$91,716	\$1,119
Other Fringe Benefits	\$83,333	\$31,996	\$50,741	\$596
Workers Compensation	\$24,393	\$9,713	\$14,664	\$16
<b>TOTAL PERSONNEL COST</b>	<b>\$1,330,379</b>	<b>\$507,695</b>	<b>\$812,880</b>	<b>\$9,805</b>
<b>Services (Total)</b>	<b>\$213,250</b>	<b>\$37,582</b>	<b>\$77,181</b>	<b>\$98,487</b>
Management Fee	\$166	\$0	\$160	\$6
Professional & Technical	\$28,861	\$7,363	\$17,790	\$3,708
Temporary Help	\$2,706	\$847	\$1,855	\$5
Contract Maintenance	\$48,774	\$19,379	\$28,997	\$398
Custodial Services	\$83	\$83	\$0	\$0
Paratransit	\$92,957	\$0	\$0	\$92,957
Other	\$39,703	\$9,911	\$28,379	\$1,413
<b>Materials &amp; Supplies (Total)</b>	<b>\$111,041</b>	<b>\$35,850</b>	<b>\$64,254</b>	<b>\$10,938</b>
Fuel and Lubricants	\$22,035	\$5,043	\$6,293	\$10,700
Tires	\$6,915	\$6,662	\$253	\$0
Other	\$82,092	\$24,145	\$57,708	\$238
<b>Fuel &amp; Propulsion (Total)</b>	<b>\$81,574</b>	<b>\$29,728</b>	<b>\$51,847</b>	<b>\$0</b>
Diesel Fuel	\$26,784	\$26,784	\$0	\$0
Propulsion Power	\$55,383	\$0	\$55,383	\$0
Clean Natural Gas	-\$593	\$2,943	-\$3,536	\$0
<b>Utilities (Total)</b>	<b>\$42,400</b>	<b>\$8,948</b>	<b>\$33,354</b>	<b>\$99</b>
Electricity and Gas	\$33,401	\$6,488	\$26,873	\$41
Utilities - Other	\$8,999	\$2,460	\$6,481	\$58
<b>Casualty &amp; Liability (Total)</b>	<b>\$24,305</b>	<b>\$9,421</b>	<b>\$14,429</b>	<b>\$454</b>
Insurance	\$17,419	\$6,752	\$10,341	\$326
Claims	\$6,885	\$2,669	\$4,089	\$128
<b>Leases (Total)</b>	<b>\$6,796</b>	<b>\$2,250</b>	<b>\$3,253</b>	<b>\$1,294</b>
Property	\$2,610	\$789	\$670	\$1,150
Equipment	\$4,186	\$1,460	\$2,582	\$144
<b>Miscellaneous (Total)</b>	<b>\$4,282</b>	<b>\$2,841</b>	<b>\$1,316</b>	<b>\$126</b>
Dues And Subscriptions	\$483	\$186	\$287	\$9
Conferences and Meetings	\$243	\$78	\$152	\$12
Business Travel/Public Hrg	\$727	\$182	\$512	\$33
Interview & Relocation	\$729	\$379	\$325	\$25
Tolls	\$0	\$0	\$0	\$0
Advertising	\$2,472	\$1,265	\$1,202	\$4
Other	\$2,905	\$1,069	\$1,795	\$41
Reimbursements	-\$3,277	-\$320	-\$2,957	\$0
<b>TOTAL NONPERSONNEL COST</b>	<b>\$483,649</b>	<b>\$126,619</b>	<b>\$245,633</b>	<b>\$111,397</b>
<b>TOTAL COST</b>	<b>\$1,814,028</b>	<b>\$634,314</b>	<b>\$1,058,513</b>	<b>\$121,201</b>

## Operating Budget by Mode: Metrobus

### *Sources of Funds*

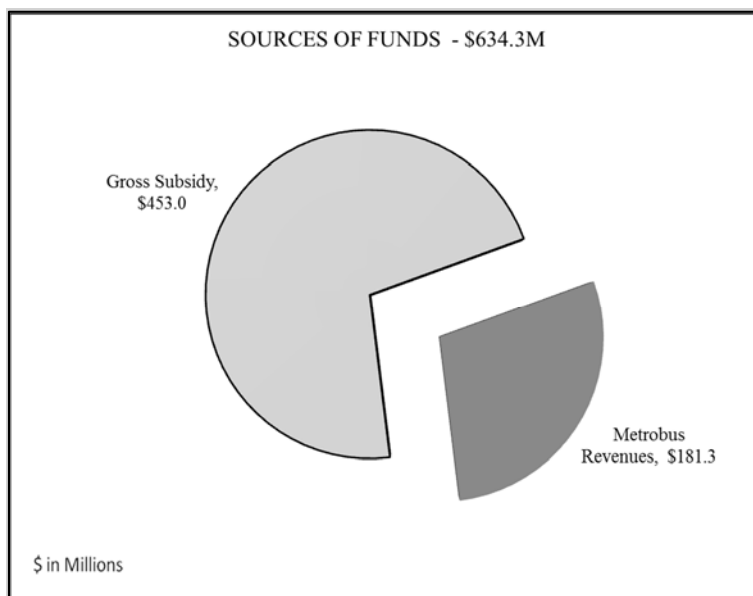
For FY2016 Approved Budget, Metrobus revenues include system revenue and gross subsidy from Metro's jurisdictional partners.

Total system revenue for Metrobus in FY2016 is projected at \$181.3 million. The larger component is passenger revenues, including fares and passes, which are estimated at \$165.5 million. This represents a growth of \$1.2 million over the FY2015 budget. The growth in fare and passenger revenues is tied to a projected ridership increase of 1.0 million trips.

Advertising revenue attributed to Metrobus will contribute \$13.7 million. This amount is \$0.3 million higher than the FY2015 budget.

Other Revenue, which includes rental revenue, third-party reimbursements, and other miscellaneous sources, will contribute \$2.1 million in FY2016.

Figure 3.9

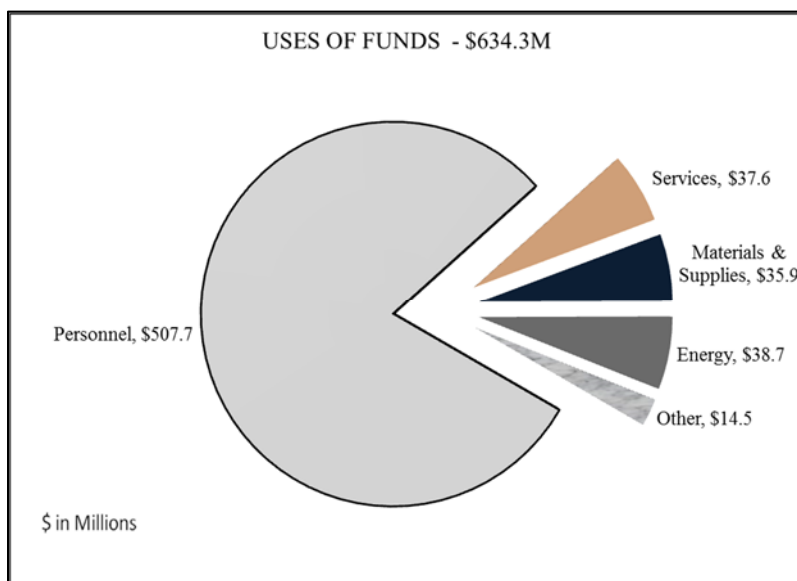


### ***Uses of Funds***

Total personnel expenses make up the largest portion of the Metrobus budget. For FY2016, personnel cost is estimated at \$507.7 million or 80.0 percent of the Metrobus budget, which represents an increase of \$18.2 million over the FY2015 budget. This increase reflects committed wage and benefit growth and additional staffing for the Fatigue Risk Management initiative.

Services are budgeted at \$37.6 million, which is \$0.4 million less than the FY2015 budget. The decrease reflects projected inflation associated with various services in support of Metrobus, offset by Approved service transfers. Materials and Supplies are budgeted at \$35.9 million, which is \$2.7 million more than the FY2015 budget. The increase right sizes the budget to address historical material utilization to maintain bus operations. Energy costs include fuel, propulsion, and utilities and are budgeted at \$38.7 million. This amount is \$4.7 million less than FY2015. The reduction is based on approved service levels and lower fuel costs. Other expenses approved for Metrobus total \$14.5 million, a decrease of \$0.5 million over the FY2015 budget.

Figure 3.10



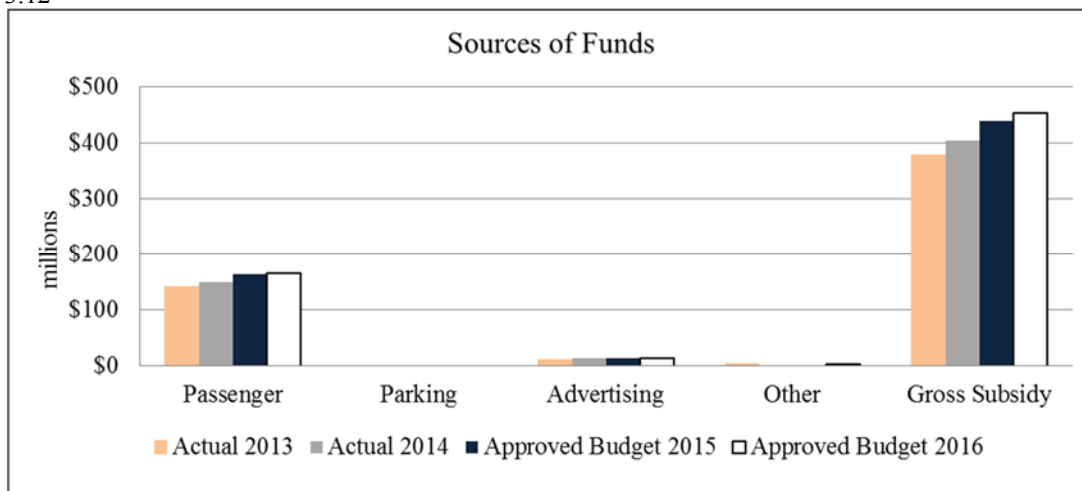
*Note: Excludes operating reimbursable projects*

Table 3.11

METROBUS BY ACCOUNT					
Revenue, Expenses and Funding Source					
<i>(Dollars in Thousands)</i>	<b>Actual</b>	<b>Actual</b>	<b>Approved</b>	<b>Approved</b>	
	<b><u>2013</u></b>	<b><u>2014</u></b>	<b><u>Budget</u></b>	<b><u>Budget</u></b>	<b><u>\$ Variance</u></b>
			<b><u>2015</u></b>	<b><u>2016</u></b>	
<b>REVENUES</b>					
Passenger	\$138,734	\$141,421	\$155,675	\$156,835	\$1,160
Other Passenger	\$3,262	\$8,404	\$8,554	\$8,725	\$171
Parking	\$0	\$0	\$0	\$0	\$0
Advertising	\$11,143	\$13,297	\$13,361	\$13,695	\$334
Joint Development	\$11	\$0	\$0	\$0	\$0
Fiber Optics	\$0	\$0	\$0	\$0	\$0
Other	\$3,615	\$1,875	\$1,729	\$2,080	\$352
Interest	\$33	\$25	\$301	\$0	(\$301)
<b>Total Revenues</b>	<b>\$156,799</b>	<b>\$165,022</b>	<b>\$179,619</b>	<b>\$181,335</b>	<b>\$1,717</b>
<b>EXPENSES</b>					
Personnel	\$425,338	\$458,614	\$489,527	\$507,695	\$18,167
Services	\$31,905	\$26,967	\$37,972	\$37,582	(\$390)
Materials & Supplies	\$28,166	\$31,184	\$33,136	\$35,850	\$2,715
Fuel & Propulsion Power	\$27,231	\$30,251	\$34,406	\$29,728	(\$4,679)
Utilities	\$6,773	\$7,821	\$8,429	\$8,948	\$519
Casualty & Liability	\$14,617	\$13,196	\$11,328	\$9,421	(\$1,907)
Leases & Rentals	\$1,191	\$1,204	\$1,919	\$2,250	\$331
Miscellaneous	\$457	(\$230)	\$1,743	\$2,841	\$1,097
<b>Total Expenses</b>	<b>\$535,679</b>	<b>\$569,006</b>	<b>\$618,461</b>	<b>\$634,314</b>	<b>\$15,853</b>
<b>GROSS SUBSIDY</b>	<b>\$378,880</b>	<b>\$403,985</b>	<b>\$438,842</b>	<b>\$452,978</b>	<b>\$14,136</b>
Less: Preventive Maint	(\$10,438)	(\$10,438)	(\$10,438)	(\$10,438)	\$0
<b>Net Local Subsidy</b>	<b>\$368,442</b>	<b>\$393,547</b>	<b>\$428,404</b>	<b>\$442,540</b>	<b>\$14,136</b>
<b>Cost Recovery Ratio</b>	<b>29.3%</b>	<b>29.0%</b>	<b>29.0%</b>	<b>28.6%</b>	<b>-0.5%</b>

Gross subsidy for Metrobus grew by \$25.1 million or 6.6 percent to \$403.9 million from FY2013 to FY2014 and is budgeted to grow by \$14.1 million or 3.2 percent to \$452.9 million from FY2015 to FY2016.

Figure 3.12



Personnel costs grew by \$33.3 million or 7.8 percent from FY2013 to FY2014 and are projected to grow by \$18.2 million or 3.7 percent from FY2015 to FY2016, primarily due to committed wage and benefit increases. Services decreased by \$4.9 million or 1.5 percent from FY2013 to FY2014 and are projected to decrease by \$0.4 million or 1.0 percent from FY2015 to FY2016. Materials and Supplies increased by \$3.0 million or 1.1 percent from FY2013 to FY2014 and are projected to increase by \$2.7 million or 8.2 percent from FY2015 to FY2016. Fuel and Propulsion cost grew by \$3.0 million or 11.1 percent from FY2013 to FY2014 and is projected to decrease by \$4.6 million or 13.6 percent from FY2015 to FY2016. Casualty & Liability cost decreased by \$1.4 million or 9.7 percent from FY2013 to FY2014 and is projected to decrease by \$1.9 million or 16.8 percent from FY2015 to FY2016. Other expenses remain relatively flat.

Figure 3.13

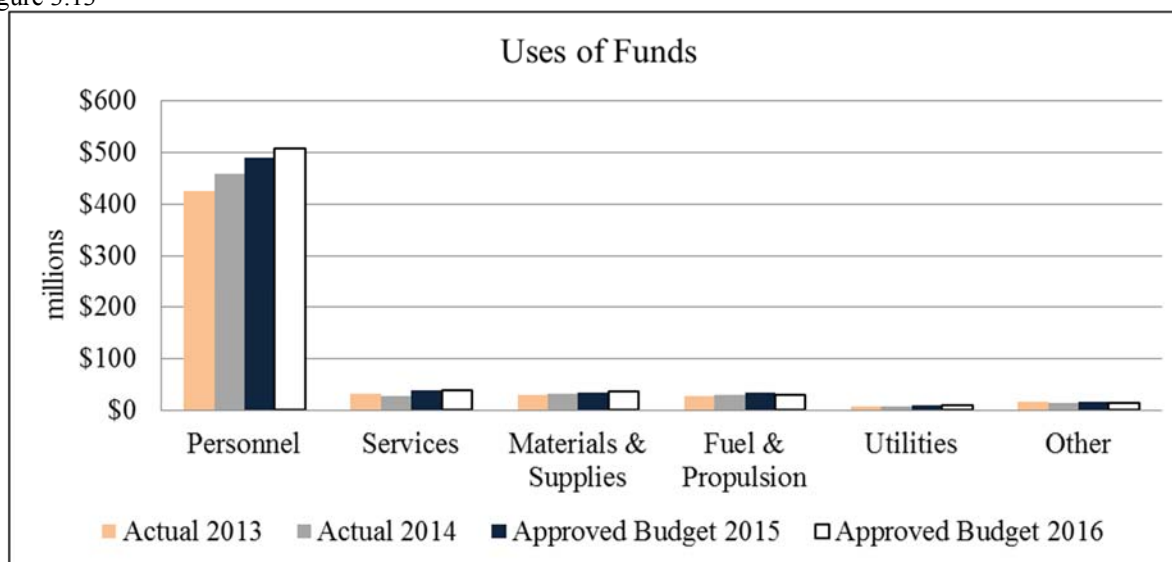




Table 3.14

OPERATING EXPENSE BUDGET METROBUS MODE						
(Dollars in Thousands)	Actual 2013	Actual 2014	Approved Budget 2015	Approved Budget 2016	\$ Variance	% Change
<b>Salaries (Total)</b>	<b>\$62,029.0</b>	<b>\$67,163</b>	<b>\$74,857</b>	<b>\$81,075</b>	<b>\$6,218</b>	<b>8%</b>
Full-Time Salaries	\$60,451	\$65,350	\$75,511	\$80,209	\$4,699	
Salary Lapse	\$0	\$0	(\$2,201)	(\$2,284)	(\$83)	
Overtime Salaries	\$1,578	\$1,813	\$1,547	\$3,150	\$1,603	
<b>Wages (Total)</b>	<b>\$231,482.3</b>	<b>\$242,181</b>	<b>\$257,487</b>	<b>\$260,150</b>	<b>\$2,662</b>	<b>1%</b>
Operator/StaMgr Wages	\$143,167	\$146,621	\$160,777	\$160,390	(\$387)	
Operator/StaMgr Overtime	\$25,428	\$30,593	\$25,100	\$24,350	(\$750)	
Full Time Wages	\$57,242	\$59,546	\$67,449	\$71,127	\$3,678	
Wage Lapse	\$0	\$0	(\$2,273)	(\$2,544)	(\$270)	
Overtime Wages	\$5,645	\$5,421	\$6,435	\$6,827	\$392	
<b>TOTAL SALARIES AND WAGES</b>	<b>\$293,511.3</b>	<b>\$309,344</b>	<b>\$332,344</b>	<b>\$341,224</b>	<b>\$8,880</b>	<b>3%</b>
<b>Fringes (Total)</b>	<b>\$131,826.9</b>	<b>\$149,270</b>	<b>\$157,183</b>	<b>\$166,470</b>	<b>\$9,287</b>	<b>6%</b>
Fringe Health	\$48	\$54	\$62,656	\$68,053	\$5,397	
Fringe Pension	\$0	\$0	\$56,193	\$56,708	\$515	
Other Fringe Benefits	\$125,230	\$141,758	\$28,774	\$31,996	\$3,222	
Workers Compensation	\$6,549	\$7,458	\$9,560	\$9,713	\$153	
<b>TOTAL PERSONNEL COST</b>	<b>\$425,338.2</b>	<b>\$458,614</b>	<b>\$489,527</b>	<b>\$507,695</b>	<b>\$18,167</b>	<b>4%</b>
<b>Services (Total)</b>	<b>\$31,905.3</b>	<b>\$26,967</b>	<b>\$37,972</b>	<b>\$37,582</b>	<b>(\$390)</b>	<b>-1%</b>
Management Fee	\$0	\$0	\$0	\$0	\$0	
Professional & Technical	\$9,696	\$6,156	\$8,953	\$7,363	(\$1,589)	
Temporary Help	\$559	\$95	\$842	\$847	\$4	
Contract Maintenance	\$16,740	\$15,493	\$19,488	\$19,379	(\$109)	
Custodial Services	\$30	\$25	\$133	\$83	(\$50)	
Paratransit	\$0	\$2	\$0	\$0	\$0	
Other	\$4,880	\$5,195	\$8,556	\$9,911	\$1,355	
<b>Materials &amp; Supplies (Total)</b>	<b>\$28,166.3</b>	<b>\$31,184</b>	<b>\$33,136</b>	<b>\$35,850</b>	<b>\$2,715</b>	<b>8%</b>
Fuel and Lubricants	\$2,971	\$3,290	\$4,942	\$5,043	\$100	
Tires	\$5,267	\$5,540	\$6,602	\$6,662	\$60	
Other	\$19,929	\$22,354	\$21,591	\$24,145	\$2,554	
<b>Fuel &amp; Propulsion(Total)</b>	<b>\$27,231.1</b>	<b>\$30,251</b>	<b>\$34,406</b>	<b>\$29,728</b>	<b>(\$4,679)</b>	<b>-14%</b>
Diesel Fuel	\$27,361	\$27,102	\$30,409	\$26,784	(\$3,625)	
Propulsion Power	\$80	\$0	\$0	\$0	\$0	
Clean Natural Gas	(\$210)	\$3,149	\$3,997	\$2,943	(\$1,054)	
<b>Utilities (Total)</b>	<b>\$6,772.9</b>	<b>\$7,821</b>	<b>\$8,429</b>	<b>\$8,948</b>	<b>\$519</b>	<b>6%</b>
Electricity and Gas	\$5,107	\$5,242	\$6,197	\$6,488	\$291	
Utilities - Other	\$1,666	\$2,578	\$2,232	\$2,460	\$228	
<b>Casualty &amp; Liability (Total)</b>	<b>\$14,616.7</b>	<b>\$13,196</b>	<b>\$11,328</b>	<b>\$9,421</b>	<b>(\$1,907)</b>	<b>-17%</b>
Insurance	\$6,519	\$6,262	\$6,439	\$6,752	\$313	
Claims	\$8,098	\$6,933	\$4,889	\$2,669	(\$2,220)	
<b>Leases (Total)</b>	<b>\$1,190.9</b>	<b>\$1,204</b>	<b>\$1,919</b>	<b>\$2,250</b>	<b>\$331</b>	<b>17%</b>
Property	\$423	\$421	\$789	\$789	\$0	
Equipment	\$768	\$783	\$1,130	\$1,460	\$331	
<b>Miscellaneous (Total)</b>	<b>\$457.1</b>	<b>(\$230)</b>	<b>\$1,743</b>	<b>\$2,841</b>	<b>\$1,097</b>	<b>63%</b>
Dues And Subscriptions	\$141	\$121	\$175	\$186	\$11	
Conferences and Meetings	\$28	\$36	\$77	\$78	\$1	
Business Travel/Public Hrg	\$70	\$95	\$208	\$182	(\$26)	
Interview & Relocation	\$229	\$323	\$8	\$379	\$371	
Tolls	\$0	\$0	\$0	\$0	\$0	
Advertising	\$2,154	\$1,209	\$1,275	\$1,265	(\$10)	
Other	\$403	\$175	\$356	\$1,069	\$714	
Reimbursements	(\$2,568)	(\$2,189)	(\$356)	(\$320)	\$36	
<b>TOTAL NONPERSONNEL COST</b>	<b>\$110,340.4</b>	<b>\$110,392</b>	<b>\$128,934</b>	<b>\$126,619</b>	<b>(\$2,315)</b>	<b>-2%</b>
<b>TOTAL COST</b>	<b>\$535,678.6</b>	<b>\$569,006</b>	<b>\$618,461</b>	<b>\$634,314</b>	<b>\$15,853</b>	<b>3%</b>

## Operating Budget by Mode: Metrorail

### *Sources of Funds*

In the FY2016 Approved Budget, as with Metrobus, Metrorail revenues include both system revenue (primarily passenger fares and parking fees, as well as advertising and lease revenues) and subsidy from Metro's jurisdictional partners.

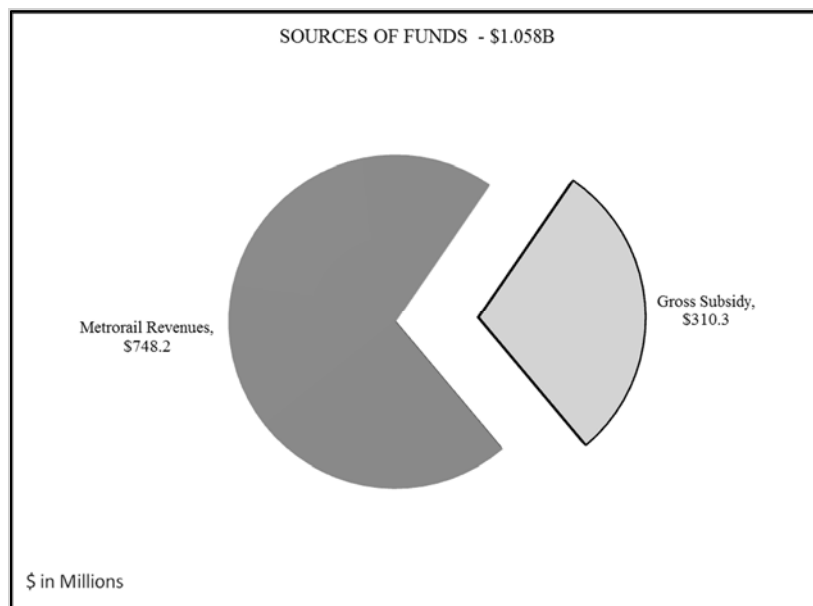
Passenger revenues, including fares and passes, are budgeted at \$636.0 million. This represents a decrease of \$39.6 million from the FY2015 budget. The decrease in fare and passenger revenues is tied to a projected ridership reduction of 6.5 million passenger trips.

Parking revenue at Metrorail garages will contribute \$49.0 million in revenue. This amount is a \$0.5M higher than the FY2015 budget.

Advertising revenue attributed to Metrorail will contribute \$6.8 million in FY2016. This amount is \$0.2 million higher than the FY2015 budget.

Other Revenue, which includes Joint Development, Fiber Optics, and other miscellaneous revenue sources, will contribute \$56.4 million in FY2016, which is an increase of \$28.6 million from FY2015.

Figure 3.15



### ***Uses of Funds***

Total personnel expenses make up the largest portion of the Metrorail budget. For FY2016, personnel costs are estimated at \$812.9 million, or 76.0 percent of the Metrorail budget, which represents an increase of \$39.3 million over the FY2015 budget. This increase reflects committed wage and benefit increases as well as additional staffing for Fatigue Risk Management.

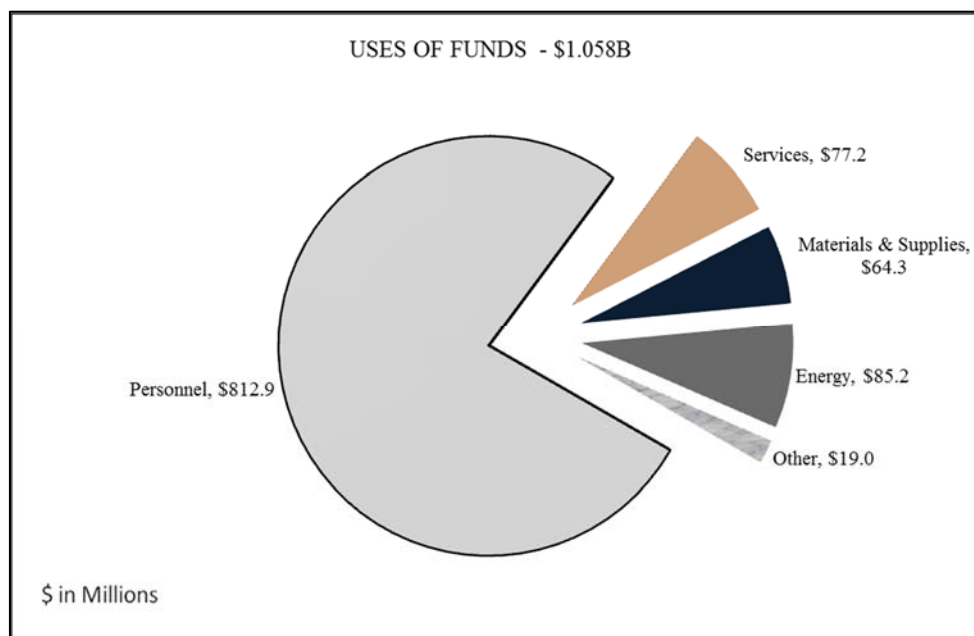
Services are budgeted at \$77.2 million, which is \$2.3 million lower than the FY2015 budget. The reduction represents budgeted efficiencies within various services in support of Metrorail.

Materials and Supplies are budgeted at \$64.3 million, which is \$2.1 million more than the FY2015 budget. The increase is in line with historical material utilization requirements needed to maintain rail operations.

Energy costs include fuel, propulsion and utilities; and are budgeted at \$85.2 million. This amount is \$1.2 million lower than the FY2015 budget. This decrease is based on electricity rates remaining flat with FY2015 levels and a reduction in projected hourly Kilowatt consumption.

Other expenses Approved for Metrorail total \$18.9 million, a decrease of \$2.0 million from the FY2015 budget.

Figure 3.16



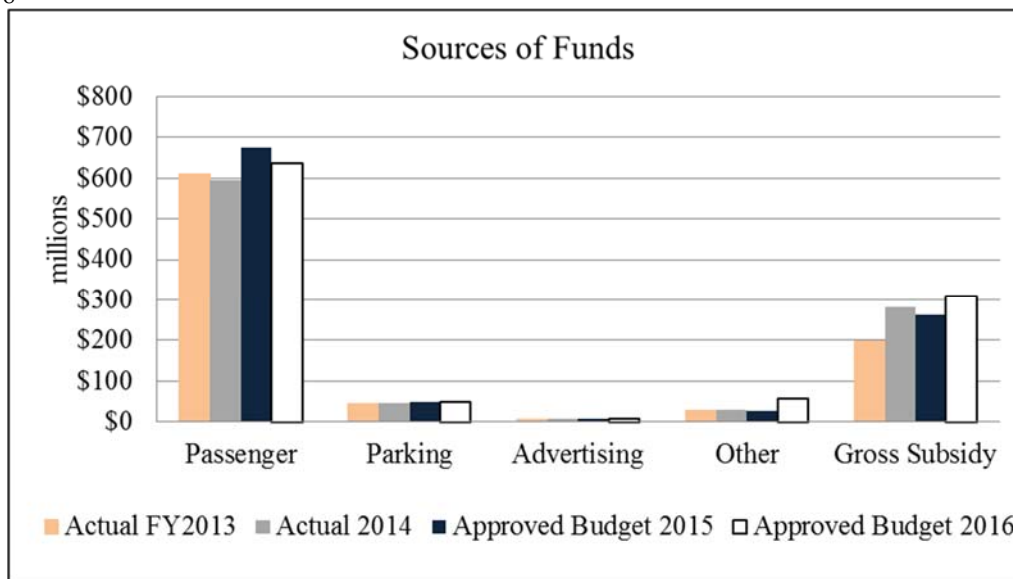
*Note: Excludes reimbursable operating projects*

Table 3.17

METRORAIL BY ACCOUNT					
Revenue, Expenses and Funding Source					
<i>(Dollars in Thousands)</i>	<b>Actual 2013</b>	<b>Actual 2014</b>	<b>Approved Budget 2015</b>	<b>Approved Budget 2016</b>	<b>\$ Variance</b>
<b>REVENUES</b>					
Passenger	\$605,538	\$593,324	\$671,743	\$632,133	(\$39,610)
Other Passenger	\$4,376	\$3,410	\$3,818	\$3,818	\$0
Parking	\$45,640	\$46,614	\$48,410	\$49,000	\$590
Advertising	\$5,589	\$6,549	\$6,633	\$6,805	\$172
Joint Development	\$6,601	\$7,360	\$7,000	\$8,000	\$1,000
Fiber Optics	\$15,634	\$15,467	\$16,000	\$16,500	\$500
Other	\$5,089	\$8,334	\$4,739	\$31,909	\$27,169
Interest	\$11	(\$181)	\$30	\$0	(\$30)
<b>Total Revenues</b>	<b>\$688,479</b>	<b>\$680,876</b>	<b>\$758,374</b>	<b>\$748,164</b>	<b>(\$10,209)</b>
<b>EXPENSES</b>					
Personnel	\$646,628	\$729,150	\$773,533	\$812,880	\$39,347
Services	\$75,364	\$64,120	\$79,554	\$77,181	(\$2,373)
Materials & Supplies	\$67,864	\$68,939	\$62,118	\$64,254	\$2,135
Fuel & Propulsion Power	\$48,361	\$48,705	\$55,261	\$51,847	(\$3,415)
Utilities	\$26,203	\$28,212	\$31,177	\$33,354	\$2,177
Casualty & Liability	\$18,808	\$20,216	\$17,664	\$14,429	(\$3,235)
Leases & Rentals	\$2,989	\$3,842	\$3,568	\$3,253	(\$315)
Miscellaneous	(\$51)	\$1,165	(\$235)	\$1,316	\$1,551
<b>Total Expenses</b>	<b>\$886,165</b>	<b>\$964,348</b>	<b>\$1,022,639</b>	<b>\$1,058,513</b>	<b>\$35,874</b>
<b>GROSS SUBSIDY</b>	<b>\$197,686</b>	<b>\$283,473</b>	<b>\$264,266</b>	<b>\$310,349</b>	<b>\$46,083</b>
Less: Preventive Maintenance	(20,262)	(20,262)	(20,262)	(20,262)	
<b>Net Local Subsidy</b>	<b>\$177,424</b>	<b>\$263,211</b>	<b>\$244,004</b>	<b>\$290,087</b>	<b>\$46,083</b>
<b>Cost Recovery Ratio</b>	<b>77.7%</b>	<b>70.6%</b>	<b>74.2%</b>	<b>70.7%</b>	
*Actuals include any charges to Joint Allocated and Non-regional Distribution operating units					

Passenger fare revenue, the main source of revenue, is projected at \$635.9 million in FY2016. The projected gross subsidy for FY2016 is \$310.3 million, an increase of \$46.1 million over the FY2015 approved budget.

Figure 3.18



Personnel costs grew by \$82.5 million or 12.8 percent from FY2013 to FY2014 and are projected to increase by \$39.3 million or 5.1 percent from FY2015 to FY2016, primarily related to committed wage and benefit increases and fatigue risk management. Services decreased by \$11.4 million or 14.9 percent from FY2013 to FY2014 and are projected to decrease by \$2.4 million or 3.0 percent from FY2015 to FY2016. Materials and Supplies increased by \$1.1 million or 1.6 percent from FY2013 to FY2014 and are projected to increase by \$2.1 million or 3.4 percent from FY2015 to FY2016 in recognition of the increased parts and material costs associated with rail car maintenance.

Figure 3.19

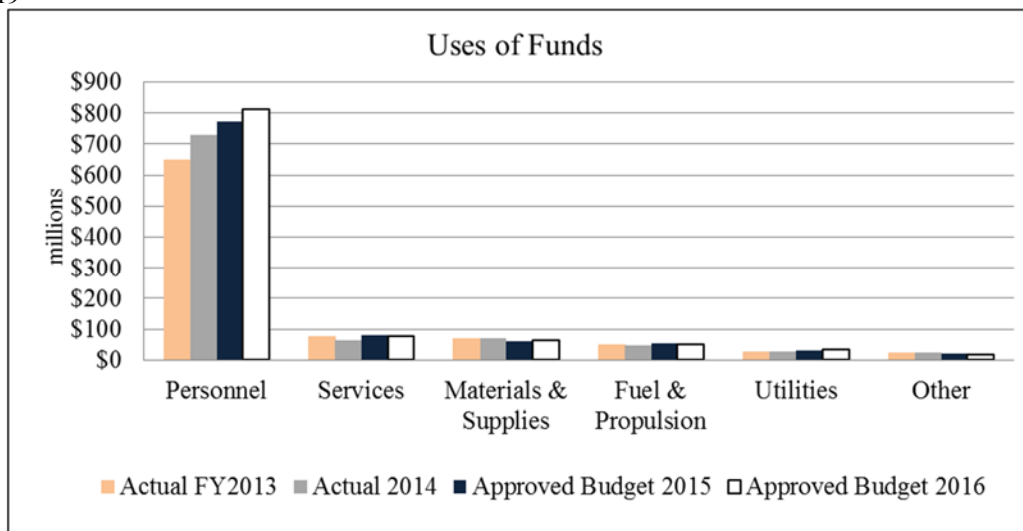


Table 3.20

OPERATING EXPENSE BUDGET METRORAIL MODE						
(Dollars in Thousands)	Actual 2013	Actual 2014	Approved Budget 2015	Approved Budget 2016	\$ Variance	% Change
<b>Salaries (Total)</b>	<b>\$165,205</b>	<b>\$181,692</b>	<b>\$184,139</b>	<b>\$205,117</b>	<b>\$20,978</b>	11%
Full-Time Salaries	\$152,962	\$170,261	\$179,691	\$199,277	\$19,586	
Salary Lapse	\$0	\$0	(\$4,226)	(\$4,836)	(\$610)	
Overtime Salaries	\$12,244	\$11,431	\$8,674	\$10,676	\$2,002	
<b>Wages (Total)</b>	<b>\$279,927</b>	<b>\$311,107</b>	<b>\$339,114</b>	<b>\$346,755</b>	<b>\$7,641</b>	2%
Operator/StaMgr Wages	\$70,785	\$77,902	\$95,932	\$96,215	\$284	
Operator/StaMgr Overtime	\$18,293	\$15,033	\$18,408	\$19,153	\$745	
Full Time Wages	\$174,175	\$204,408	\$215,662	\$225,108	\$9,446	
Wage Lapse	\$0	\$0	(\$5,591)	(\$7,225)	(\$1,634)	
Overtime Wages	\$16,675	\$13,763	\$14,703	\$13,504	(\$1,199)	
<b>TOTAL SALARIES AND WAGES</b>	<b>\$445,132.7</b>	<b>\$492,799</b>	<b>\$523,252</b>	<b>\$551,872</b>	<b>\$28,619</b>	5%
<b>Fringes (Total)</b>	<b>\$201,496</b>	<b>\$236,351</b>	<b>\$250,281</b>	<b>\$261,008</b>	<b>\$10,728</b>	4%
Fringe Health	\$163	\$128	\$100,515	\$103,887	\$3,372	
Fringe Pension	\$0	\$0	\$90,148	\$91,716	\$1,569	
Other Fringe Benefits	\$191,620	\$226,014	\$45,194	\$50,741	\$5,547	
Workers Compensation	\$9,714	\$10,209	\$14,424	\$14,664	\$240	
<b>TOTAL PERSONNEL COST</b>	<b>\$646,628</b>	<b>\$729,150</b>	<b>\$773,533</b>	<b>\$812,880</b>	<b>\$39,347</b>	5%
<b>Services (Total)</b>	<b>\$75,364</b>	<b>\$64,120</b>	<b>\$79,554</b>	<b>\$77,181</b>	<b>(\$2,373)</b>	-3%
Management Fee	\$1,697	\$129	\$160	\$160	\$0	
Professional & Technical	\$15,214	\$9,736	\$18,105	\$17,790	(\$315)	
Temporary Help	\$1,769	\$2,013	\$1,849	\$1,855	\$5	
Contract Maintenance	\$27,149	\$27,588	\$28,582	\$28,997	\$416	
Custodial Services	\$0	\$0	\$0	\$0	\$0	
Paratransit	\$0	\$0	\$0	\$0	\$0	
Other	\$29,535	\$24,654	\$30,858	\$28,379	(\$2,479)	
<b>Materials &amp; Supplies (Total)</b>	<b>\$67,864</b>	<b>\$68,939</b>	<b>\$62,118</b>	<b>\$64,254</b>	<b>\$2,135</b>	3%
Fuel and Lubricants	\$2,658	\$3,120	\$3,592	\$6,293	\$2,700	
Tires	\$176	\$186	\$133	\$253	\$120	
Other	\$65,031	\$65,633	\$58,393	\$57,708	(\$685)	
<b>Fuel &amp; Propulsion(Total)</b>	<b>\$48,361</b>	<b>\$48,705</b>	<b>\$55,261</b>	<b>\$51,847</b>	<b>(\$3,415)</b>	-6%
Diesel Fuel	(\$1)	\$397	\$0	\$0	\$0	
Propulsion Power	\$48,267	\$48,218	\$56,755	\$55,383	(\$1,372)	
Clean Natural Gas	\$95	\$89	(\$1,494)	(\$3,536)	(\$2,043)	
<b>Utilities (Total)</b>	<b>\$26,203</b>	<b>\$28,212</b>	<b>\$31,177</b>	<b>\$33,354</b>	<b>\$2,177</b>	7%
Electricity and Gas	\$22,776	\$24,177	\$26,192	\$26,873	\$680	
Utilities - Other	\$3,427	\$4,034	\$4,984	\$6,481	\$1,497	
<b>Casualty &amp; Liability (Total)</b>	<b>\$18,808</b>	<b>\$20,216</b>	<b>\$17,664</b>	<b>\$14,429</b>	<b>(\$3,235)</b>	-18%
Insurance	\$9,638	\$9,594	\$10,040	\$10,341	\$300	
Claims	\$9,170	\$10,622	\$7,624	\$4,089	(\$3,535)	
<b>Leases (Total)</b>	<b>\$2,989</b>	<b>\$3,842</b>	<b>\$3,568</b>	<b>\$3,253</b>	<b>(\$315)</b>	-9%
Property	\$971	\$942	\$670	\$670	\$0	
Equipment	\$2,018	\$2,900	\$2,897	\$2,582	(\$315)	
<b>Miscellaneous (Total)</b>	<b>(\$51)</b>	<b>\$1,165</b>	<b>(\$235)</b>	<b>\$1,316</b>	<b>\$1,551</b>	-660%
Dues And Subscriptions	\$218	\$188	\$272	\$287	\$15	
Conferences and Meetings	\$82	\$100	\$152	\$152	(\$0)	
Business Travel/Public Hrg	\$234	\$269	\$538	\$512	(\$26)	
Interview & Relocation	\$345	\$495	\$15	\$325	\$310	
Tolls	\$0	\$0	\$0	\$0	\$0	
Advertising	\$457	\$1,754	\$1,215	\$1,202	(\$12)	
Other	\$1,226	\$840	\$676	\$1,795	\$1,119	
Reimbursements	(\$2,612)	(\$2,481)	(\$3,102)	(\$2,957)	\$146	
<b>TOTAL NONPERSONNEL COST</b>	<b>\$239,537</b>	<b>\$235,198</b>	<b>\$249,106</b>	<b>\$245,633</b>	<b>(\$3,473)</b>	-1%
<b>TOTAL COST</b>	<b>\$886,165</b>	<b>\$964,348</b>	<b>\$1,022,639</b>	<b>\$1,058,513</b>	<b>\$35,874</b>	4%

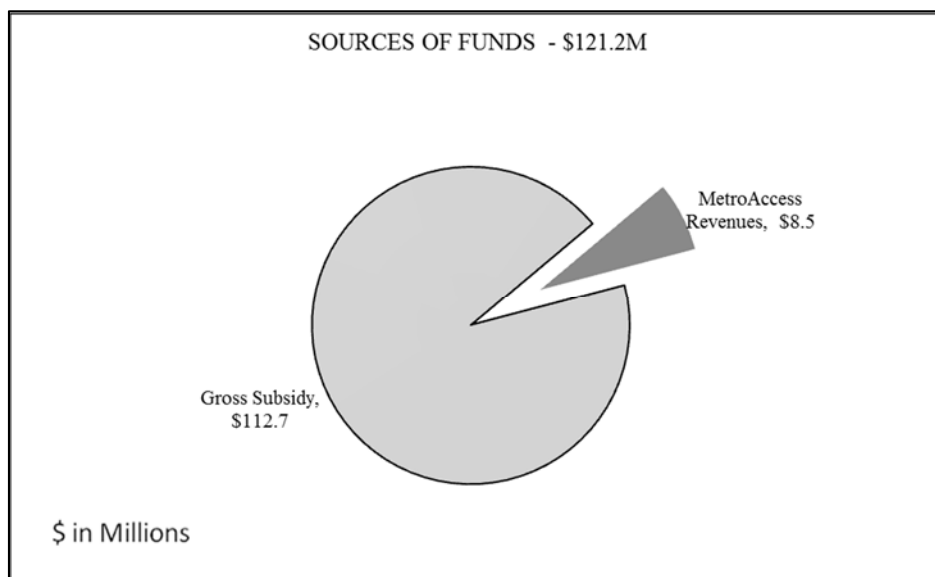
## Operating Budget by Mode: MetroAccess

### *Sources of Funds*

For FY2016 Approved Budget, MetroAccess revenues include passenger revenue and gross subsidy from Metro's jurisdictional partners.

MetroAccess passenger revenues are budgeted at \$8.5 million. This represents a growth of \$0.5 million over the FY2015 budget. The growth in fare revenue is tied to a projected ridership increase of 0.2 million trips.

Figure 3.21



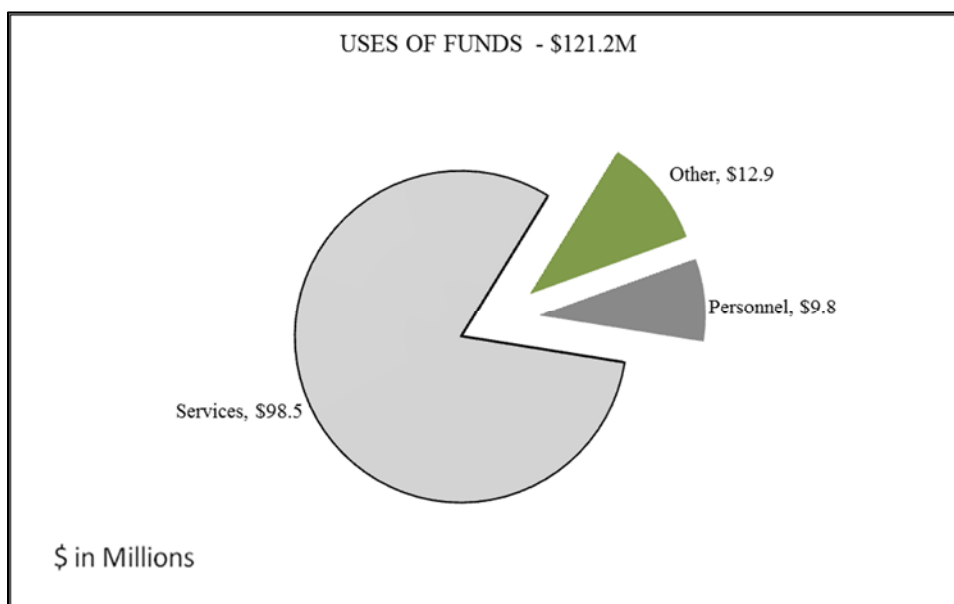
### ***Uses of Funds***

The paratransit services contract make up the largest portion of the MetroAccess budget. For FY2016, paratransit services cost is estimated at \$98.5 million or 81.3 percent of the MetroAccess budget, and represent an increase of \$6.4 million over the FY2015 budget. This increase reflects an increase in projected ridership of 0.2 million trips.

Personnel cost is estimated at \$9.8 million, which is \$0.7 million more than the FY2015 budget. The increase reflects additional staffing related to the projected increase in ridership.

Other expenses approved for MetroAccess total \$12.9 million, an increase of \$0.5 million over the FY2015 budget.

Figure 3.22



*Note: Excludes reimbursable operating projects*

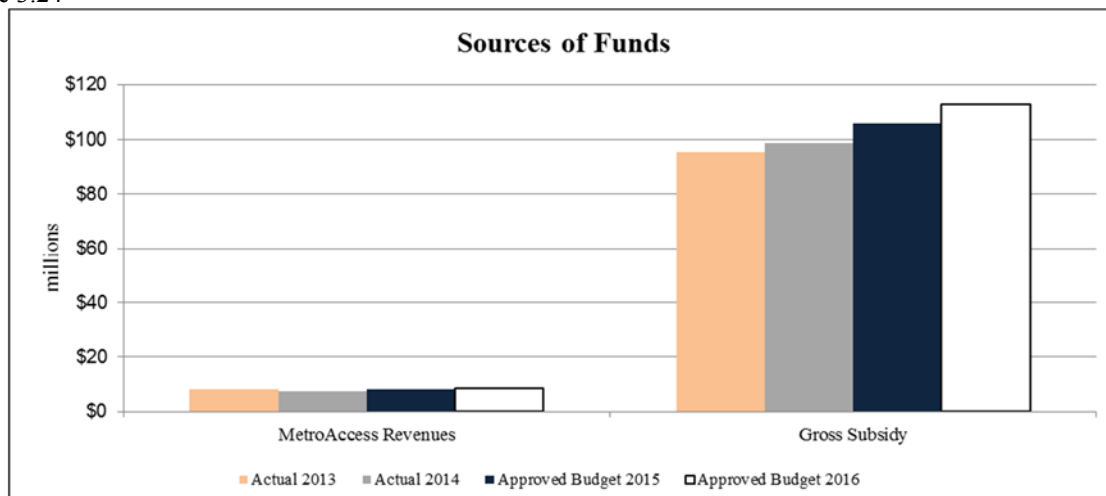


Table 3.23

METROACCESS BY ACCOUNT					
Revenue, Expenses and Funding Source					
<i>(Dollars in Thousands)</i>	<b>Actual 2013</b>	<b>Actual 2014</b>	<b>Approved Budget 2015</b>	<b>Approved Budget 2016</b>	<b>\$ Variance</b>
<b>REVENUES</b>					
Passenger	\$8,280	\$7,542	\$8,041	\$8,500	\$459
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	\$76	(\$1)	\$0	\$0	\$0
Interest	\$0	\$0	\$0	\$0	\$0
<b>Total Revenues</b>	<b>\$8,356</b>	<b>\$7,542</b>	<b>\$8,041</b>	<b>\$8,500</b>	<b>\$459</b>
<b>EXPENSES</b>					
Personnel	\$6,734	\$7,922	\$9,108	\$9,805	\$696
Services	\$95,504	\$88,148	\$92,127	\$98,487	\$6,359
Materials & Supplies	\$380	\$8,692	\$10,448	\$10,938	\$490
Fuel & Propulsion Power	(\$0)	\$0	(\$49)	\$0	\$49
Utilities	\$90	\$70	\$127	\$99	(\$28)
Casualty & Liability	\$414	\$634	\$576	\$454	(\$122)
Leases & Rentals	\$622	\$723	\$1,280	\$1,294	\$14
Miscellaneous	\$30	\$26	\$68	\$126	\$57
<b>Total Expenses</b>	<b>\$103,774</b>	<b>\$106,215</b>	<b>\$113,686</b>	<b>\$121,201</b>	<b>\$7,516</b>
<b>GROSS SUBSIDY</b>	<b>\$95,419</b>	<b>\$98,674</b>	<b>\$105,645</b>	<b>\$112,701</b>	<b>\$7,057</b>
Less: Preventive Maint	\$0	\$0	\$0	\$0	\$0
<b>Net Local Subsidy</b>	<b>\$95,419</b>	<b>\$98,674</b>	<b>\$105,645</b>	<b>\$112,701</b>	<b>\$7,057</b>
<b>Cost Recovery Ratio</b>	<b>8.1%</b>	<b>7.1%</b>	<b>7.1%</b>	<b>7.0%</b>	<b>-0.1%</b>

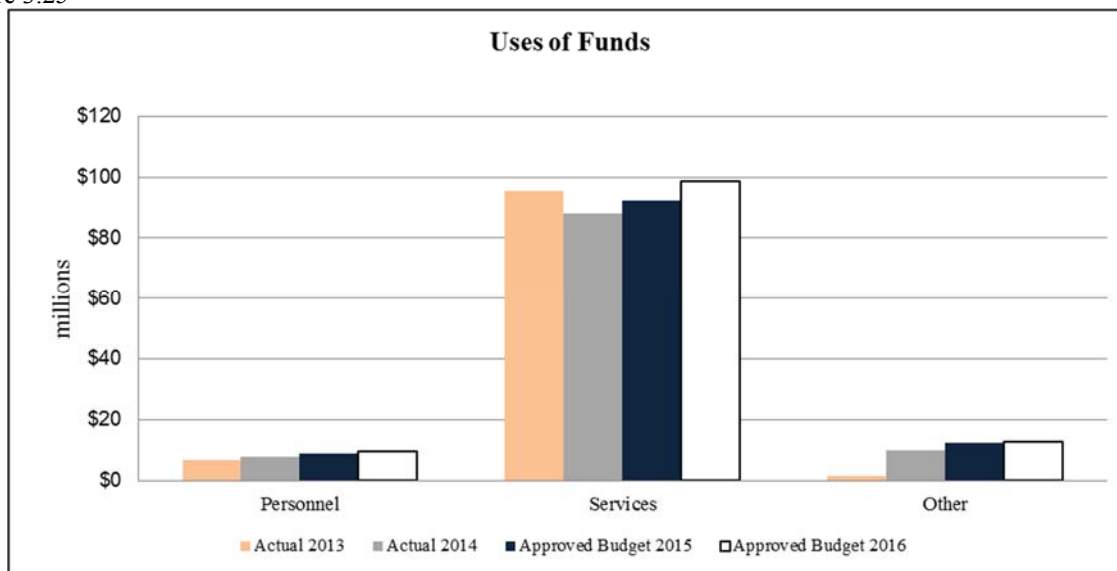
Gross subsidy increased by \$3.3 million or 3.4 percent from FY2013 to FY2014 and is projected to increase by \$7.0 million or 6.7 percent from FY2015 to FY2016. Passenger revenue is expected to increase by 5.7 percent in FY2016 keeping with ridership projections.

Figure 3.24



Paratransit service contract expenses decreased by \$7.4 million or 7.7 percent from FY2013 to FY2014, but are projected to increase by \$6.4 million or 7.0 percent from FY2015 to FY2016.

Figure 3.25



## Fiscal Year 2016 Approved Budget: Reimbursable Operating Budget

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

Table 3.26

<b>FY2016 Reimbursable Operating Projects</b> (dollars in thousands)				
	FY2014 Approved Budget	FY2015 Approved Budget	FY2016 Approved Budget	Change
<b>State &amp; Local Funding</b>				
• DC Circulator <sup>1</sup>	16,251	19,447	23,030	3,583
<b>Federal Grant Funding</b>				
• Safety & Security grants	22,027	17,160	5,706	(11,454)
• Bus Bridges/Transit Works	795	1,383	1,383	(0)
• Takoma / Langley Park Transit Center			533	533
<b>Other Sources of Funding</b>				
• DC Circulator - Passenger fare revenue	3,394	3,394	3,613	219
• Neutral Host agreement with Carrier team	12,458	6,172	6,349	177
• Joint Development & Adjacent Construction projects	1,621	6,432	6,706	274
<b>Total Expenditures</b>	<b>\$56,545</b>	<b>\$53,988</b>	<b>\$47,321</b>	<b>-\$6,667</b>

### *DC Circulator*

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

### *Safety and Security Grants*

In the past few years, WMATA has received 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 FY2016 and into FY2017. If new Congressional appropriations become available, WMATA will actively pursue new funding to further enhance security activities.

***Takoma/Langley Park Transit Center***

The Transit Center will be a key component in improving public transportation in the Langley Park Community of Prince George's County. WMATA is participating in the construction of the Takoma/Langley Park Transit Center and will be responsible for installing the technology needed to prepare for initiating revenue service. The Maryland Transit Administration (MTA) has agreed to reimburse WMATA for the operating expenses of the Transit Center.

***Neutral Host***

Neutral Host is an agreement with four cellular communication carriers to design, build, operate and maintain a wireless communication infrastructure throughout Metro's underground stations and tunnels. The infrastructure acts as "Neutral Host" between participating telecommunications service providers and the consumers of their services. A separate, parallel communication system is to be built for Metro's exclusive use to support its own wireless operational, administrative, and public safety needs. The carriers have agreed to reimburse Metro for all expenses incurred to build and maintain the system. Annual reimbursed costs include labor expenses for tunnel and track escorts.

***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 assure the above 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 impact to WMATA property, facilities and/or operations.
- In conjunction with LAND and COUN prepares Project Agreements.
- Provide coordination/oversight for all aspects of a project including: design, safety, operations, constructability, assures compliance with WMATA standards, monitors /coordinates construction activities and accepts 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.

Table 3.27

OPERATING COST BY DEPARTMENT AUTHORITY-WIDE APPROVED FY2016 REIMBURSABLE BUDGET					
<i>(Dollars in Thousands)</i>	<b><u>TOTAL</u></b>	<b><u>MTPD</u></b>	<b><u>BUS</u></b>	<b><u>CIO</u></b>	<b><u>DGMO</u></b>
<b>Salaries (Total)</b>	<b>\$4,381</b>	<b>\$2,665</b>	<b>\$299</b>	<b>\$0</b>	<b>\$1,417</b>
Full-Time Salaries	\$4,141	\$2,425	\$299	\$0	\$1,417
Salary Lapse	\$0	\$0	\$0	\$0	\$0
Overtime Salaries	\$240	\$240	\$0	\$0	\$0
<b>Wages (Total)</b>	<b>\$8,011</b>	<b>\$0</b>	<b>\$865</b>	<b>\$4,058</b>	<b>\$3,088</b>
Operator/StaMgr Wages	\$0	\$0	\$0	\$0	\$0
Operator/StaMgr Overtime	\$750	\$0	\$750	\$0	\$0
Full Time Wages	\$2,046	\$0	\$0	\$2,046	\$0
Wage Lapse	\$0	\$0	\$0	\$0	\$0
Overtime Wages	\$5,214	\$0	\$115	\$2,011	\$3,088
<b>TOTAL SALARIES AND WAGES</b>	<b>\$12,392</b>	<b>\$2,665</b>	<b>\$1,164</b>	<b>\$4,058</b>	<b>\$4,505</b>
<b>Fringes (Total)</b>	<b>\$6,094</b>	<b>\$1,713</b>	<b>\$524</b>	<b>\$1,827</b>	<b>\$2,029</b>
Fringe Health	\$2,930	\$1,033	\$227	\$792	\$879
Fringe Pension	\$2,059	\$443	\$193	\$674	\$749
Other Fringe Benefits	\$1,075	\$231	\$101	\$352	\$391
Workers Compensation	\$29	\$6	\$3	\$10	\$11
<b>TOTAL PERSONNEL COST</b>	<b>\$18,485</b>	<b>\$4,378</b>	<b>\$1,688</b>	<b>\$5,885</b>	<b>\$6,534</b>
<b>Services (Total)</b>	<b>\$24,245</b>	<b>\$0</b>	<b>\$24,209</b>	<b>\$0</b>	<b>\$37</b>
Management Fee	\$0	\$0	\$0	\$0	\$0
Professional & Technical	\$0	\$0	\$0	\$0	\$0
Temporary Help	\$0	\$0	\$0	\$0	\$0
Contract Maintenance	\$23,878	\$0	\$23,878	\$0	\$0
Custodial Services	\$0	\$0	\$0	\$0	\$0
Paratransit	\$0	\$0	\$0	\$0	\$0
Other	\$368	\$0	\$331	\$0	\$37
<b>Materials &amp; Supplies (Total)</b>	<b>\$644</b>	<b>\$0</b>	<b>\$364</b>	<b>\$280</b>	<b>\$0</b>
Fuel and Lubricants	\$0	\$0	\$0	\$0	\$0
Tires	\$48	\$0	\$48	\$0	\$0
Other	\$596	\$0	\$316	\$280	\$0
<b>Fuel &amp; Propulsion (Total)</b>	<b>\$2,287</b>	<b>\$0</b>	<b>\$2,287</b>	<b>\$0</b>	<b>\$0</b>
Diesel Fuel	\$2,269	\$0	\$2,269	\$0	\$0
Propulsion Power	\$0	\$0	\$0	\$0	\$0
Clean Natural Gas	\$18	\$0	\$18	\$0	\$0
<b>Utilities (Total)</b>	<b>\$145</b>	<b>\$0</b>	<b>\$0</b>	<b>\$145</b>	<b>\$0</b>
Electricity and Gas	\$0	\$0	\$0	\$0	\$0
Utilities - Other	\$145	\$0	\$0	\$145	\$0
<b>Casualty &amp; Liability (Total)</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
Insurance	\$0	\$0	\$0	\$0	\$0
Claims	\$0	\$0	\$0	\$0	\$0
<b>Leases (Total)</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
Property	\$0	\$0	\$0	\$0	\$0
Equipment	\$0	\$0	\$0	\$0	\$0
<b>Miscellaneous (Total)</b>	<b>\$1,514</b>	<b>\$1,422</b>	<b>\$0</b>	<b>\$0</b>	<b>\$92</b>
Dues And Subscriptions	\$0	\$0	\$0	\$0	\$0
Conferences and Meetings	\$0	\$0	\$0	\$0	\$0
Business Travel/Public Hrg	\$196	\$156	\$0	\$0	\$40
Interview & Relocation	\$0	\$0	\$0	\$0	\$0
Tolls	\$0	\$0	\$0	\$0	\$0
Advertising	\$0	\$0	\$0	\$0	\$0
Other	\$1,317	\$1,265	\$0	\$0	\$52
Reimbursements	\$0	\$0	\$0	\$0	\$0
<b>TOTAL NONPERSONNEL COST</b>	<b>\$28,836</b>	<b>\$1,422</b>	<b>\$26,860</b>	<b>\$425</b>	<b>\$129</b>
<b>TOTAL COST</b>	<b>\$47,321</b>	<b>\$5,800</b>	<b>\$28,548</b>	<b>\$6,310</b>	<b>\$6,663</b>

## Departmental Details

The following information in this chapter summarizes the budgeted resources necessary to deliver on the departments' committed actions in support of the Authority-wide Strategic Goals and in fulfillment of the GM/CEO's Business Plan. Metro's Business Planning process provides the organization a framework for connecting employees' day-to-day activities with the organization's goals. These plans help align employee actions with the departmental business plans, which in turn, support the GM/CEO business plan.

Business plans are structured and orientated to the department (not enterprise) level with one-to-three year horizons and, annual assessments. The Approved FY2016 operating and capital budgets allocate resources to key business plan priorities and actions including:

**Goal 1: Build and Maintain a Premier Safety Culture and System**

- Employee Fatigue Management Plan
- Confidential Close Call Reporting System
- Safety and Security Awareness and Response
- NTSB Recommendations

**Goal 2: Meet or Exceed Customer Expectations by Consistently Delivering Quality Service**

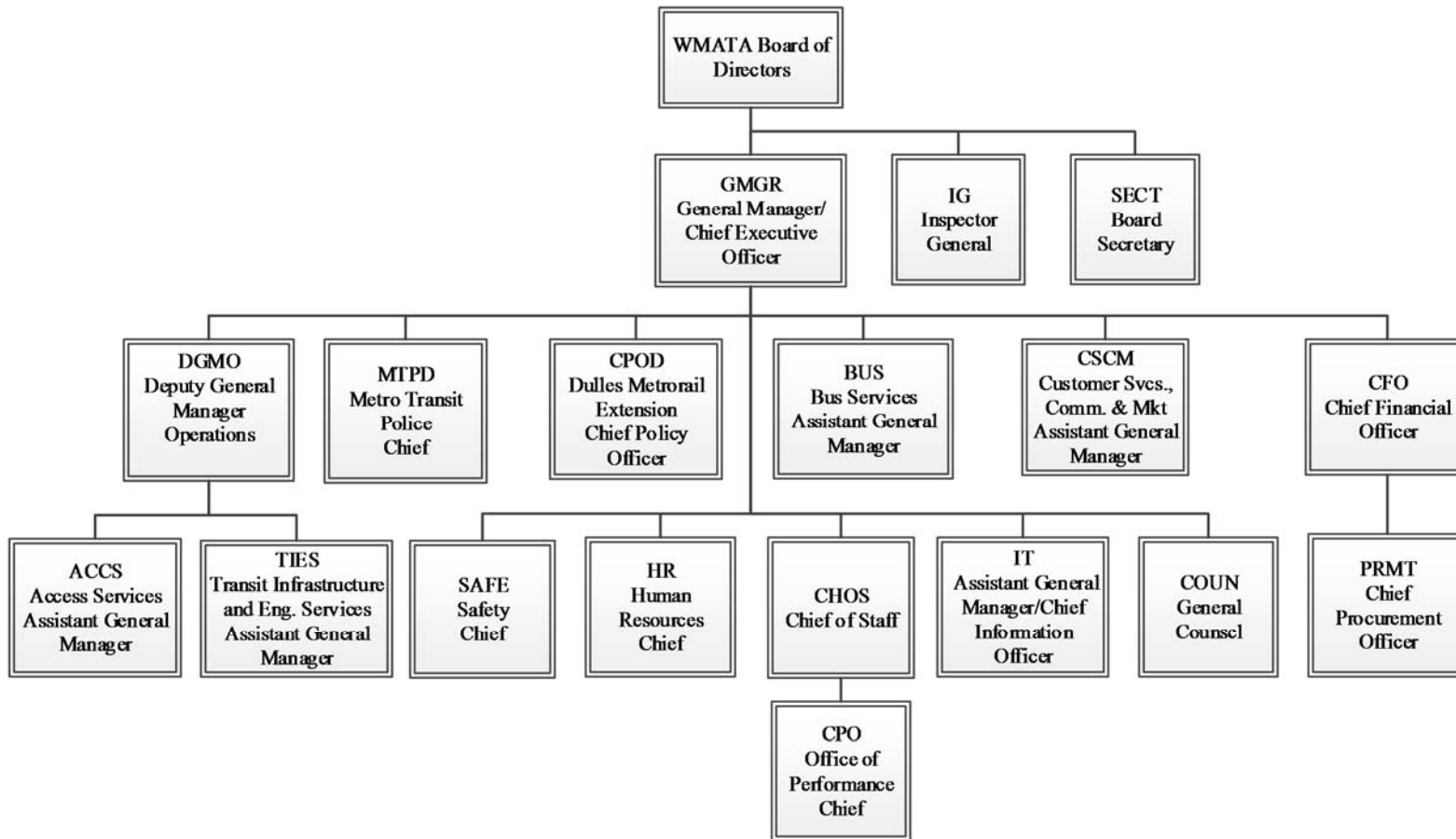
- Customer Care Program
- New Electronic Payments Program
- Metrobus Service Improvements
  - State of Good Operations, Priority Corridor Network, Better Bus Initiatives
- Metrorail Service Improvements
  - New 7000 Series Railcar Delivery and Acceptance Testing
  - Automatic Train Control
  - Escalator and Elevator Reliability
  - Proactive Public Participation Plan

**Goal 3: Improve Regional Mobility and Connect Communities**

- 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

**Goal 4: Ensure Financial Stability and Invest in our People and Assets**

- Financial Management Reforms
- Capital Funding Agreement
- Human Capital Plan
- Transit Asset Management
- Collaborative Risk Management

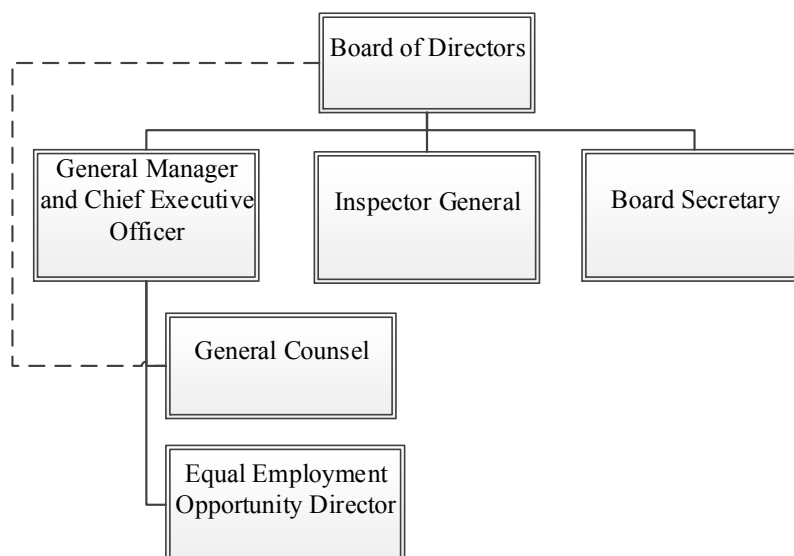
**WMATA Executive Leadership Team (ELT) Organizational Chart**

The GM/CEO's Business Plan includes Key Performance Indicators 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 Metro's performance at [www.wmata.com/about\\_metro/scorecard/](http://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.

Historical data for FY2013-FY2015 presented in the tables that follow may not accurately reflect each department's previous budget/actuals due to reorganization within Metro. This does not affect the authority-wide overall total.

### Independent Offices



### General Manager and Chief Executive Officer

Table 3.28

<i>(Dollars in Thousands)</i>	<b>Actual 2013</b>	<b>Actual 2014</b>	<b>Approved Budget 2015</b>	<b>Approved Budget 2016</b>	<b>Change</b>	<b>Variance</b>
PERSONNEL COST	\$853	\$848	\$842	\$949	\$107	12.7%
NONPERSONNEL COST	\$59	\$238	\$73	\$84	\$11	15.6%
<b>TOTAL COST</b>	<b>\$912</b>	<b>\$1,085</b>	<b>\$915</b>	<b>\$1,033</b>	<b>\$118</b>	<b>12.9%</b>
BUDGETED POSITIONS	5	4	5	4	-1	-20.0%



The safe and reliable operation of the nation's second largest rail transit system, fifth largest bus network and fifth busiest paratransit service, is managed by the General Manager/Chief Executive Officer (GM/CEO). Providing more than 1.2 million passenger trips a day with a workforce of approximately 13,000 men and women, the GM/CEO provides strategic guidance to ensure Metro continues to play a role in sustaining the region's economic growth while meeting the needs of those living and visiting the National Capital Region.

In FY2016, Metro continues its focus on Safety and Reliability and expands its focus on customer service with the development of an enterprise wide customer care initiative. This initiative focuses the organization on delivering the goal to meet or exceed customer expectations by consistently delivering quality service through a customer-centric approach to ensure Metro provides safe, proactive and transparent service to its customers.

In FY2015, Metro declared financial reform as one of its key priorities and established new policies in the areas of grants management and procurement. Metro maintains this focus in FY2016 and remains committed to full compliance with all FTA regulations. Metro will continue to close National Transportation Safety Board recommendations, achieve State of Good Repair and provide transparent information on Metro's performance.

To continue the path of improvement, the GM/CEO's Business Plan focuses Metro's operating budget, capital program and business actions to safely improve service for customers and deliver on the goals and strategies established in the Momentum Strategic Plan.

The Business Plan highlights for CY2015 –CY2017 for each of the four Strategic Goals include actions to address the following activities:

Strategic Goal:	Actions:
Build and maintain a premier safety culture and system	<ul style="list-style-type: none"> <li>• Completion of remaining National Transportation Safety Board recommendations</li> <li>• New 7000 Series rail cars, replacing the 1000 Series cars</li> <li>• Implementation of a wayside worker warning system</li> <li>• Establishment of a new national transit industry standard for employee fatigue risk management</li> </ul>
Meet or exceed customer expectations by consistently delivering quality service	<ul style="list-style-type: none"> <li>• Enterprise wide customer care initiative that introduces a customer care initiative created to transform Metro's culture into one that values customer satisfaction and puts a premium on service delivery that meets or exceeds customer expectations</li> <li>• Bus Priority Corridor Networks</li> <li>• Continue bus stop improvements</li> <li>• Automatic train operation (ATO)</li> <li>• Escalator and Elevator Delivery</li> <li>• Launch pilot for new fare payment system pilot (NEPP)</li> </ul>

Ensure fiscal stability and invest in our people and assets	<ul style="list-style-type: none"> <li>• Financial Reform</li> <li>• Capital Funding Agreement</li> <li>• Human Capital Planning</li> <li>• Transit Asset Management</li> <li>• Collaborative Risk Management</li> </ul>
Improve regional mobility and connect communities	<ul style="list-style-type: none"> <li>• Silver Line Phase II preparation</li> <li>• Expand the new Metroway bus rapid transit network</li> <li>• Metro 2025 programs, including the expansion of eight-car trains</li> </ul>

### Office of Inspector General

Table 3.29

<i>(Dollars in Thousands)</i>	<b>Actual 2013</b>	<b>Actual 2014</b>	<b>Approved Budget 2015</b>	<b>Approved Budget 2016</b>	<b>Change</b>	<b>Variance</b>
PERSONNEL COST	\$3,255	\$3,182	\$3,168	\$3,401	\$233	7.4%
NONPERSONNEL COST	\$386	\$557	\$508	\$1,223	\$714	140.5%
<b>TOTAL COST</b>	<b>\$3,642</b>	<b>\$3,739</b>	<b>\$3,676</b>	<b>\$4,624</b>	<b>\$948</b>	<b>25.8%</b>
BUDGETED POSITIONS	32	34	34	34	0	0.0%

### Purpose

The Office of Inspector General (OIG) is an independent office that reports to the Metro Board of Directors. OIG is modeled after the federal Office of Inspector General to advance Metro's accountability and transparency.

### Responsibilities

The OIG supervises and conducts independent and objective audits, evaluations, investigations, and reviews of Metro programs and operations to promote economy, efficiency, and effectiveness, as well as to prevent and detect fraud, waste, and abuse in 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 Metro.

### OIG FY2015 Accomplishments

- OIG Audit completed three performance audits and made value-added recommendations to promote economy, efficiency, and effectiveness of Metro's programs and operations
- OIG Audit completed two performance evaluations of Metro programs, (i.e., Escalator Rehabilitation Replacement and Maintenance and Disadvantaged Business Enterprise) and made value-added recommendations to help Metro management meet its performance goals and objectives

- OIG also reviewed more than 10 contractor proposals for reasonableness of cost/pricing information and suggested at least \$6.5 million in net adjustments to the Office of Procurement for use in contract negotiations
- OIG Audit successfully “passed” an internal quality assurance review to ensure its internal quality control system operated to provide reasonable assurance of compliance with *Government Auditing Standards*
- OIG updated its audit risk assessment to feed into OIG’s (Board approved) Calendar Year 2015 Work Plan
- OIG worked closely with Metro management in addressing findings in the Federal Transit Administration’s (FTA) Review of Metro’s financial management oversight (FMO), including commenting and reviewing corrective action responses
- OIG Investigations received and processed over 400 hotline complaints
- OIG Investigations component issued over 10 Reports of Investigations (ROI’s)
- OIG Investigation component investigated 7 whistleblower retaliation complaints
- OIG worked closely with the Office of General Counsel to update and strengthen Metro’s Whistleblower/Retaliation Policy
- Upon request, OIG provided 11 sessions of Internal Control and Fraud Awareness training to contract technical representatives and other Metro personnel

#### **OIG Planned FY2016 Accomplishments**

- OIG Audit will conduct risk-based performance audits and evaluations to promote economy, efficiency, and effectiveness of Metro programs, operations, and activities
- At the request of the Office of Procurement, OIG will perform reviews and analyses of contractor proposals to determine reasonableness of cost/pricing information
- OIG will also supervise Metro’s annual independent audit of financial accounts, conducted by external auditors, to facilitate timely reporting to bondholders
- OIG Investigations will provide quick reviews of hotline complaints and issue confidential reports of investigation, involving waste fraud and abuse
- OIG will continue to work with the Office of General Counsel to maintain and strengthen Metro’s Whistleblower/Retaliation Policy
- OIG’s investigation component will lead coordination of investigations with the Metro Transit Police Department and/or outside law enforcement agencies

**General Counsel**

Table 3.30

<i>(Dollars in Thousands)</i>	<b>Actual 2013</b>	<b>Actual 2014</b>	<b>Approved Budget 2015</b>	<b>Approved Budget 2016</b>	<b>Change</b>	<b>Variance</b>
PERSONNEL COST	\$4,633	\$4,869	\$5,201	\$6,395	\$1,194	<b>23.0%</b>
NONPERSONNEL COST	\$689	\$7,088	\$1,591	\$1,422	(\$169)	<b>-10.6%</b>
<b>TOTAL COST</b>	<b>\$5,322</b>	<b>\$11,957</b>	<b>\$6,792</b>	<b>\$7,818</b>	<b>\$1,026</b>	<b>15.1%</b>
BUDGETED POSITIONS	42	41	48	48	0	0.0%

**Purpose**

The Office of General Counsel (COUN) protects the Authority's legal interests. The General Counsel serves as legal advisor to the Authority in an individual professional capacity, and serves as Ethics Officer for the Board of Directors. As a part of Metro's executive team, the General Counsel serves as a partner in the business process by providing legal and strategic advice for business transactions and policy initiatives. With Section Chiefs leading in key client services areas – including Contracts & Procurement, Customer Service & Regulatory Affairs, Finance & Administration, Governance & Human Resources, Real Estate & Joint Development, Metro Transit Police, Litigation and Workers' Compensation – COUN partners with senior managers to develop agreements with third parties, advise on procurements, assist with real estate and joint development activities, represent the Authority in trials and appeals, and provide advice on risk and representational matters.

**Responsibilities**

The Office of General Counsel is responsible for planning, directing and providing substantially all of the legal services provided to the Authority, and supervising outside counsel when specialized legal expertise is required. Among other things, COUN:

- Provides day-to-day legal advice to Board of Directors, Metro's General Manager, officers, and managers
- Defends Metro in litigation and pursues claims on Metro's behalf
- Interprets Metro's Compact
- Administers Metro's Public Access to Records and Privacy Policy programs
- Counsels Metro's employees on a range of general law matters

**FY2015 Accomplishments/work in progress**

- Completed re-write of procurement policies and procedures
- Participated in rollout of new procurement policies and procedures to WMATA staff
- Substantially completed re-organization of COUN procurement section, including recruiting three new attorneys

- Working with PRMT to develop Contract Lifecycle Management (CLM), the new procurement tracking system
- Participated in negotiation and execution of \$200 million loan to support CIP
- Actively participating in negotiation of new capital funding agreement
- Obtained favorable determination letters from the IRS for three WMATA pension plans
- Realigned COUN space to accommodate new staff and completed build-out and relocation of law library
- Substantially completed COUN client satisfaction survey and expect to distribute in CY2015
- Implemented PARP tracking tool and currently collecting data
- Completed revision of Board of Directors Code of Ethics

### FY2016 Planned Accomplishments

- Complete negotiation of new bond issue
- Continue implementation of new procurement policies and procedures
- Continue to develop proactive working relationships with client offices
- Begin drafting revised reimbursable projects policy
- Continue negotiation of lines of credit to support the CIP
- Complete re-write of Whistleblower policy and development of training module

### Board Secretary

Table 3.31

<i>(Dollars in Thousands)</i>	<b>Actual 2013</b>	<b>Actual 2014</b>	<b>Approved Budget 2015</b>	<b>Approved Budget 2016</b>	<b>Change</b>	<b>Variance</b>
PERSONNEL COST	\$443	\$397	\$433	\$512	\$79	18.2%
NONPERSONNEL COST	\$639	\$134	\$194	\$180	(\$13)	-7.0%
<b>TOTAL COST</b>	<b>\$1,082</b>	<b>\$531</b>	<b>\$627</b>	<b>\$692</b>	<b>\$65</b>	<b>10.4%</b>
BUDGETED POSITIONS	5	5	5	5	0	0.0%

### Purpose

The Office of the Board Secretary (SECT) is an independent office that reports to the WMATA Board of Directors. SECT serves as a resource to advance the Board's goals and policies, and Metro's strategic plan.

### Responsibilities

SECT is responsible for managing the decision-making process, 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 Metro 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 Metro 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 providing policy and logistical support for the Riders' Advisory Council.

### **FY2015 Accomplishments**

- Successful completion of nine Compact public hearings
- Provided support for GM/CEO search
- Facilitated Board member review of FMO responses
- Worked with COUN on revision to 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
- Provided orientation to new Board member appointments
- Continued support of online public access to Board Resolutions database and Board materials
- Provided joint Committee Coordination for Governance
- Managed the successful conduct of all Board and Committee meetings
- Served as a resource to the Metro Board and staff regarding Board policies and directions

### **FY2016 Planned Accomplishments**

- Continue acting as a vital bridge between executive leadership, the public, and the Board
- Facilitate continued Board efficiency and Governance best practices, including updating the Board Bylaws, Procedures and Code of Ethics in coordination with COUN
- Continue support of and make recommendations regarding Board goals, initiatives and policies
- Ensure Compact requirements are met, including the implementation of the Public Participation Plan
- Coordinate the orientation of new Board members

### **Equal Employment Opportunity**

Table 3.32

<i>(Dollars in Thousands)</i>	<b>Actual 2013</b>	<b>Actual 2014</b>	<b>Approved Budget 2015</b>	<b>Approved Budget 2016</b>	<b>Change</b>	<b>Variance</b>
PERSONNEL COST	\$1,165	\$1,291	\$1,223	\$1,277	\$54	4.5%
NONPERSONNEL COST	\$247	\$212	\$492	\$397	(\$95)	-19.3%
TOTAL COST	\$1,412	\$1,503	\$1,714	\$1,674	(\$41)	-2.4%
BUDGETED POSITIONS	11	11	11	11	0	0.0%

The Office of Equal Employment Opportunity (OEEO) implements and manages WMATA's commitment to the principles of equal employment opportunity, affirmative action, and equal access through the development and promotion of a diverse, inclusive and discrimination-free work environment.

OEEEO has responsibility for key areas including:

- Equal Employment Opportunity
- Workplace violence
- Workforce Diversity and Compliance
- Affirmative Action planning and implementation
- Title VI compliance

### **Equal Opportunity Branch**

Handles Equal Employment Opportunity (EEO) and dispute resolution. OEEEO is responsible for ensuring adherence to WMATA's policy and applicable federal laws regarding non-discrimination in all phases of the employment process through investigating and resolving formal and informal Title VI related complaints using effective, fair and alternative methods of resolution. The Equal Opportunity Branch provides proactive management consultation/training and employee counseling and conducts workplace violence prevention training.

### **Workplace Violence**

Responsible for the administration, application and implementation of the workplace violence policy, providing guidance to departments on recommended disciplinary actions resulting from incidents. OEEEO will determine the circumstances when a Workplace Violence concern will be investigated by a member of the OEEEO staff.

### **Workforce Diversity and Compliance Branch**

Interprets diversity in its broadest sense. Metro is of course, an equal employment employer, and welcomes a broad mix of unique characteristics in its employee population. Diversity refers to the ways people differ from each other. Metro staff members display a wide variety of personal and professional characteristics. Culturally, it varies in gender, age, ethnicity, race, sexual orientation, and language facility, to name a few. Functionally, it varies in the way we think, process information, learn, respond to authority, etc. Our upbringing affects our interpersonal skills and relationships, our perspective and even our political outlook. Many of these characteristics are generally invisible, yet they influence our professional expectations, work and life experience.

We believe valuing diversity makes good business sense and encourages an environment that welcomes a healthy exchange of ideas and different viewpoints. We regard diversity as the cornerstone of institutional greatness and as something that must be developed and cultivated. WMATA must straddle two fronts: the dynamically changing demographics of the population for which it serves and a reflective diversity for the people it employs. The Washington, DC Metropolitan area is a richly diverse environment offering a multiplicity of ideas. Thus, diversity is all-inclusive; it does not leave out anyone.

## **Affirmative Action Planning & Implementation**

In order to value diversity, we must assure that we are truly diverse at every level in terms of our employees' primary identification, race and gender. Our affirmative action program aims to close any gaps by setting targets to change the race/gender profile in specific job categories where women and minorities are underrepresented. These gaps are identified when we compare our employee population with the mosaic of races, ethnicities, and genders we find in our labor market.

Workforce Diversity and Policy Compliance is responsible for the design, development, implementation, and enforcement and monitoring of the Affirmative Action Plan in accordance with Federal Transit Administration and Equal Employment Opportunity Commission guidelines and the Office of Federal Contract Compliance Programs.

## **Title VI Compliance**

Metro is committed to ensuring that no person is excluded from participation in, or denied the benefits of its transit services on the basis of race, color or national origin, as protected by Title VI of the Civil Rights Act of 1964. Title VI states that, "No person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance." Title VI allows persons to file administrative complaints with federal departments and agencies alleging discrimination by financial assistance recipients.

OEEEO partnering with various organizations in Metro ensures that any changes to fares or the availability of transportation is in compliance with Title VI guidelines as they relate to minorities and low income ridership. OEEEO also has the responsibility to process and review Title VI administrative complaints.

## **OEEEO CY2015 Accomplishments**

- Diversity & Inclusion Week Tribute
- Submission of 2014 – 2017 Title VI Plan to FTA
- January – December 2014 trained over 1200 front line employees on Title VI
- Continued partnerships with PLAN, CSCM, BUS, and RAIL in reviewing initiatives requiring Title VI Analysis
- Completed field survey to identify disabled and veteran employees
- Partnered with Talent Acquisition is revising the Employee Data Sheet to capture information on disabled and veteran applicants

## **OEEEO Planned CY2016 Accomplishments**

- Partner with Talent Management in rolling out mandatory EEO training for managers.
- Growth in women, Latino, disabled, and veteran employees
- Pending PCN availability, increase Title VI training for seasoned BUS and Rail employees
- Re-establish language resource team
- Collaborate with CSCM on areas of public participation and outreach
- The 2<sup>nd</sup> Diversity & Inclusion event (pending budget)



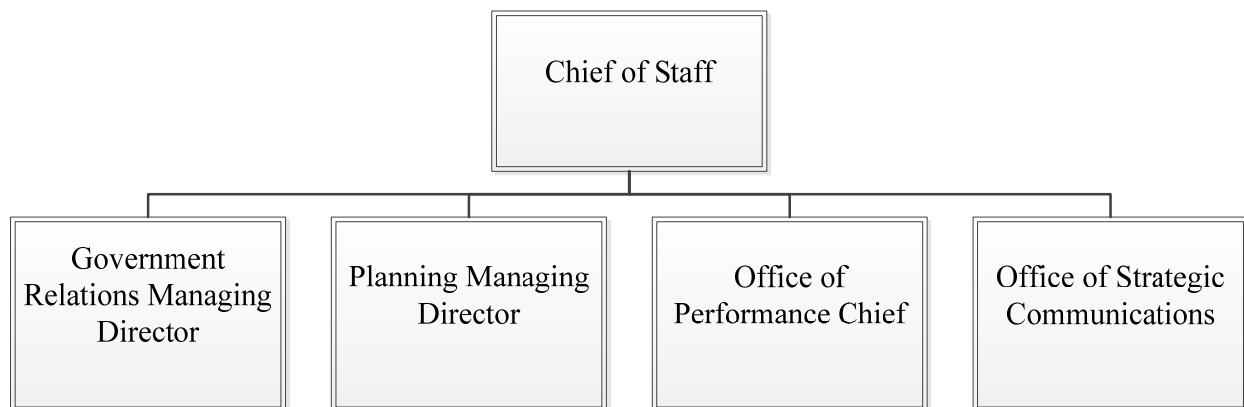
**Chief of Staff**

Table 3.33

<i>(Dollars in Thousands)</i>	<b>Actual 2013</b>	<b>Actual 2014</b>	<b>Approved Budget 2015</b>	<b>Approved Budget 2016</b>	<b>Change</b>	<b>Variance</b>
PERSONNEL COST	\$3,395	\$3,163	\$3,724	\$4,101	\$377	<b>10.1%</b>
NONPERSONNEL COST	\$577	\$578	\$632	\$615	(\$18)	<b>-2.8%</b>
<b>TOTAL COST</b>	<b>\$3,972</b>	<b>\$3,741</b>	<b>\$4,356</b>	<b>\$4,715</b>	<b>\$359</b>	<b>8.3%</b>
BUDGETED POSITIONS	32	32	32	32	0	0.0%

The Office of the Chief of Staff (CHOS) leads major departmental projects and initiatives, directs the agency's short and long-term strategic planning process, oversees performance in achieving organizational goals and immediate priorities, including the Authority's Momentum strategic plan and builds and maintains stakeholder relationships, and oversees management's Board communications. In addition, CHOS serves as management's liaison to the Board of Directors and leads the Executive Leadership Team in implementing agency-wide initiatives.

**FY2015 Accomplishments**

- Supported stakeholder outreach for the Silver Line service
- Continued support of Momentum, recommending creative funding/financing solutions for Metro 2025
- Increased support, and facilitated discussions between jurisdictions to reach resolution on the next Capital Funding Agreement
- Provided regional transit planning leadership by advancing the long range regional transit system plan, and initiating key supporting projects such as regional bus network planning
- Continued to advance policy programs through adoption, such as the Public Participation Plan

CHOS Business Plan for CY2015-2017 is updated annually and identifies actions that advance achievement of Metro's four strategic goals. The actions outlined in the CHOS Business Plan includes

Strategic Goal:	Actions:
Build and maintain a premier safety culture and system	<ul style="list-style-type: none"> <li>• Participates in Executive Safety Committee meetings</li> <li>• Participates in actions and committees related to Fatigue Management and Agency Risk Management</li> <li>• Ensures development and subsequent communication of policies to support the safety program</li> </ul>
Meet or exceed customer expectations by consistently delivering quality service	<ul style="list-style-type: none"> <li>• Supports efforts in Momentum and Metro 2025</li> <li>• Provides support to finalize operating plans related to Phase II of the Silver Line service</li> <li>• Supports Customer Care Initiatives by ensuring trends are elevated to the Executive Steering Committee</li> <li>• Provides internal customer service to prepare materials for the Board</li> <li>• Supports the Board in smooth transition of the new General Manager and board members</li> </ul>
Improve regional mobility and connect communities	<ul style="list-style-type: none"> <li>• Advances the long range plan to the Board for consideration by incorporating public outreach findings</li> <li>• Supports Board with Key Performance Indicators (KPI) for connecting communities by reaching out to jurisdictions on land use and working with the Board Planning Committee to advance the KPI, monitoring and reporting on the progress of the related KPIs</li> </ul>
Ensure fiscal stability and invest in our people and assets	<ul style="list-style-type: none"> <li>• Directs the overall strategy to advance the implementation and funding of Momentum, including plan strategies and initiatives</li> <li>• Leads stakeholder involvement amongst the businesses, communities and support groups</li> <li>• Supports of Board funding efforts; and consideration and adoption of the 2040 long range plan</li> <li>• Oversees Facilities Management Board to ensure equitable and efficient implementation of the facilities workspace management policy</li> <li>• Leads key authority-wide initiatives, including Employee Engagement initiatives, and Talent Management Council</li> </ul>

## Office of Performance

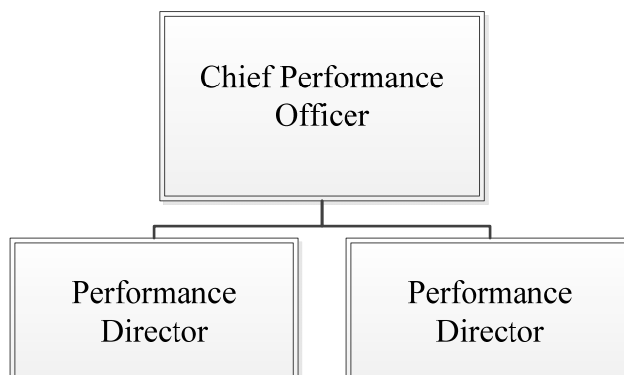


Table 3.34

<i>(Dollars in Thousands)</i>	<b><u>Actual 2013</u></b>	<b><u>Actual 2014</u></b>	<b><u>Approved Budget 2015</u></b>	<b><u>Approved Budget 2016</u></b>	<b><u>Change</u></b>	<b><u>Variance</u></b>
PERSONNEL COST	\$1,003	\$1,008	\$977	\$1,230	\$252	<b>25.8%</b>
NONPERSONNEL COST	\$429	\$253	\$573	\$539	(\$34)	<b>-5.9%</b>
<b>TOTAL COST</b>	<b>\$1,432</b>	<b>\$1,260</b>	<b>\$1,551</b>	<b>\$1,769</b>	<b>\$218</b>	<b>14.1%</b>
BUDGETED POSITIONS	7	7	7	8	1	14.3%

### Purpose

The Office of the Chief Performance Officer (CPO) takes action to unify and align WMATA in achieving its strategic goals by focusing on a small number of Key Performance Indicators. CPO produces the Vital Signs Report to document performance trends, address performance changes, and outline future actions to improve performance.

### Responsibilities

CPO helps the GM/CEO manage

- UP to the Board
- OUT to customers and the public
- DOWN to Executive Leadership and staff

CPO works collaboratively across the agency to turn data into performance information which helps prioritize decision making. Annually, CPO facilitates the GM and ELT through KPI target setting. Targets for each KPI define what success looks like. CPO uses the quarterly Vital Signs Report to disseminate performance results and suggested recommendations for improvements.

CPO assists all departments with annual updates to their departmental business plans. This work fosters helps improved organizational alignment toward Metro's strategic goals by cascading performance measures, targets and management actions down through the organization. These departmental business plans are guided by the annual update of the GM/CEO Business Plan.

Which is in turn guided by the Board of Director's focus on strategic plans and policy. In addition, CPO fosters a greater awareness of organization-wide risk; including the identification, understanding and management of enterprise risks to ensure controlled impact on organization's mission and values.

**Business Plan**

CPO's business plan includes actions to collect agency-wide performance measures and work with departments to analyze trends, ask questions on why performance changed and gain input/consensus on actions to improve performance. CPO supports the organization with analysis and recommended solutions to business issues, including process re-engineering. CPO staff network to make connections across offices regarding trends, challenges and potential solutions, drawing management attention to key issues. CPO works with other transit organizations to benchmark performance and share best practices, helping WMATA become an industry leader. CPO is also embarking on a new effort to implement a collaborative risk management approach to identify, prioritize and mitigate key risks facing WMATA.

**FY2015 Accomplishments**

- Continued production of quarterly Vital Signs Reports to document Metro's performance leading to more accountable and transparent communication with the Board and public
- Guided continual improvement and expanded use of departmental business plans
- Enhanced agency ability to use performance information to plan and manage work
- Worked with transit partners to prepare for measuring "State of Good Repair" and setting targets as required by MAP-21
- In partnership with Chief Policy Officer, guided an assessment of how Metro manages critical organizational risks

**FY2016 Planned Accomplishments**

- Continue publishing Vital Signs Reports to document Metro's performance
- Demonstrate how to use data to inform and improve decision making
- Establish a plan to implement enterprise risk management
- Update departmental business plans to reflect accomplishments and challenges
- Expand benchmarking efforts to improve Metro's performance by learning from peer agencies
- Adapt existing KPI's to also focus on our customer's experience

## Department of Bus

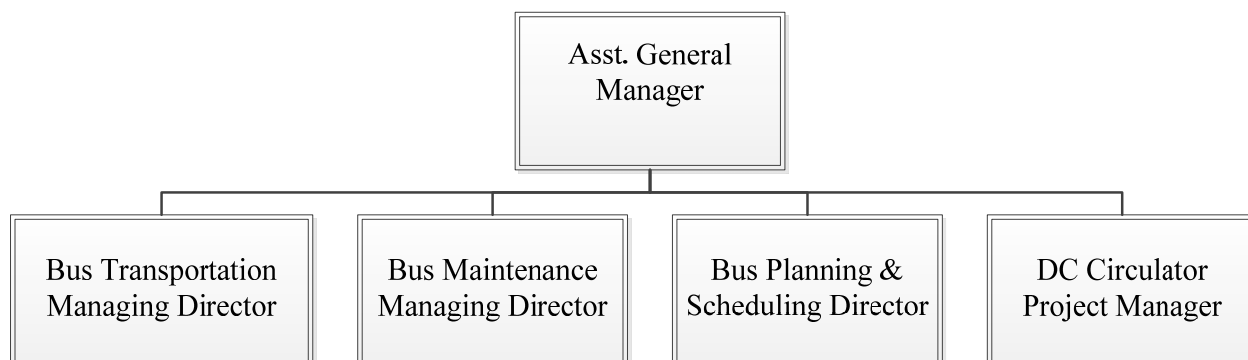


Table 3.35

<i>(Dollars in Thousands)</i>	<b>Actual 2013</b>	<b>Actual 2014</b>	<b>Approved Budget 2015</b>	<b>Approved Budget 2016</b>	<b>Change</b>	<b>Variance</b>
PERSONNEL COST	\$360,874	\$395,377	\$414,794	\$427,158	\$12,364	3.0%
NONPERSONNEL COST	\$70,384	\$73,711	\$80,117	\$77,541	(\$2,577)	-3.2%
<b>TOTAL COST</b>	<b>\$431,258</b>	<b>\$469,087</b>	<b>\$494,912</b>	<b>\$504,699</b>	<b>\$9,788</b>	<b>2.0%</b>
BUDGETED POSITIONS	3,995	4,138	4,177	4,183	6	0.1%

### Purpose

The Department of Bus Services is committed to being an integral part 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 towards the social, economic and environmental well-being of the community.

### Responsibilities

The Department of Bus Services is responsible for the maintenance, operation, scheduling and planning of Metrobus routes in the District of Columbia, Virginia, and Maryland. This is accomplished with approximately 1,516 buses, on 175 lines of service with 304 routes, and 4,183 employees. Additionally, Bus Services is responsible for the maintenance of WMATA's 1,823 non-revenue service vehicles and manages the DC Circulator Contract (a reimbursable project). Bus Service is the transportation provider for more than 135.9 million customers each year.

### Business Plan

The Department of Bus Services has three Business Plans related to the provision of its services. The Bus Transportation (BTRA) Business Plan, the Bus Maintenance (BMNT) Business Plan and the Planning, Scheduling and Customer Facilities (BOSC/BPLN) Business Plan detail how BUS's day-to-day actions help Metro make progress towards the agency's four Strategic Goals. The Bus Planning and Scheduling Business Plan details implementation of the Priority Corridor Network, guides the State of Good Operations initiative investments and coordinates provision of operator and vehicle schedules, system support activities and maintenance of Bus Customer Facilities

across the region. The actions, with corresponding performance targets, and measures in these Business Plans support the General Manager's Priorities and provide actionable and measurable plans that guide BUS's efforts to continually improve its services and deliver its programs. Bus has one of the most mature Business Planning processes at Metro. Below are examples of specific actions outlined in their Business Plans.

- Improve On-time performance and service reliability to over 79 percent through service design, schedule adjustment and active attention to service operations
- Reduce Employee Injury rate by the use of pro-active safety programs, investigation into all cases of injury and counseling of employees with multiple injuries
- Control and reduce the rate of customer injuries through continuous training, service adjustments to maintain schedules and work with jurisdictions to improve traffic conditions
- Continue improvements to the Priority Corridor Networks (PNC) corridors and other key Metrobus service within budget to continue to provide capacity and generate new ridership
- Be fiscally responsible and maintain operating expenses within budget. Continue a high level of expenditure of capital funds to support the overall goal of improving customer service
- Provide customer communications training to bus operators to improve their skills reduce complaints and minimize assaults
- Aggressively work with Human Resources to fill vacancies to minimize overtime and to insure 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. The actions and measures in our business plan aim to positively influence the following GM/CEO's Business Plan performance measures:

- Employee Injury Rate
- Customer Injury Rate
- Bus On-Time Performance
- Customer Commendation/Complaint Rate
- Operating Expense on Budget
- Capital Funds Invested
- Operating Expense on Budget
- Capital Funds Invested
- Number of Positions Filled

### **Program Highlights**

In FY2015, the General Manager added 25 bus operator positions at a cost of \$1.4 million (annualized) to reflect staffing requirements necessary to comply with 10-hour and 7<sup>th</sup> day objectives of the fatigue management program. In addition to the work schedule protocol adjustments to ensure compliance with 14-hour day and 12-hour work objectives, this added

staffing will aid in complying with the fatigue management standards, supporting training initiatives, reducing over-time and improving service safety and reliability.

In FY2016, Bus Services will extend Metroway service to Pentagon City, and make “State of Good Operations” (SOGO) budget neutral adjustments to routes throughout the system to reduce crowding, improve on time performance, and improve operational efficiencies, using every resource wisely.

**Calendar Year 2015 Highlights are as follows:**

- 3 Priority Corridor Networks (PCN) with New or Extended Service --10 PCNs with other Service Improvements
  - New Metroway Service Introduced
  - 2 PCNs Studies Completed,  
1 Emerging Corridor Study Completed
  - 5 Service Evaluation Studies Completed --Total studied 55
  - 6 Public Hearings
  - 25 Bus bridge plans and events for rail shutdowns
- |                  |         |
|------------------|---------|
| Total Passengers | 417,000 |
| Total Trips      | 27,914  |
| Total Miles      | 144,692 |
- 950 Detour Plans for Weekend Events
  - Special Plans
    - National Marathon
    - National Christmas Tree Lighting Ceremony
    - Holiday Shopping and Airport Service Plans
    - Nationals Baseball Plan

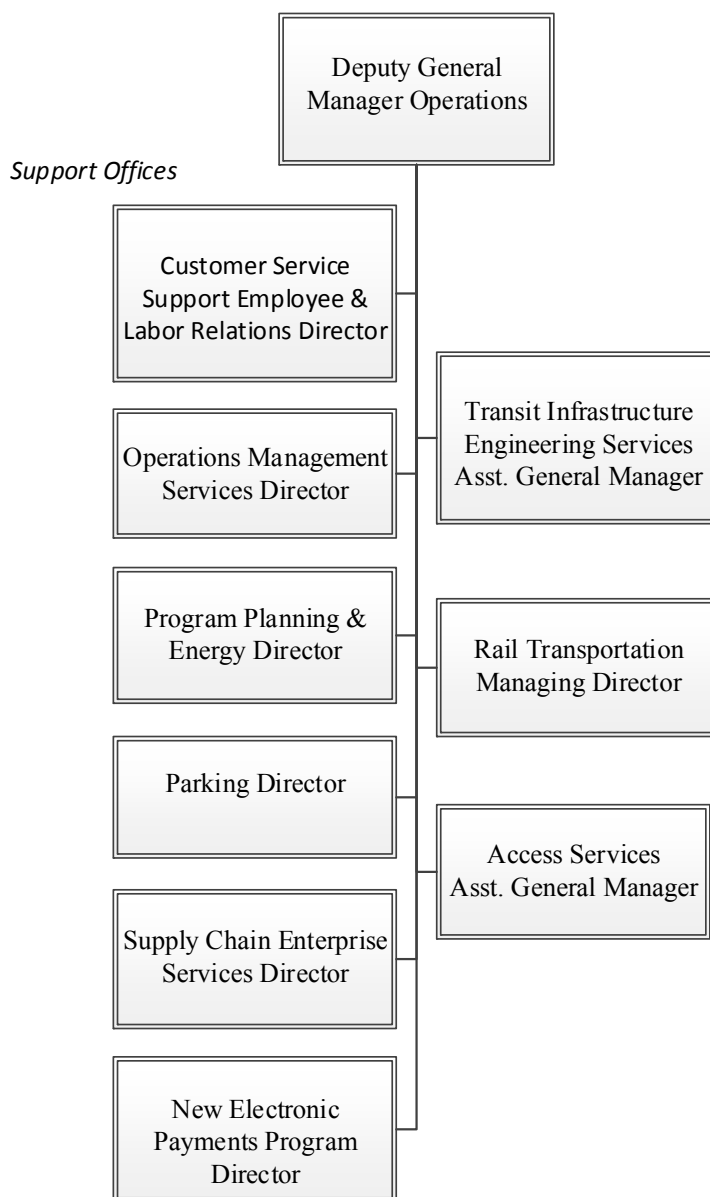
**Department of Operations**

Table 3.36 – DGMO Support Offices

<i>(Dollars in Thousands)</i>	<b>Actual 2013</b>	<b>Actual 2014</b>	<b>Approved Budget 2015</b>	<b>Approved Budget 2016</b>	<b>Change</b>	<b>Variance</b>
PERSONNEL COST	\$10,637	\$14,887	\$17,939	\$21,365	\$3,426	<b>19.1%</b>
NONPERSONNEL COST	\$80,448	\$82,163	\$95,091	\$95,442	\$351	<b>0.4%</b>
<b>TOTAL COST</b>	<b>\$91,085</b>	<b>\$97,051</b>	<b>\$113,030</b>	<b>\$116,807</b>	<b>\$3,777</b>	<b>3.3%</b>
<b>BUDGETED POSITIONS</b>	<b>197</b>	<b>154</b>	<b>219</b>	<b>224</b>	<b>5</b>	<b>2.3%</b>



### Purpose

The Deputy General Manager of Operations (DGMO) directs the daily operations and maintenance of the Metrorail system covering 118 miles of track, 91 stations, vertical transportation system (613 escalators/313 elevators), 1,100+ railcars, nine rail yards, Metro's supply facility, and all WMATA administrative facilities. The DGMO manages an annual operating budget that exceeds \$930.0 million, and an annual capital budget of \$800.0 million that is focused on rebuilding Metro to a state of good repair, as well as providing labor relations management, technical skills training and return-to-work programs for employees.

### Responsibilities

The Business Plans that detail the actions, targets and measures for the delivery of rail service and all of its supporting functions are developed at the organizational level. There are 11 Business Plans that support the DGMO's successful delivery of Operations programs. These contain the actions, measures, targets and identify the dependencies with other organizations that will enable the DGMO to deliver safe, secure, reliable and efficient service.

## Rail Transportation

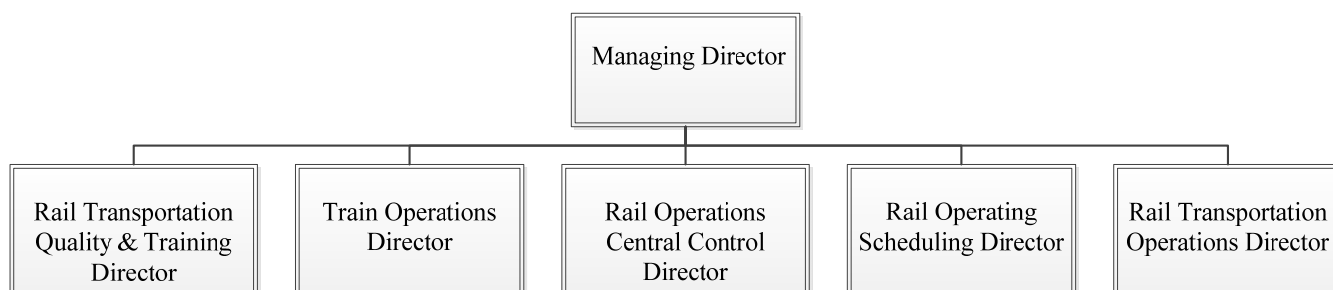


Table 3.37

<i>(Dollars in Thousands)</i>	<b>Actual 2013</b>	<b>Actual 2014</b>	<b>Approved Budget 2015</b>	<b>Approved Budget 2016</b>	<b>Change</b>	<b>Variance</b>
PERSONNEL COST	\$167,858	\$178,775	\$207,750	\$214,977	\$7,227	3.5%
NONPERSONNEL COST	\$1,311	\$1,782	\$1,736	\$1,861	\$125	7.2%
<b>TOTAL COST</b>	<b>\$169,169</b>	<b>\$180,557</b>	<b>\$209,486</b>	<b>\$216,838</b>	<b>\$7,352</b>	<b>3.5%</b>
BUDGETED POSITIONS	1,552	1,623	1,663	1,661	-2	-0.1%

**Purpose**

The Office of Rail Transportation (RTRA) strives daily to provide our customers with a safe, courteous, and capable transit experience that demonstrates our renewed commitment to the mission of the Authority and to the region's riding public.

**Responsibilities**

The Office of Rail Transportation provides rail service across 118 miles of track and 91 rail stations, 40 of which are in DC, 26 in Maryland and 25 in Virginia. RTRA is responsible for all facets of rail operations including station and train operations, rail operations control center including maintenance operations center, rail operations training and planning/scheduling.

**Business Plan**

The Office of Rail Transportation's Business Plan identifies how RTRA's day-to-day actions help Metro make progress towards the agency's four strategic goals (Safety, Quality, Connectivity and Assets). RTRA's Business Plan details the actions it will take to achieve the priorities of the GM/CEO Business Plan and positively influence the following performance measures:

- Employee Injury Rate
- Customer Injury Rate
- Rail On-Time Performance
- Average Persons per Car
- Customer Commendation/Complaint Rate
- ADA Compliance
- Operating Budget Compliance
- Percentage of Employees Certified
- Percentage of Employees Engaged
- Vacancy Rate

**CY2014 Performance Highlights**

In the third quarter of the calendar year, Metrorail expanded its service with the addition of 11.7 miles and 5 stations on the Silver Line. Even with this mileage, Metrorail on-time performance (OTP) through the third quarter is nearly 91 percent and fleet reliability continues to be above target with mean distance between delays to by 13,350 miles above the target of 60,000 miles. Staff have identified key elements of strong Silver Line service (e.g. on-time dispatch from Wiehle-Reston East, on time train arrivals at East Falls Church to ensure proper sequencing of Silver, Orange and later, Blue Line trains and strategically responding to delay incidents) and have begun to manage to these elements. Through these efforts, Rail on-time performance has strengthened. For rail fleet reliability, railcar delay incidents have remained constant despite a 15% increase in railcar mileage.

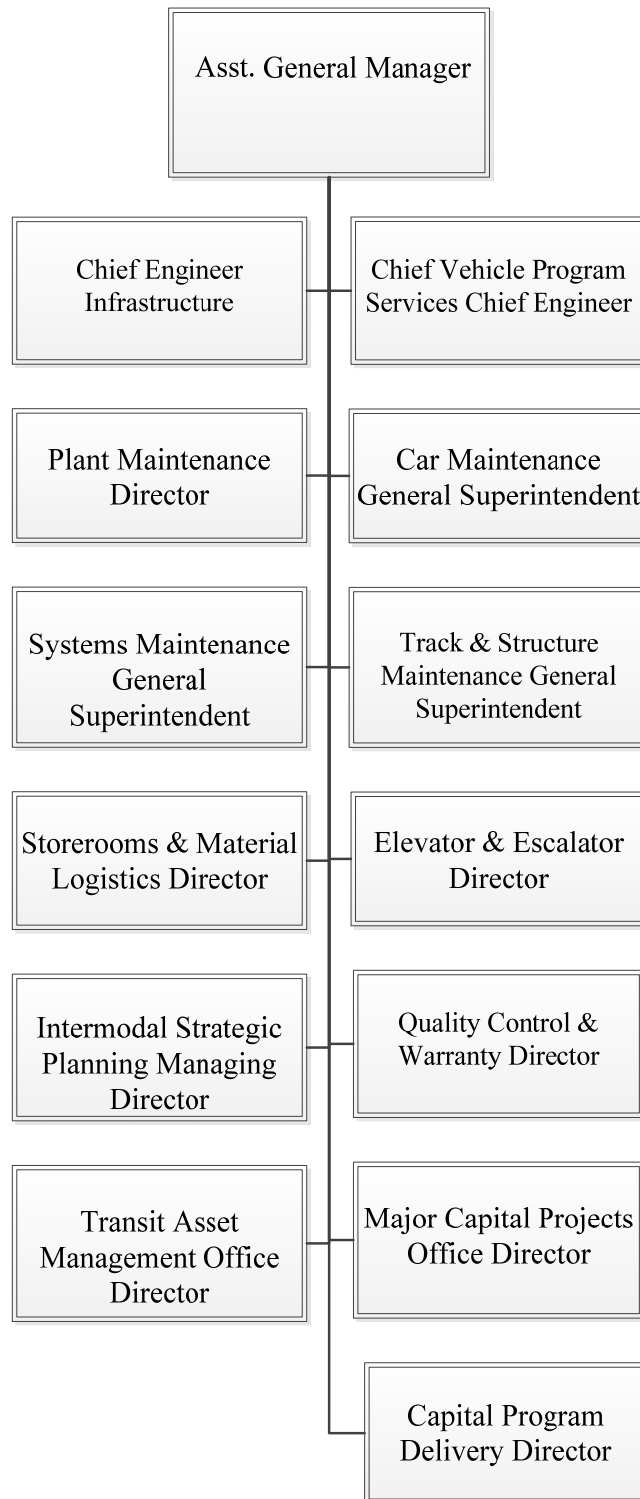
**Transit Infrastructure and Engineering Services**

Table 3.38

<i>(Dollars in Thousands)</i>	<b>Actual 2013</b>	<b>Actual 2014</b>	<b>Approved Budget 2015</b>	<b>Approved Budget 2016</b>	<b>Change</b>	<b>Variance</b>
PERSONNEL COST	\$346,593	\$402,323	\$408,773	\$431,625	\$22,852	<b>5.6%</b>
NONPERSONNEL COST	\$93,554	\$94,120	\$90,108	\$87,886	(\$2,222)	<b>-2.5%</b>
<b>TOTAL COST</b>	<b>\$440,147</b>	<b>\$496,444</b>	<b>\$498,880</b>	<b>\$519,511</b>	<b>\$20,630</b>	<b>4.1%</b>
BUDGETED POSITIONS	4,731	4,837	4,868	4,945	77	1.6%

**Purpose**

The Department of Transportation Infrastructure and Engineering Services (TIES) strives to provide a positive daily commute for our customers by providing a safe and reliable rail system through comprehensive engineering, inspection, maintenance, and rehabilitation programs that enhance the condition of the Metrorail system, Metrobus and Metrorail facilities, shops, rail yards and railcars. TIES is comprised of the following offices:

- Chief Engineer Infrastructure (CENI)
- Chief Engineer Vehicles (CENV)
- Rail Car Maintenance (CMNT)
- Capital Program Delivery (CPDO)
- Elevator and Escalator (ELES)
- Intermodal Strategic Planning (IPLN)
- Major Capital Projects (MCAP)
- Plant Maintenance (PLNT)
- Quality Assurance and Warranty (QAAW)
- Systems Maintenance (SMNT)
- Storerooms and Material Logistics (SRML)
- Transit Asset Management (TAMO)
- Track and Structures (TRST)

**Responsibilities**

- Engineering, project management and construction management for the Capital Program ensuring that the proper capital investments are made to support safe operations of the Metro System
- Technical support with the delivery and acceptance of railcars and rail vehicles required for maintenance of the system
- Comprehensive maintenance program for a fleet of 1100+ railcars, 266 rolling stock track maintenance vehicles and 955 pieces of support equipment. Provide a daily service requirement of 954 railcars

- Maintain a state of good repair for WMATA's vertical transportation system, including 613 escalators (in stations) and 313 elevators (in stations, parking garages and maintenance facilities)
- Management and maintenance of all WMATA's facilities and mechanical equipment systems in support of Metrorail and Metrobus operations that includes 91 Metrorail stations, 24 parking garages, nine rail yards, 10 bus garages, 26 administrative facilities covering a 1,500 square mile area
- Independent and objective quality assurance services designed to add value and to improve the organization's operations and procurement
- Enhancement of the safety and reliability of WMATA operations through comprehensive maintenance programs for Automatic Fare Collection (AFC), Automatic Train Control (ATC), Communications Systems (COMM), Lighting, Low Voltage Systems and the Rail Traction Power Distribution Systems (POWR), Shops and Material Support (SAMS) and support to CPDO for capital rebuilding
- Management of inventory and processes needed to support and maintain all systems/equipment in the Department of Transit Infrastructure & Engineering Services (TIES) operating 11 storerooms with inventory valued at over \$30.0 million
- Inspection, maintenance and rehabilitation of all revenue and yard tracks as well as all aerials, bridges, retaining walls and tunnels
- Replacement of track components such as switches, fasteners, running rail, cross-ties, and insulators on ballast and direct fixation track throughout the Metrorail System
- Maintenance and inspection of WMATA's right-of-way structures, fence line and parking garages, and providing inspection reports for 432 mainline miles of track, 171 mainline switches, and 354 yard switches

**Business Plan**

The eleven organizations that comprise the Department of Transit Infrastructure and Engineering have Business Plans that articulate how their day-to-day actions help Metro make progress towards the agency's four strategic goals. These Business plans contain specific actions to implement the GM/CEO's priorities and contribute to the attainment of the agencies Strategic Goals by 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
- Percentage of Employees Certified
- Percentage of Employees Engaged
- Vacancy Rate

**CY2013 Performance Highlights**

- CENI: Awarded contracts for: corrosion control services and replacement of shop equipment that has reached the end of its useful life, including the installation of wheel truing machines. Installed CCTV cameras with video analytic capability that detect intrusions and suspicious activities. Completed CCTV upgrades to increase capacity of data/images and provide latest viewing capabilities at 45 Metrorail stations (SEC0004).
- CENV: Completed the following for the new 7000 Series railcars (final design reviews, qualification, FAI of components, manufacturing of prototype and pilot railcars, exercised options for 164 additional railcars). Finalized acceptance of Track Geometry Vehicle and achieved project closeout of the 6000 Series railcars.
- CMNT: Increased daily car requirement to 896 and completed several maintenance campaigns that resulted in the improvement of Mean Distance Between Failures by 4.5 percent.
- CPDO: Continuing to expand on the foundation of safety and reliability, WMATA has realigned some of the project delivery staff into a newly created Office of Capital Program Delivery (CPDO) reporting directly to the AGM-TIES. Under this realignment, the office of Infrastructure Renewal Programs (IRPG) was divided into two groups: IRPG and SRPG (Office of System Renewal Program). In addition, a new Office of Track Allocation and Support Services (TASS) has been created to consolidate escort support functions and mobile command operations.
- ELES: Increased preventive maintenance resulted in escalator availability improving 3% in CY2013, exceeding the target of 89 percent. Improved escalator reliability for customers included new units at Foggy Bottom and Dupont Circle. Elevator availability improved (to 92.2 percent) in CY2013 as the number of, and the time to fix, unscheduled outages declined due to the addition of dedicated elevator mechanics (FY2013 Budget Initiative) and improved preventive maintenance.
- MCAP: Completed 8-car train report study, which will serve as a foundation for implementation plan to transition to 8-car trains by 2025. Completed construction of MTPD's District II training facility and completed renovation of MTPD's Special Operations Division which became a permanent location for MTPD's Transit Police Special Operations Divisions to include Special Response Team, the Transit Anti-Crime Team the Auto Theft Unit, K-9 Teams, the Explosive Ordinance Disposal Team and the Motorcycle Unit. Completed construction of the Commissioning Facility at Greenbelt Yard. Awarded contract to construct a new (replacement of the current Southern Ave Bus Garage) Bus Garage for 175 buses, including Heavy Repair & Overhaul Facility for WMATA's entire bus fleet, Maintenance and service shop for non-revenue vehicles and Bus Engineering Shop.
- PLNT: Performed better than the target for employee injuries (no more than 3.21 injuries per 200,000 work hours); achieved a rate of 3.04 and completed 114 percent of safety conversations. Completed 12 major and 12 mini rehabs to restore the appearance of rail stations and several major signage projects: fabricated and installed 1,200 Rush+ signs and 308 suicide prevention signs for the Metrorail system; fabricated 2,500 decals to install on cover boards in roadway that provide warning of 750 volts; and fabricated/installed signs

at the Pentagon station for the realignment of bus service. Replaced the elevator cabs/controls for the four passenger and three freight elevators at the Jackson Graham Building. Repaired and painted the external facade of the Jackson Graham Building. Initiated program to have Landscape Supervisors acquire state certification as Pesticide Applicators. Implemented new training programs on maintenance of drainage pumping stations and certification for General Equipment Mechanics.

- QAAW: Established an Incoming Inspection process and Material Review Board to ensure that parts purchased for railcars are correct and meet all required specifications. Updated and strengthened the Internal Audit Procedure to establish standards for scheduling, performing, evaluating, recording the results, reporting and follow up of all audits conducted by QAAW. Commenced review and approval of all documentation submitted by Kawasaki for the 7000 series railcars.
- SMNT: Achieved an injury rate of 1.72 injuries/200,000 work hours and completed 35,223 Safety Observations, for a 101 percent completion rate. In support of capital rebuilding, SMNT provided Red Tag and ATC Traffic re-configurations for 107 shutdowns and single track events, and 469 early out events in CY2013. Executed 3,805 Red Tag events, ranging in durations from several hours to several days in CY2013.
- SRML: Reduced excess material in storerooms by \$5.0 million. Installed Vertical Storage Units at Alexandria & Greenbelt Storerooms to optimize storage space and improved material availability by 46 percent at all storerooms.
- TAMO: Kicked off an authority wide Transit Asset Management improvement program to develop a framework that that will integrate Metro's asset management practices into one, coordinated, organizational strategy, and provide the basis for continually improving asset management practices at Metro. Developed an authority wide asset management policy and strategy which aligns asset management decision making to the strategic goals of the authority. Designed and tested a prototype mobile system for performing and recording asset condition assessments.
- TRST: Completed installation of: 32 Yard Switches, 18,000 Cross-Ties, 12.5 miles of Running Rail, 30,000 Fasteners, 7000 Insulators, 1,000 Flash-Butt Welds, 1,500 ROW Signage Replacement, 40 miles of Tamping. Completed rehabilitation of: 750' Floating Slabs, 2,150 Leaks, and 8,000 Grout Pads.

## Access Services

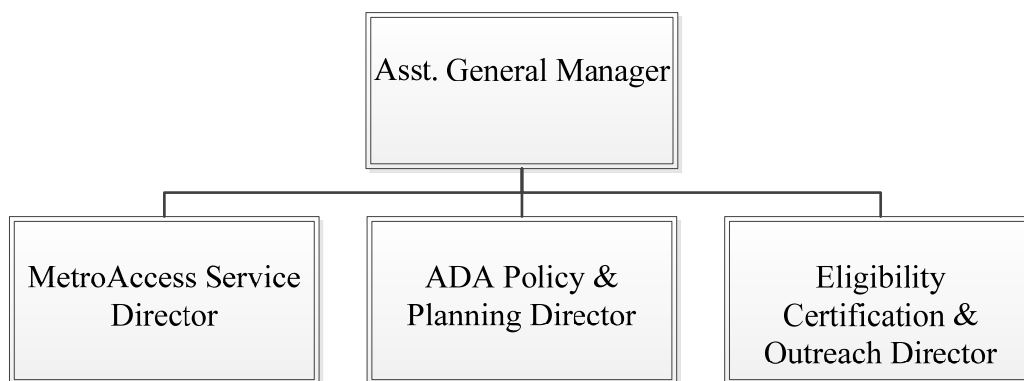


Table 3.39

<i>(Dollars in Thousands)</i>	<b>Actual 2013</b>	<b>Actual 2014</b>	<b>Approved Budget 2015</b>	<b>Approved Budget 2016</b>	<b>Change</b>	<b>Variance</b>
PERSONNEL COST	\$4,865	\$6,130	\$6,731	\$6,938	\$207	3.1%
NONPERSONNEL COST	\$95,577	\$96,877	\$102,731	\$109,569	\$6,838	6.7%
<b>TOTAL COST</b>	<b>\$100,442</b>	<b>\$103,007</b>	<b>\$109,462</b>	<b>\$116,507</b>	<b>\$7,045</b>	<b>6.4%</b>
BUDGETED POSITIONS	42	54	56	56	0	0.0%

### Purpose

The Department of Access Services (ACCS) ensures that Metro 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.

### Responsibilities

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

- MetroAccess service delivery
- Metro accessibility policy leadership
- Ensure 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



**Business Plan**

The ACCS Business Plan is centered on three strategic objectives: (1) all of Metro's services are continuously safe and accessible to our customers with disabilities; (2) MetroAccess paratransit service is delivered efficiently and effectively; and (3) 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, and communications staff to ensure that our doors are opened to the greatest number of customers with disabilities, and over 16 million use our accessible bus and rail services every year. Our Eligibility Certification & Outreach office takes this message directly to the customer, providing information sessions in the community; educating those who apply for reduced fare or paratransit service on the benefits of our fixed-route system; and conducting our award-winning travel training program to make independent and spontaneous travel on that system a reality for thousands of customers.

The MetroAccess office manages our paratransit service through a team of contractors via a multi-contractor, performance-based business model (with a total value of \$1.0 billion in contracts over a 10-year performance period) comprised of contracts for service delivery (three contractors); call center operations; and quality assurance. Benefits from the new model include greater agility and control in managing the service, greater efficiency, and lower cost.

MetroAccess is tracked through five GM/CEO Business Plan performance measures, including Customer Injury Rate, On-Time Performance, Customer Commendation/Complaint Rate, Operating Expense on Budget, and Capital Funds Invested.

**Program Highlights**

Working for the long-term sustainability of our paratransit service, ACCS has advanced regional partnerships with other entities that can perform specialized transportation service in lieu of MetroAccess, and two successful CAPS (Coordinated Alternative to Paratransit Service) pilot projects have been launched in Maryland and the District of Columbia. Both of these pilots provide more tailored service to customers who previously used MetroAccess and at a fraction of the cost. The Maryland project leverages the resources of a human services agency, and the other makes use of the District's taxi services. At the direction of the Board, a formal study and regional action plan are being developed for implementation starting in FY2016 that will seek to establish many more CAPS-type projects.

ACCS is also promoting a collective effort to improve the accessibility of the region's bus stops, and Metro's Trip Planner now features photographs and data on the accessibility of bus stops to assist customers in planning their travel. A new architecture is under development for the regional bus stop database that will enable jurisdictions to provide real-time updates on bus stop improvements, and an annual progress report will be provided to the Board by Metro's Accessibility Advisory Committee.

## Human Resources



Table 3.40

<i>(Dollars in Thousands)</i>	<b>Actual 2013</b>	<b>Actual 2014</b>	<b>Approved Budget 2015</b>	<b>Approved Budget 2016</b>	<b>Change</b>	<b>Variance</b>
PERSONNEL COST	\$11,280	\$11,116	\$11,515	\$14,302	\$2,787	<b>24.2%</b>
NONPERSONNEL COST	\$6,018	\$5,676	\$5,421	\$5,559	\$139	<b>2.6%</b>
<b>TOTAL COST</b>	<b>\$17,298</b>	<b>\$16,792</b>	<b>\$16,936</b>	<b>\$19,861</b>	<b>\$2,926</b>	<b>17.3%</b>
<b>BUDGETED POSITIONS</b>	<b>120</b>	<b>127</b>	<b>129</b>	<b>143</b>	<b>14</b>	<b>10.9%</b>

### Purpose

The Department of Human Resources (HR) is comprised of the Offices of Talent Acquisition, Talent Management, Compensation/Benefits, and Information Management. HR develops and sustains programs, policies, and strategies which enhance organizational effectiveness and maximize the potential of the organization and employees to advance the mission and goals of Metro. HR supports and promotes a workplace that fosters respect, trust, equity, diversity, career and professional development, and collaboration.

### Responsibilities

- **Talent Acquisition** designs and implements proactive sourcing and recruitment strategies and facilitates the day-to-day recruiting, hiring and employee mobility activities that attract and retain the caliber of talent needed to achieve Metro's business objectives. Furthermore Talent Acquisition promotes a positive employment brand and develops candidate pipelines through functional and multicultural recruitment outreach and the cultivation of key organizational and community-based strategic sourcing partnerships.
- **Talent Management** promotes a performance-based culture by providing strategic business partners and workforce development programs to solve organizational and team business challenges, and corporate learning and development courses to support employee professional development. Talent Management improves engagement, retention and skill depth through succession planning and leadership development programs.
- **Compensation/Benefits and Medical Services** designs and implements compensation, benefits, and medical services programs and strategies to enhance WMATA's capacity to

attract, retain, and reward employees. Medical Services ensure employees meet mandated occupational health standards resulting in customer safety and higher productivity. The Employee Wellness Program develops strategies to communicate and address common employee health risks resulting in a decrease in the trend of health benefits expense.

- **Information Management** defines and drives the delivery of HR Technology solutions in support of HR functions and services. HRIM collaborates with the HR Process Owners, HR Business Partners, and IT to deliver and maintain the desired technology solutions. HRIM will ensure the integrity of HR electronic and paper processing.
- **Employee Relations** promotes a positive and cooperative work environment through proactive consultation and interventions to address conduct, performance, and other employment related matters. Employee Relations develops and implements strategies that contribute to improving productivity, motivation, and morale in the workplace.

#### **Program Highlights CY2014 Accomplishments/Initiatives**

- Recruited 1,215 new hires into the organization enabling the Authority to achieved a 6.1% YE vacancy rate
- Achieved the greatest rate of utilization for WMATA in over 5 Affirmative Action Plan submissions; achieving a 51.0 percent utilization rate for the 2011-2014 AAP
- Again earned WMATA the Military Friendly Employer designation for 2015
- Achieved Affirmative Action Plan goals in bus operator, laborer and technical fields
- Implemented the Principles of Supervision, a mandatory course focused on Metro leadership tools and processes.
- Completed design for the Succession Planning Program
- Deployed the Years of Service Recognition Program to recognize employees' career milestones at 5-year increments.
- Developed a comprehensive job-based Leadership Development Program.
- Implemented 457 Plan Enhancements
- Implemented Metro Wellness Program
- Implemented Human Capital Management, PeopleSoft 9.1 upgrade
- Designed and delivered workplace bullying awareness training for management

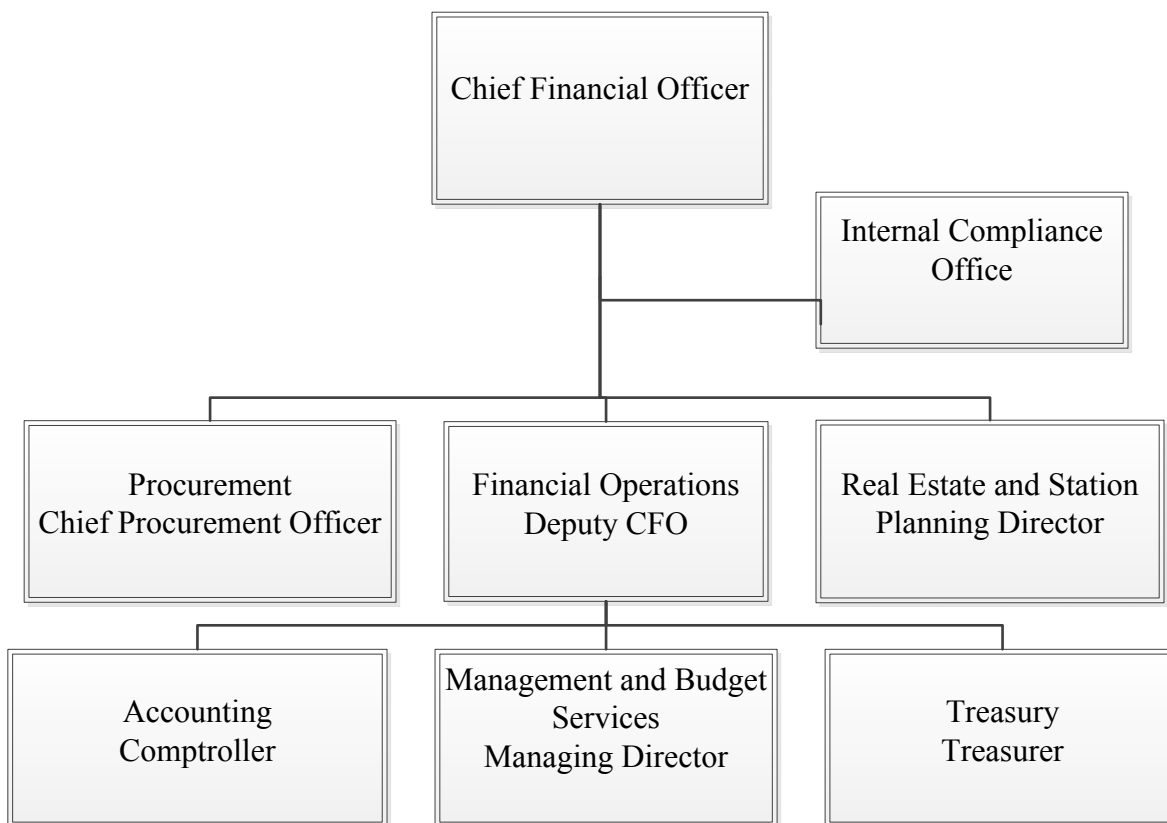
**Financial Operations**

Table 3.41

<i>(Dollars in Thousands)</i>	<b>Actual 2013</b>	<b>Actual 2014</b>	<b>Approved Budget 2015</b>	<b>Approved Budget 2016</b>	<b>Change</b>	<b>Variance</b>
PERSONNEL COST	\$49,116	\$49,745	\$54,487	\$55,105	\$618	1.1%
NONPERSONNEL COST	\$61,549	\$48,661	\$57,192	\$50,373	(\$6,820)	-11.9%
<b>TOTAL COST</b>	<b>\$110,665</b>	<b>\$98,406</b>	<b>\$111,679</b>	<b>\$105,477</b>	<b>(\$6,202)</b>	<b>-5.6%</b>
BUDGETED POSITIONS	382	346	353	367	14	4.0%

**Purpose**

The purpose of Financial Operations is to facilitate the planning, coordination, management, and implementation of Metro's services, programs, and priorities while monitoring, sustaining and strengthening the Authority's fiscal integrity and financial condition.

## Responsibilities

### Office of Internal Compliance (OIC)

- The Office of Internal Compliance 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 value-added assessments of financial reporting and operational risks. The OIC partners with departments to review and evaluate business processes efficiency and effectiveness.

### Accounting (ACCT)

- The General Ledger office analyzes, reconciles, maintains, journalizes and reports accounts receivable, jurisdiction subsidy, inventory, prepaid assets, health and welfare contributions, pension contributions, workers compensation, retirement accounts, cash accounts, investments, debts, operating revenue and expense reports for the National Transit Database, other financial transactions and specific footnotes to the financial statements
- The Accounts Payable office ensures that all payments to vendors, third parties, jurisdictions and reimbursements to employees are processed timely, accurately, efficiently and in compliance with the Authority, Jurisdictional and Federal policies and regulations
- The Financial Analysis office analyzes and evaluates costs charged to capital, reimbursable and new service projects, reconcile funds control in project costing to general ledger and to provide financial reports to Federal, State and Local Jurisdictions in accordance with general accepted accounting principles. Coordinates reporting to the National Transit Database, and is responsible for the preparation of the quarterly financial statements including the Statement of Net Position, Statement of Revenues, Expenses, and Changes in Net Position, and Statement of Cash Flow. Coordinates WMATA audits, and is responsible for the preparation of the Schedule of Expenditures of Federal Awards (SEFA)
- The Financial Systems and Reporting (FSnR) office performs validation of transactions, bundle/upgrade testing, system configuration and maintenance updates. FSnR maintains the monthly allocation process and provides financial/budget variance reporting for the Office of Accounting and its external customers. FSnR also provides direct support for PeopleSoft external interfaces affecting the modules supported by the office, coordinates equipment and software requests for the office and provides Intranet support and server maintenance
- Project Costing provides functional support by leveraging the knowledge of financial and reporting systems, transaction flows, cross-system impacts in order to ensure data integrity. Performs on-going review for quality assurance to insure that financial information is accurately reported and conveyed in the PeopleSoft Financial Systems
- The Asset Management office provides overall management responsibilities, policies and procedures governing the accountability and control of WMATA's nonexpendable personal property which meets WMAT's current capitalization criteria.

**Office of Management and Budget Services (OMBS)**

- Supports the implementation of Metro's Strategic Plan by aligning resources with actions and strategies to deliver the Mission and Goals of the Strategic Plan
- Plans, coordinates, develops, executes, monitors, and advocates for Metro's multi-year budget and six year CIP
- Provides accurate and timely information, analysis, reports and makes recommendations to the organization, the GM/CEO, the Board of Directors, and funding agencies
- Provides the organization with the analytical tools to facilitate optimal management, performance and delivery of Metro's Operating and Capital budgets, services, and programs
- Ensures compliance with all federal grant regulations
- Provides long range financial forecasting and revenue projections

**Procurement (PRMT)**

- Executes and facilitates all procurement actions on behalf of the Authority for goods and services
- Manages the Disadvantaged Business Enterprise (DBE) function and the Small Business and Local Preference Program (SBLPP)

**Treasury (TRES)**

- Manages the fare media sales & distribution functions to provide for an effective and optimal process and organizational structure
- Collects and processes revenues in an efficient and cost effective manner
- Implements fare media (SmarTrip) related technology projects to decrease costs, improve productivity and increase customer satisfaction
- Reduces financial & market risk - liquidity (cash flow) risk, credit risk, workers compensation and third party claims and price fluctuations (fuel, power, materials and supplies)
- Obtains the lowest cost of financing possible, with least restrictive covenants
- Manages investments with the goal of earning a market-rate of return while preserving capital and liquidity

**Real Estate and Station Area Planning (LAND)**

- Implements Metro's joint development program through which property interests owned and/or controlled by Metro are marketed to private developers with the objective of developing transit-oriented projects that enhance station access and generate revenues for the Authority.
- Oversees the performance of joint development projects to ensure that projects achieve Metro's expected financial objectives
- Manages Metro's surplus property assets
- Negotiates and manages Metro's leasing of property to others, and the leasing of property for Metro use
- Acquires property for Metro operational requirements
- Negotiates easements for temporary or permanent use of Metro property

## Business Plans

Financial Operations Business Plans identify the offices day-to-day functions that assist Metro in achieving its four Strategic Goals. Financial Operations' contributions toward agency goals are tracked in the following performance measures in the GM/CEO Business Plan:

- Employee Injury Rate
- Customer Injury Rate
- Customer Commendation/Complaint Rate
- Operating Expense on Budget
- Capital Funds Invested
- Number of Positions Filled

## Accomplishments

- Financial Operations provided project executive leadership in coordinating WMATA management's responses to the draft Federal Transit Authority's (FTA) Financial Management Oversight (FMO) Review draft report.
- All corrective actions detailed in the FMO management responses were accepted without revision.
- Established WMATA's Office of Internal Compliance in FY2015
- Completed PeopleSoft Human Capital Management upgrade from version 8.8 to version 9.1 in March 2014, including Time & Labor, Payroll and implemented a new module, Absence Management. Upgrades included enhanced employee self-service options, on-line absence requests and approvals, and strong absence over-use controls.
- FY2014 and FY2015 PeopleSoft project costing sub-system reconciliation report in progress
- FY2014 and FY2015 Developing and implementing two initiatives to automate AP processing
- FY2014 and FY2015 Processing the intake of Silver Line transferred assets budgeted at \$2.9 billion
- Successfully implemented FY2015 fare increase
- Successfully coordinate the fare collection project for the July 2014 opening of the Silver Line
- In FY2015 received \$52.0 million in Federal grant reimbursements
- In FY2015 we have successfully drawn \$7.0 million in grant reimbursements
- Maintained a cumulative success rate of 98.0 percent for federal grant reimbursement requests
- PRMT spearheaded an effort to reduce rogue spending by purchase card holders by reducing the number of cardholders from over 315 to 235 in FY2015
- In FY2015 PRMT reduced procurement administrative lead time processing from an average of 217 days to an average of 93 days
- PRMT to roll out CLM functionality to support contracting discipline in FY2016
- Reduce toner cartridge buys by using network printers in FY2016
- Hedged 75 percent of budgeted diesel fuel consumption for FY2016 at \$1.97/gallon
- In FY2014, increased Lines of Credit from \$150.0 million to \$302.0 million, and in FY2015, successfully closed \$100.0 million in interim financing to support Metro's liquidity position

- Successfully completed Prince George's County parking garage in refinancing resulting in debt service savings of \$6.0 million
- Completed the Light Rail Transit and Streetcar Interoperability Study in FY2015
- In FY2015, closed on the sale of the Anacostia property to the District of Columbia
- Collected over \$5.0 million in annual lease revenue in FY2015
- In FY2016, LAND will advance new solicitations for West Hyattsville, Forest Glen, Morgan Boulevard, Largo and Braddock Road
- Complete the sale of land to Montgomery County at Glenmont State in FY2016

### Metro Transit Police

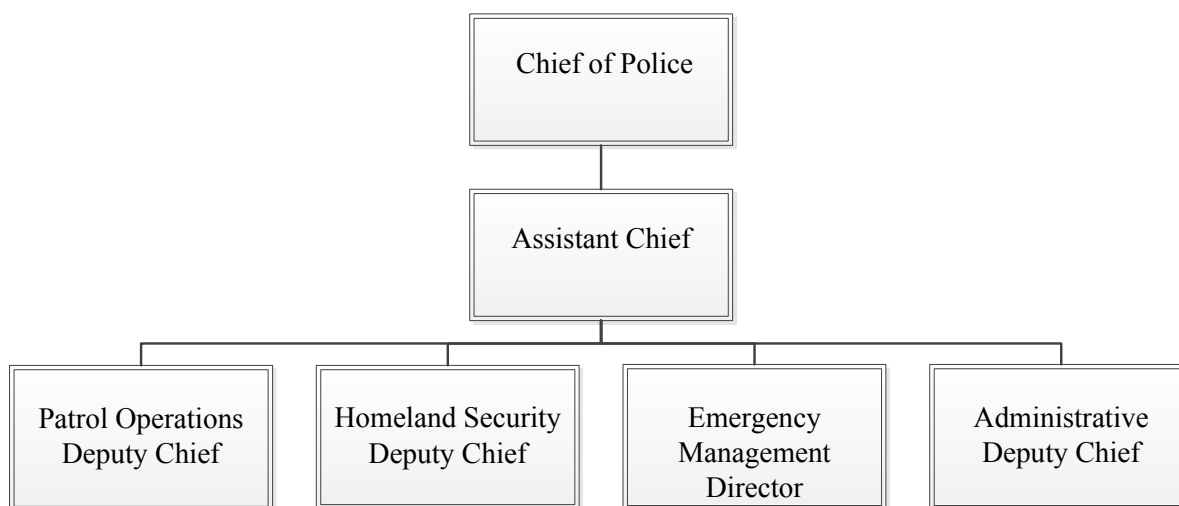


Table 3.42

<i>(Dollars in Thousands)</i>	<b>Actual 2013</b>	<b>Actual 2014</b>	<b>Approved Budget 2015</b>	<b>Approved Budget 2016</b>	<b>Change</b>	<b>Variance</b>
PERSONNEL COST	\$68,933	\$70,382	\$76,280	\$78,093	\$1,812	2.4%
NONPERSONNEL COST	\$2,995	\$2,887	\$3,447	\$4,121	\$674	19.6%
<b>TOTAL COST</b>	<b>\$71,929</b>	<b>\$73,269</b>	<b>\$79,727</b>	<b>\$82,213</b>	<b>\$2,486</b>	<b>3.1%</b>
BUDGETED POSITIONS	704	749	745	729	-16	-2.1%

#### Purpose

The Metro Transit Police Department (MTPD) provides protection for Metro customers, personnel, transit facilities and revenue.

#### Responsibilities

The Metro Transit Police Department is responsible for the protection of customers, personnel, and transit facilities of the Washington Metropolitan Area Transit Zone, comprised of the



Commonwealth of Virginia, District of Columbia, and the State of Maryland. On July 26, 2014, service began on Phase I of the Silver line, an 11.7 mile segment, which includes five stations. The Department is composed of both uniformed and plainclothes officers who are charged with the duty of enforcing the laws of the signatories, and the laws, ordinances and regulations of the political subdivisions, and the rules and regulations of the Authority.

### **Business Plan**

The Metro Transit Police Department Business Plan identifies how MTPD's long range plans and day-to-day actions help Metro make progress towards the agency's four strategic goals. MTPD's contribution towards agency goals is tracked through the following GM/CEO Business Plan performance measures:

- Employee Injury Rate
- Crime Rate
- Customer Comment Rate
- Operating Expense on Budget
- Capital Fund Invested
- Number of Positions Filled

### **Program Highlights**

In CY2014, the Metro Transit Police Department had the greatest year-to-year reduction in crime in the last fifteen years. Part I crime was reduced by approximately 27.0 percent in all recorded modes combined, rail, bus, and parking lots. MTPD exceeded the established crime reduction performance target of less than 2,000 Part I crimes by about 22.0 percent. Metrorail Part I crime rate was reduced from 7.1 crimes per million (CPM) riders in CY2013 to approximately 5.2 CPM in CY2014. The crime reduction is primarily attributed to two specific categories, Theft Snatch and Robbery.

CY2014 was the first full year following Metro Transit Police Department reorganization, and throughout the year continued to fill vacancies in both sworn and civilian positions. In August of 2014 MTPD and the Fraternal Order of Police signed a labor agreement that will remain in effect through September 30, 2017. The MTPD hired ten civilian, Digital Video Evidence coordinators and technicians, a civilian Quartermaster, a civilian Office Manager, one Records Data Entry Clerk, 24 sworn police officers, and 20 special police officers. Each opportunity to civilianize an "administrative" position within the MTPD was exercised to increase the number of sworn police officers on the street conducting mission-specific objectives. In FY2015 the MTPD, in coordination with Treasury, will pursue a contract to outsource the revenue protection function to further focus sworn members on patrol-related functions.

The Transit Security Administration (TSA) awarded MTPD the gold standard for their triennial Baseline Assessment for Security Enhancement (BASE) Assessment. The BASE assessment compares baseline internal security processes, procedures, and policies against TSA recommendations, enhances the overall security environment through development of corrective action recommendations, identifies "Smart Practice" models for other systems and increases TSA's insight into universal security issues, concerns, and trends to influence future policy decisions and target resources.

Two major construction projects were completed by the end of CY2014: the new District II police station and the range training facility. A dedication ceremony was conducted on December 20, 2014, and the police station was named in honor of fallen MTPD Officer Harry Davis, Sr.

The MTPD Office of Emergency Management (OEM) completed multiple table top and full scale exercises in anticipation of the opening of the Silver Line and five new Metrorail stations in July 2014. During 2015, OEM anticipates a number of additional table top and full scale exercises in the three jurisdictions. In addition, approximately 2,000 WMATA employees and regional partners were trained on how to respond to emergency events in the system. The MTPD OEM hosted the Transportation Senior Leadership Seminar at the District of Columbia Convention Center with over 150 transit leaders discussing recent trends and best practices in security and emergency management.

In FY2014, the MTPD participated in several outreach events, some focused on crime prevention, or emergency response; others were more targeted to specific crime prevention efforts such as youth disorder, bicycle thefts, or snatches of cell phones. The MTPD continued a special outreach program called, “Respect Your Ride” in collaboration with the WMATA Office of Customer Services, Communications, and Marketing. Respect Your Ride events are scheduled at schools and community events to provide open dialogue with young customers of Metrorail and Metrobus to encourage appropriate and respectful behavior while traveling in the system. At other events, literature, marketing materials, and bicycle locks are distributed.

Technology improvements continued with “MYMTPD” Text Tips. MYMTPD received close to 2000 text tips this past year. The closed circuit television cameras (CCTV) continue to be enhanced in rail stations and onboard buses. The cameras are becoming a frequently used and reliable resource for criminal cases and some WMATA civil cases, and resolution of complaints. In 2014, the MTPD was approved by the WMATA Board of Directors to participate in a regional camera sharing network sponsored by the Maryland State Police. The MTPD continued progress in the multi-million dollar computer-aided dispatch and records management system.

At the end of FY 2014, MTPD had a budget surplus of \$4.3 million. Personnel expenses accounted for \$3.3 million of the surplus, which includes a saving of \$0.6 million in overtime. The budget for non-personnel expenses was favorable by \$0.4 million.

## Department of Safety & Environmental Management

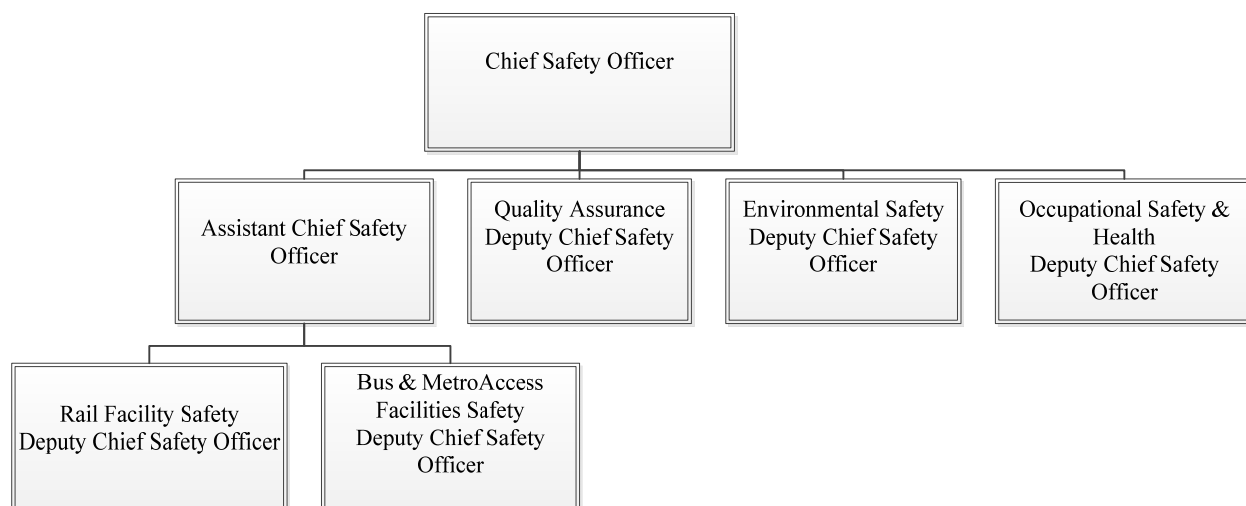


Table 3.43

<i>(Dollars in Thousands)</i>	<b>Actual 2013</b>	<b>Actual 2014</b>	<b>Approved Budget 2015</b>	<b>Approved Budget 2016</b>	<b>Change</b>	<b>Variance</b>
PERSONNEL COST	\$7,258	\$6,818	\$6,800	\$7,828	\$1,028	<b>15.1%</b>
NONPERSONNEL COST	\$9,589	\$2,683	\$9,431	\$7,578	(\$1,852)	<b>-19.6%</b>
<b>TOTAL COST</b>	<b>\$16,847</b>	<b>\$9,501</b>	<b>\$16,231</b>	<b>\$15,407</b>	<b>(\$824)</b>	<b>-5.1%</b>
<b>BUDGETED POSITIONS</b>	<b>61</b>	<b>61</b>	<b>66</b>	<b>67</b>	<b>1</b>	<b>1.5%</b>

### Purpose

The purpose of the Safety & Environmental Management Department (SAFE) is to ensure that Metro'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. In striving to accomplish that goal, 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.

### Responsibilities

Overall SAFE responsibilities include the management and/or compliance of: policies and procedures in the areas of system safety, occupational safety and health, accident and incident investigation, the continuous hazard management process, 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.

**Business Plan**

The Safety and Environmental Management Department Business Plan identifies how SAFE's day-to-day actions help Metro make progress towards the agency's four strategic goals. SAFE's contribution towards agency goals is tracked through the following GM/CEO Business Plan performance measures:

- Employee Injury Rate
- Customer Injury Rate
- Operating Expense on Budget

**Accomplishments**

- Closed a total 25 of 29 NTSB recommendations
- Updated the System Safety Program Plan, a document required by both FTA Title 49 CFR Part 659 and the Tristate Oversight Committee's (TOC) Program Standards and Procedures. The Plan now focuses on hazard identification and management, regulatory compliance and other matters and governs how WMATA implements its overall system safety programs. The document is approved by the WMATA Board and TOC and is communicated across all WMATA departments with the goal of ensuring that WMATA is fully compliant with all FTA and OSHA federal requirements
- Held 4th Annual the "Champions of Safety" program to recognize employees who maintain safe work practices
- Continue implementation of the safety measurement system (SMS) database that functions as an umbrella system that pulls together and consolidates information from various data systems within WMATA, including: central control, maintenance and human resources. The system is a single data entry input for personnel to enter new events and permits authorized users to track, update and close out actions through workflow processes. This one-stop, single source database allows the Safety Department to have a central repository of all incidents and accidents with all documentation and actions – including any analysis, reviews and reports – taken to resolve issues. The centralized system will lead to greater overall efficiency in managing and resolving safety matters across all modes
- Instituted incident and accident investigation policy and procedures that establish notification, response, investigation, documentation and follow-up protocols in order to avoid the recurrence of unsafe practices. The new policy defines staff roles depending on the severity of the accident/incident and recognizes the Safety Department as the lead department in investigating major accidents
- Conducted over 8 Internal Safety Audits (ISAs), generating over 30 percent of all new Corrective Action Plans (CAPs)
- Introduced the Ride Safe campaign aimed at educating the public on preventing customer injuries
- Introduced the National Safety Council's Defensive Driving Course for non-revenue personnel
- Developed computer-based training modules to help employees comply with EPA requirements governing storm water, spill prevention and recycling matters
- Continued the Confidential Close Call Reporting System similar to the Federal Railroad Administration's (FRA) Confidential Close Call Reporting System (C3RS)

- 
- Launched SafeStat program, a management tool for trending and analysis that will provide information to safety managers to allocate resources and mitigate hazards
  - Over 50 percent of WMATA's safety staff has earned Transit Safety and Security certification by the U.S. Department of Transportation's Transit Safety Institute (TSI), which instructs transit staff in key topics. Six staff members have passed the American Society of Quality's (ASQ) certification and two have passed proficiency exams – one earned the Certified Safety Professional designee and the other the Certified Industrial Hygienist designee
  - Required the presence of safety officers at major weekend shut-downs
  - Continue moving towards a Fatigue Risk Management System with a focus on safety-critical (WMATA defined) occupations within bus, rail and Metro Access. Approved Fatigue Risk Management Policy/Instruction and Hours of Service Policy/Instruction

## Information Technology

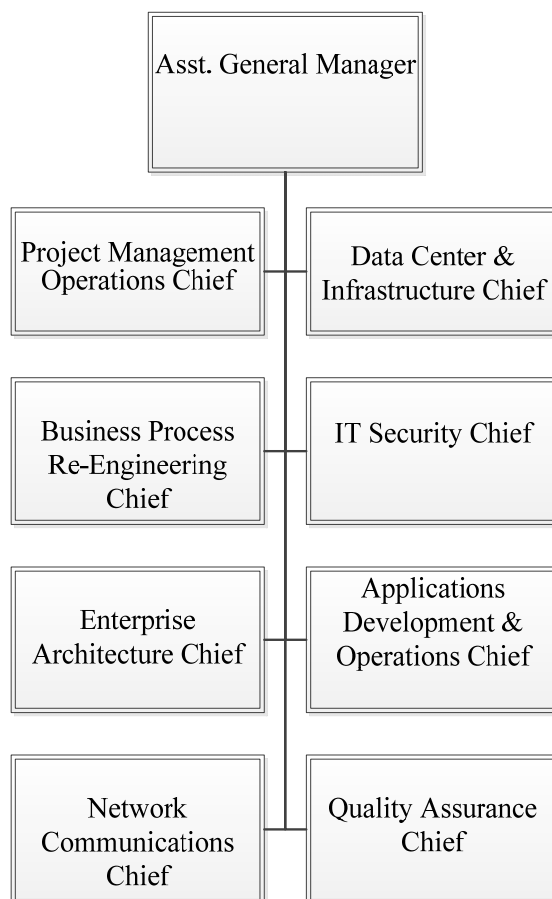


Table 3.44

<i>(Dollars in Thousands)</i>	<b>Actual 2013</b>	<b>Actual 2014</b>	<b>Approved Budget 2015</b>	<b>Approved Budget 2016</b>	<b>Change</b>	<b>Variance</b>
PERSONNEL COST	\$23,924	\$31,826	\$33,087	\$36,059	\$2,972	<b>9.0%</b>
NONPERSONNEL COST	\$22,046	\$22,594	\$26,914	\$30,911	\$3,996	<b>14.8%</b>
<b>TOTAL COST</b>	<b>\$45,970</b>	<b>\$54,420</b>	<b>\$60,001</b>	<b>\$66,970</b>	<b>\$6,969</b>	<b>11.6%</b>
BUDGETED POSITIONS	288	322	357	351	-6	-1.7%

### Purpose

The Department of Information Technology ensures that Metro has the technical infrastructure required to support continuous safety and operational improvements, as well as the tools to communicate more effectively with our riders.

**Responsibilities**

The Department of Information Technology (IT) provides information technology and telecommunication services to support WMATA's four Strategic Goals. IT implements solutions throughout WMATA; promotes compatibility, integration and interoperability; and develops and enforces information technology policy and standards throughout the authority.

**Business Plan**

The Department of Information Technology Business Plan identifies how IT's day-to-day actions help Metro make progress towards the agency's four strategic goals. IT's contribution towards agency goals is reflected in all twelve performance measures in the GM/CEO Business Plan.

**Program Highlights****CAD/RMS (Computer-Aided Dispatch and Records Management System)**

MTPD and the IT are in the validation stage of the delivery of the Computer Aided Dispatch (CAD) system, PremierOne 3.3.1. Throughout the year, Motorola, MTPD, and IT worked extensively to install, configure, and test the system to ensure it meets the needs of WMATA and MTPD. Along with the CAD delivery, WMATA is in the final stages of the AVL procurement, which will install vehicle locator equipment in the MTPD police fleet to allow enhanced command and control of its patrols. Additionally, and in preparation for the delivery of PremierOne, we have successfully transitioned MTPD's second generation of mobile devices that will support the new system. MTPD and IT have been working closely to create innovative and efficient solutions to allow MTPD to operate a multitude of mobile applications and devices at a fraction of the cost, and is expected to save WMATA hundreds of thousands of dollars, and provide MTPD with services that they could not otherwise afford. MTPD and IT will begin validation of the upgraded PremierOne 4.0 system in August, and will continue with functional, system integration, interface and user acceptance testing through November. Upon completion, in-depth training and train the trainer courses will continue until the deployment of CAD in November, and RMS in December. We will continue training courses after the successful deployment of the system to ensure that MTPD has all the training necessary to employ the system. IT has established a Production Support team that is embedded with MTPD and has been working with the project in earnest to understand the unique needs of MTPD, and will continue to work side-by-side with MTPD after the implementation. Finally, IT continues to support MTPD with its Business Intelligence platform, by providing them with insightful reports and continually suggesting ideas to increase their understanding of the data, continually suggesting ideas to increase their understanding of the data.

**SMS (Safety Measurement System)**

SAFE and IT have worked collaboratively to support WMATA's strategic position in safety. WMATA has seen a drastic increase in the use of the Safety Observations System, as many organizations have adopted it into their culture, replacing the obsolete WorkSafe tool. WMATA has also adopted SMS as its platform for environmental management by integrating many of the analog processes and systems used to manage chemicals and chemical incidents and their lifecycles into the EMIH module of SMS. In parallel with IT efforts, SAFE has fully integrated with the Cognos Business Intelligence (BI) tool to provide enhanced reporting capabilities, and transitioned its dashboard interfaces to Cognos and the Safety Data Mart. SAFE now has select members of its organizations who are trained to use Cognos as a means to foster a BI mindset,

which is necessary for BI organizations to understand data and its potential. The SAFE/IT collaboration was integral for the recent release of the Fatigue Risk Management System, and will continue to be for future fatigue risk-related deliverables. SAFE has also undergone some enterprise changes to accommodate WMATA's progress; these activities include updating the system for the Silver Line and the new PeopleSoft HCM implementation, integration of GIS services, standardization of data fields for enhanced business intelligence, and system performance improvements. As we complete the year and move into 2016, SMS will go through a platform upgrade that will include an enterprise upgrade to SharePoint 2013 and Office 365, utilizing both in-house and cloud-base services to provide optimum functionality and security.

### **Network and Communications Program**

The management of Metro's network switches and routers is within the program's scope of responsibilities. The switches and routers that comprise the network have been installed since 2008 and have surpassed the manufacturer's End-of-Life.

In FY2015, the program completed phase I of a multi-phase project to replace the End-of-Life network components. Phase I of the project scope included the replacement of the core network components. The program also completed Phase I of a multi-year program to install Wifi wireless networks in all of the Metro Rail stations. Phase I of this project scope included the installation of Wifi Wireless Networks in 30 Rail Stations.

In FY16, the program plans to complete the installation of Wifi wireless networks in an additional 30 Rail stations, and to replace 50 percent of the remaining network components that have surpassed the manufacturer's End-of-life.

### **Business Intelligence Program**

In FY2015, we delivered Grants Management reporting for Finance that can be extended as needs arise; extended existing reporting based on payroll data; automated the Employee Injury Rate for the Office of Performance; delivered enhanced reporting capability for Safety, including Fatigue Management and Environmental Management/Industrial Hygiene; continued enhancements to analytic and dashboard capability for Bus Planning; completed Phase 2 reporting for MetroAccess; created reports and dashboards for CENV/REPA; delivered SmarTrip data analysis; and extended analysis and reporting for the IT Help Desk. The team also delivered ELM (Enterprise Learning Manager) reports, integrated ELM data into the Fatigue Management dashboard, and provided a new capability for Supply Chain reporting to replace the Xtivity process. The work to support Metro Crime Maps is complete and awaits a decision about the method of distribution. For FY16, we plan to extend capabilities for finance, grants management, and payroll-related analysis and reporting, build on our work with CENV/REPA to deliver reports and dashboards to other elements of TIES, deliver dashboard and reports to ELES, support CSVC with analysis of IVR data, and continue to extend supply chain-related reporting as we build out our Maximo model. For MTPD, CAD/RMS reports will be migrated to the new application. The work to integrate ridership and weather data into existing reports and analysis continues into FY2016. We also will be promoting the use of a new end-user tool, Workspace Advanced, which analysts and planners can use with existing Cognos models to create their own dashboards, and we will expand our capability for



doing text analytics. As always, much of our effort involves resolving data quality issues and making decisions about how best to source the data required.

### **Asset Management Program**

In FY2015, the Asset Management Program completed the following:

- Implemented the infrastructure required to support the program
- Developed and Implemented Workflows supporting the salient characteristics project
- Inducted all of the parts data in other systems
- Inducted legacy engineering records, allowing the retirement of two legacy systems maintained by external vendors
- Inducted five (5) complete bus configurations
- Implemented change management processes for parts data
- Designed and commenced development on a configuration management tool for bus
- Completed basic integrations of parts data to Maximo and PeopleSoft to support more competitive procurement processes

FY2016 Objectives for the program include:

- Induction of at least two rail car configurations
- Conversion of integrations to the SOA platform
- Implementation of engineering change management and configuration management work flows
- Design and implementation of asset induction processes

### **Human Capital Management 9.1 Project**

FY2014 accomplishments include development, testing, training and implementation of PeopleSoft Human Capital Management (HCM) 9.1 modules to include Talent Acquisition Management, Candidate Gateway, Core Human Resources, Benefits, Time & Labor, Absence Management, ePerformance, Employee and Manager Self Service, and Enterprise Learning Management. In April 2014, began post-production support to resolve defects, conduct ongoing data cleansing, assign security and update user roles, provide communications for time and absence approvals, redesign the timesheet, change time approval email notifications, support delegate actions, manage payroll exceptions, and implement customer enhancements. FY2015 activities include the completion of post-production support in December 2014.

### **Information Security Program**

The Office of Metro IT Security is charged with protecting the Confidentiality, Integrity and Availability of WMATA digital information. During FY2015, Metro IT Security successfully completed reorganization into defined cyber security services to best be aligned with industry best practice as well as placing emphasis on capability maturity. The cyber security services include but are not limited to, Application Security, Risk Management, Cyber Security Operations, Incident Response and Enterprise Monitoring & Defense. In FY2016, the Office of Metro IT Security will develop and complete projects that are focused on the core aspects of secure application development as well as projects that increase our capability resulting in enhanced Authentication & Authorization services for Metro IT users and industry partners.

**Web Applications Program**

FY2015 accomplishments include implementing substantial enhancements to the business logic controlling the submission and approval of track rights in GOTRS that enabled more flexible approval of requests that are submitted late in the approval cycle; ongoing enhancement and bug fixing for the SmarTrip web application; development and implementation of a web application for OCC Controllers to document incident handling; ongoing participation in the NEPP program's CDRL review process for the web application; provision of technical input to NEPP program management on issues related to integrating the new web application with the existing SmarTrip web application; design, development and implementation of enhancements to the Pick application to support its use by CMNT and Storeroom; design, development and implementation of enhancements to the Contractors Automated Timekeeping System (CATS); and design, development and implementation of the Public Participation Management System (PPMS) for EREL program management.

FY2016 major activities include ongoing design, development and implementation of enhancements to the Contractors Automated Timekeeping System (CATS); enhancement of the Pick web application to support its use by one additional department; ongoing bug fixing and enhancement of the GOTRS and SSWP systems; design, develop and implement Release 2 of the Public Participation Management System (PPMS).

**Geographic Information Services Program**

FY2015 accomplishments for this program include rapid deployment of a secured Radio Outage Display System to ROCC, Radio, and first responders region-wide; publishing bus stop maps and accessibility data to wmata.com; mapping real-time bus and train positions; reengineering the GIS system architecture to support high availability; providing web services and core data sets to SMS, Cognos, Maximo, Hastus, and CAD/RMS systems; and maintaining bus stop and route data through all schedule changes.

FY2016 major activities will build on prior achievements by extending the rail station mapping work to include mapping of rail yards, bus garages, and administrative buildings; providing 3-D map displays; and expanding the bus stop geodatabase into a regional bus stop inventory that includes accessibility data on stops of other local transit agencies in the Metro service area.

**Rail Operations Control Center (ROCC)**

FY2014 accomplishments for this program include the implementation of AIM, RPM and PIDS releases for Dulles Phase 1. This program implemented several AIM releases, the releases include K98, C10 – Pocket restoration of simple and through routes in C10, N-Route chain markers, Alarm partitioning, intrusion alarm, updated to the destination code Rev. 8 implemented for ATC, and updates to the LSD display for the platforms on the silver line. Implemented a DAS Fix which improved the overall stability of AIMS. This program led the troubleshooting of Traction Power and ATC RTUs resulting in successful implementation of Dulles Phase 1. PIDS Predictor enhancements accomplishments included changes to PIDS Predictor software to support the following Rail enhancements: Rush Plus, Dulles Phase 1 extensive, and Destination Code changes (revision 8). Deployed the Com-Net EclipsX head-end server into production, retrofitting all the

500+ PIDS signs (all metro stations) with the Com-Net controller boards, trained SMNT COMM technicians on the changes made to the PIDS signs, trained the ROCC COPS users on the new Com-Net EclipsX message builder, operations and maintenance of the DarkSign solution for PIDS signs and deploying of the EclipsX Dulles Phase I build to production.

FY2015 major activities include substantial enhancements to AIM which included B02 (Judiciary Square) infrastructure upgrade, AMBER light for the silver line, implemented CR for silver line. Destination code of Rev 8. AIM Simulator, troubleshooting of CGA TNP RTUs, NIC cards. Fixed the sparkles and vertical line issues with retrofitted controller boards, transitioned the maintenance of the PIDS signs to SMNT group, Implemented LED Brightness control Software solution for the PIDS signs and decommissioned the unused PIDS equipment SCUs and MUX from several metro stations. The program identified the top 100 most frequently occurring minor and major alarms reported by the AIM system which resulted in the reduction of alarms reported in AIM by 63 percent.

### **Cloud-based Email Service**

The purpose of project is to migrate WMATA's on premise email service into a cloud-based environment for resiliency, higher quality and operational efficiency purposes. WMATA has already acquired and implemented phase 1 of Office 365 Cloud Services, which has resulted in provision of email for 5,800 WMATA employees who did not have an Authority-issued email account. In FY16, the remaining critical integration tasks will be completed before the on premise mailbox migration can proceed. It is estimated that WMATA's voicemail integration with Office 365 will be complete in the first quarter of FY2016. The mailbox migration will span Q1 and Q2 of FY2016.

### **Secure and Mobile Print Services**

In order to reduce costs for toner, minimize paper waste and provide better security controls on sensitive printed materials, IT will implementing secure printing services throughout the organization which will be applicable to centralized Xerox printers managed by IT. The secure printing capability will require users to enter a user-specific code on the centralized printer before printer could release the job for printing. Phase 1 of the project, which will cover JGB is planned for Q1 and Q2 of FY2016.

Mobile Print service will allow WMATA's personnel to print from mobile devices (Smartphones, Laptops, Tablets) from anywhere within the organization on the supported centralized Xerox printers managed by IT. The Mobile Print capability will become available for pilot testing in Q2 of FY2016.

### **Data Center Power Improvements**

JGB data center power is currently fed by an end-of-life battery backup unit Uninterrupted Power Supply (UPS) which presents continued risk to WMATA's critical business services. This project is focused on acquisition and implementation of a stable power source for the JGB data center. The hardware procurement is expected to be completed by Q2 of FY2016. The implementation and conversion to the new hardware are estimated to be complete by Q4 of FY2016.

## Customer Service, Communications and Marketing

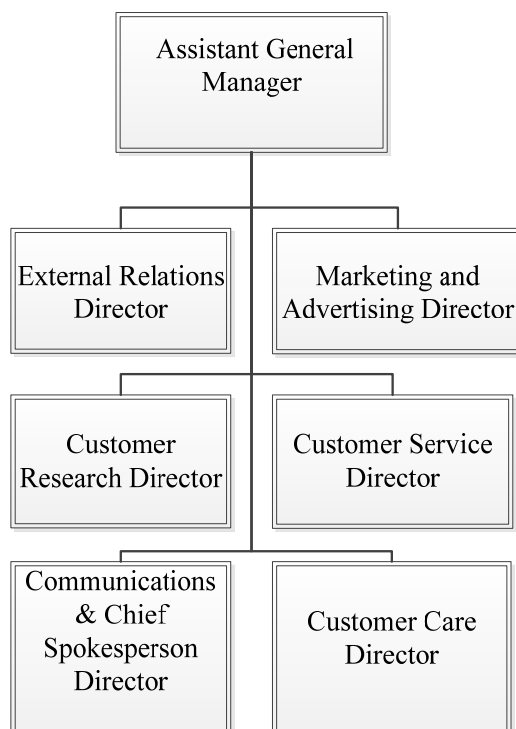


Table 3.45

	<b>Actual 2013</b>	<b>Actual 2014</b>	<b>Approved Budget 2015</b>	<b>Approved Budget 2016</b>	<b>Change</b>	<b>Variance</b>
<i>(Dollars in Thousands)</i>						
PERSONNEL COST	\$11,486	\$12,212	\$13,331	\$12,893	(\$437)	-3.3%
NONPERSONNEL COST	\$4,022	\$4,882	\$6,185	\$5,820	(\$365)	-5.9%
<b>TOTAL COST</b>	<b>\$15,508</b>	<b>\$17,094</b>	<b>\$19,515</b>	<b>\$18,713</b>	<b>(\$802)</b>	<b>-4.1%</b>
BUDGETED POSITIONS	126	129	130	127	-3	-2.3%

### Purpose

The Customer Service Communications and Marketing (CSCM) department supports all of Metro's strategic goals and builds trust, confidence, credibility and loyalty in the Metro brand.

### Responsibilities

CSCM is responsible for communicating, marketing and informing customers, employees and stakeholders about Metro's services, programs and policies. CSCM also serves as the customer advocate within Metro by seeking input from customers and ensuring that feedback is considered in decision making throughout the Authority. CSCM carries out its responsibilities through the following offices:

- Customer Service (CSVC)
- Customer Care (CARE)
- Media Relations (MREL)
- External Relations (EREL)
- Employee Communications (EMPL)
- Marketing and Advertising (MKTG)
- Customer Research (RESR)

### **CSCM Business Plan**

The CSCM Business Plan identifies day-to-day actions that help Metro make progress towards the agency's four Strategic Goals and the GM/CEO Business Plan performance measures. For selected performance measures, CSCM actions include the following:

#### Employee Injury Rate

- Fatigue management education campaign
- Employee safety awareness campaign

#### Customer Injury Rate

- Customer safety awareness campaign

#### Crime Rate

- Sexual harassment awareness campaign
- "Respect Your Ride" campaign to reduce rowdy youth behavior
- Strategic Media Relations aligned with Police Metrostat objectives

#### Customer Satisfaction Rate

- Measure and track customer satisfaction
- Share customer commendations and complaints with managers
- Conduct customer focus groups, interviews and surveys

#### Customer Service Standards

- Set standards and improve performance of call center
- Set standards and improve performance for responding to complaints

#### Transit Service Information

- Publish monthly customer newsletter in the Washington Post Express paper
- Enhance customer communications online and in stations
- Provide bus travel information via all channels
- Increase Metro Alerts subscriptions

#### New Rail Service

- Continue integrated communications and marketing plan to build Silver Line ridership

#### New Bus Service

- Develop "better bus" campaign for customers and stakeholders to encourage ridership

#### Ridership

- Build off-peak ridership through partnerships with local businesses and attractions

#### Metro Forward

- Communicate Metro Forward progress to ensure continued customer and stakeholder support

**FY2015 Accomplishments**

- Competitively secured new multiyear transit advertising contract with 25.0 percent increase in revenue guarantee over 8 years, and upside revenue sharing of 68.0 percent above minimum, including new digital media displays
- Negotiated historic (\$1.5 million) reimbursable services agreement for HBO Concert for Valor
- Increased SmartBenefits (Employers) accounts by 5.0 percent
- Launched Momentum campaign, earning 60 organizational and 10,000+ individual endorsements of strategic plan; support for rail car purchase
- Successfully launched Silver Line and Metroway rail and bus services with better than expected initial ridership
- Increased positive media coverage to highest level since 2010
- Partnered with 25 local venues to promote destination (off-peak) ridership including Safeway BBQ Battle, Marine Corps Marathon, and Tysons's Corner (Tis The Season to Ride Silver)
- Met or exceeded all Call Center productivity targets. Reduced OT expense to better than target

**Planned FY2016 Accomplishments**

- Support Board communications about selection of new General Manager and communicate new leadership vision among stakeholders
- Deliver first year results of new customer care initiative, including improved roles and responsibilities for frontline personnel, improved accountability for managers, and enhanced integrated training. Introduce new business tool for station managers to monitor equipment repairs, and engage entire workforce with internal communications campaign.
- Support reduction of slips, trips and fall injuries on rail station escalators through customer communications
- Increase off-peak ridership through new and expanded destination partnerships
- Engage customers in the new fare payment pilot and inform stakeholders about project milestones
- Implement the new public participation plan to engage stakeholders around service and policy strategies under consideration
- Introduce new 7000 Series rail cars in revenue service

## Chapter 4 - Approved FY2016 Capital Program



*7000 Series Rail Car, Greenbelt Rail Yard*





## Approved FY2016 Capital Program

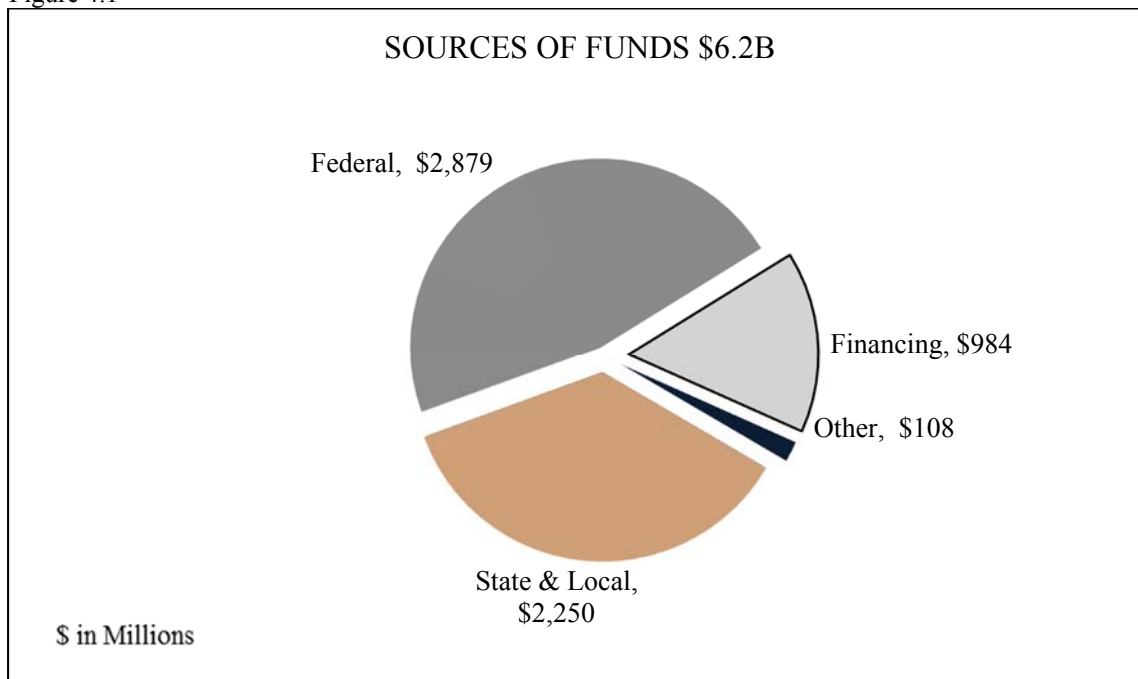
### Introduction

The Approved FY2016-FY2021 Capital Improvement Program, including the FY2016 capital budget, totals \$6.2 billion. The Approved capital investments focus most importantly on NTSB and FTA recommended safety improvements, as well as ongoing work to improve the reliability and state of good repair of the system. Metro and its jurisdictional partners are advancing the most aggressive capital investment program since the construction of the Metro system – with \$6.2 billion of the planned investments to enhance safety, rehabilitation and replacement of Metro’s infrastructure, facilities, equipment, systems, railcars, buses, and MetroAccess vehicles. In total, federal and non-federal funds will make up 45.0 percent and 55.0 percent of the capital investments respectively.

The Approved FY2016 budget represents the sixth year of Metro’s rolling six-year CIP based on the Capital Funding Agreement (CFA) among Metro and the contributing jurisdictions. The CFA provides non-federal funding for capital improvement projects initiated within the six-year FY2011-2016 CIP and allows for periodic adjustments to the six-year program in response to Metro’s ongoing and updated capital.

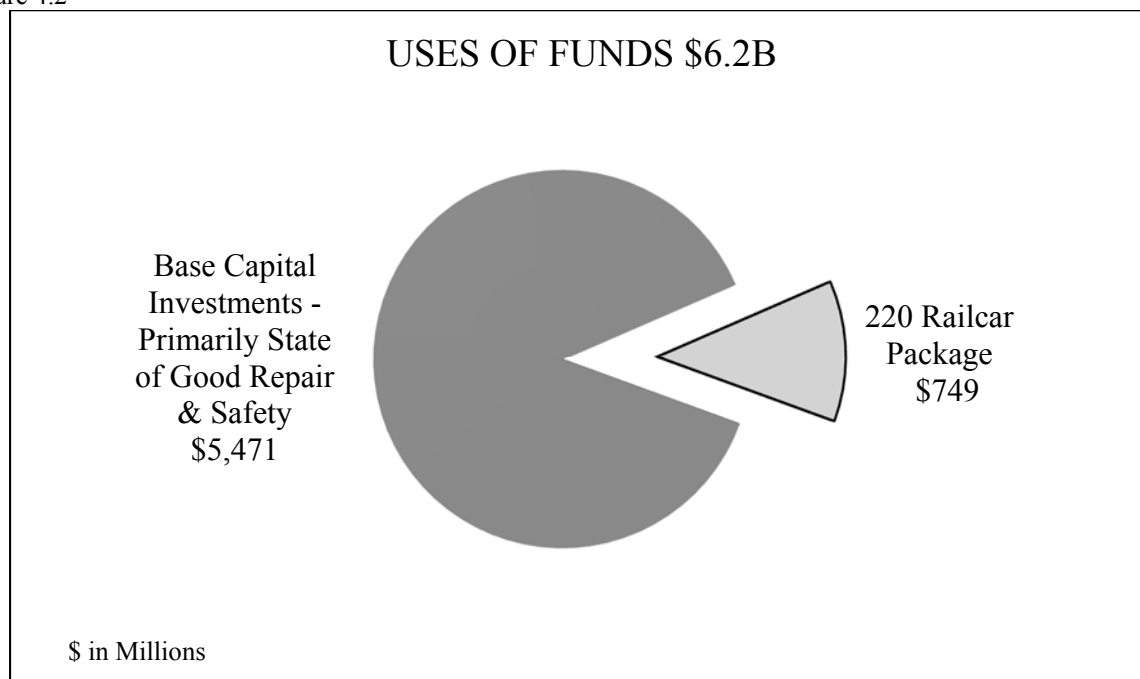
### Where Sources Come From

Figure 4.1



**Where Sources Go**

Figure 4.2



The Approved FY2016-2021 CIP reflects updated project delivery assumptions and cost estimates and is balanced to forecasted capital funding.

**Approved FY2016-2021 CIP Financial Plan**

The Approved FY2016-2021 CIP financial plan relies on projected investment of \$6.2 billion from the federal government, state and local governments, and other sources. Of the \$6.2 billion six-year plan: \$2.9 billion will come from federal funding; with \$2.3 billion coming from state and local contributions which includes \$32.5 million of planned Metro 2025 investments; \$108.0 million from other sources; \$984.4 million of long-term financing.

Metro's CIP financial plan (Table 4.1) displays funding sources in the year in which funding is anticipated to be expended, consistent with expenditure based budgeting and the CFA. The FY2016-2021 CIP financial plan is based on the assumptions, detailed beginning on page 110.

Table 4.1

**Washington Metropolitan Area Transit Authority  
FY2016-2021 Capital Improvement Program (CIP)  
Financial Plan**

(dollars in millions)

(dollars in millions)

	Six-Year Plan												FY11-21 Total
	FY2016 Budget					FY16-FY21 Total							
	FY2011 Estimate	FY2012 Estimate	FY2013 Estimate	FY2014 Estimate	FY2015 Forecast	FY2017 Forecast	FY2018 Forecast	FY2019 Forecast	FY2020 Forecast	FY2021 Forecast			
<b>Federal</b>													
Federal Formula Programs	\$ 160.9	\$ 286.1	\$ 248.6	\$ 234.0	\$ 242.7	\$ 421.5	\$ 287.3	\$ 287.3	\$ 287.3	\$ 287.3	\$ 287.3	\$ 287.3	\$ 3,030.2
Federal PRIIA	\$ 118.5	\$ 112.3	\$ 169.5	\$ 171.1	\$ 123.7	\$ 193.6	\$ 159.6	\$ 150.0	\$ 150.0	\$ 150.0	\$ 150.0	\$ 150.0	\$ 1,648.5
Resiliency Grant	\$ -	\$ -	\$ -	\$ -	\$ 0.2	\$ 3.9	\$ 8.0	\$ 6.0	\$ -	\$ -	\$ -	\$ -	\$ 18.1
Other Federal Grants	\$ -	\$ 6.7	\$ 12.6	\$ 25.7	\$ 13.2	\$ 30.2	\$ 0.6	\$ 5.5	\$ 5.9	\$ 3.6	\$ 3.6	\$ 3.6	\$ 107.8
Subtotal Federal	\$ 279.5	\$ 405.2	\$ 430.7	\$ 430.8	\$ 379.8	\$ 649.3	\$ 455.5	\$ 448.8	\$ 443.2	\$ 440.9	\$ 440.9	\$ 440.9	\$ 4,804.5
<b>State and Local</b>													
Match to Federal Formula	\$ 40.2	\$ 71.5	\$ 62.1	\$ 58.2	\$ 60.9	\$ 105.4	\$ 71.8	\$ 71.8	\$ 71.8	\$ 71.8	\$ 71.8	\$ 71.8	\$ 757.6
System Performance	\$ 59.1	\$ 111.7	\$ 126.6	\$ 105.7	\$ 127.6	\$ 118.6	\$ 117.2	\$ 122.9	\$ 129.0	\$ 135.4	\$ 142.1	\$ 142.1	\$ 1,295.9
State and Local PRIIA	\$ 118.5	\$ 112.3	\$ 169.5	\$ 171.1	\$ 123.7	\$ 193.6	\$ 159.6	\$ 150.0	\$ 150.0	\$ 150.0	\$ 150.0	\$ 150.0	\$ 1,648.5
Match to Resiliency Grant	\$ -	\$ -	\$ -	\$ -	\$ 0.1	\$ 1.3	\$ 2.7	\$ 2.0	\$ -	\$ -	\$ -	\$ -	\$ 6.0
Rail Power System Upgrades	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 17.7	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 17.7
Other State and Local	\$ -	\$ 1.5	\$ 2.2	\$ 1.9	\$ 1.3	\$ 6.7	\$ 0.2	\$ 1.4	\$ 1.5	\$ 0.9	\$ 0.9	\$ 0.9	\$ 18.3
Subtotal State and Local	\$ 217.8	\$ 297.0	\$ 360.5	\$ 336.9	\$ 313.6	\$ 443.4	\$ 351.4	\$ 348.1	\$ 352.3	\$ 358.1	\$ 364.8	\$ 364.8	\$ 3,744.0
<b>Other Sources</b>													
MetroMatters	\$ 113.7	\$ 39.4	\$ 19.2	\$ 12.4	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 184.8
Insurance Proceeds	\$ 0.1	\$ -	\$ 22.8	\$ -	\$ 1.8	\$ 9.2	\$ 3.4	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 37.3
Land Sale Proceeds	\$ -	\$ 12.6	\$ 13.2	\$ 2.5	\$ 1.5	\$ 27.3	\$ 3.7	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 60.8
Joint Development Proceeds	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3.5	\$ 11.1	\$ 13.5	\$ 8.9	\$ 3.5	\$ 23.5	\$ 23.5	\$ 64.0
Miscellaneous	\$ -	\$ 16.2	\$ -	\$ 7.6	\$ 15.0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 38.8
Subtotal Other Sources	\$ 113.9	\$ 68.2	\$ 55.2	\$ 22.6	\$ 18.4	\$ 39.9	\$ 18.2	\$ 13.5	\$ 8.9	\$ 3.5	\$ 23.5	\$ 23.5	\$ 385.7
<b>Financing</b>													
Planned Long-Term Financing	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 355.0	\$ 235.9	\$ 165.9	\$ 140.3	\$ 87.3	\$ 87.3	\$ 984.4
Subtotal Financing	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 355.0	\$ 235.9	\$ 165.9	\$ 140.3	\$ 87.3	\$ 87.3	\$ 984.4
<b>Metro 2025 Investment</b>													
Metro 2025 Investment	\$ -	\$ -	\$ -	\$ -	\$ 42.5	\$ 32.5	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 75.0
Subtotal Metro 2025	\$ -	\$ -	\$ -	\$ -	\$ 42.5	\$ 32.5	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 75.0
<b>Total</b>	\$ 611.2	\$ 770.4	\$ 846.3	\$ 790.4	\$ 754.2	\$ 1,165.2	\$ 1,180.1	\$ 1,046.2	\$ 970.3	\$ 942.8	\$ 916.5	\$ 916.5	\$ 9,993.6

### Federal Formula Programs

Federal formula programs are projected to provide a total of \$1.9 billion over the six year period, \$421.5 million of which is planned for investment during FY2016. Annual federal formula program funding is subject to federal authorization and appropriation and the award of grants from the Federal Transit Administration (FTA).

### Federal Passenger Rail Investment and Improvement Act

The Approved FY2016-2021 CIP financial plan include a total of \$953.2 million from the federal government through the Passenger Rail Investment and Improvement Act (PRIIA), \$193.6 million of which is planned for investment during FY2016.

### State and Local Match to Federal Formula Programs

A total of \$464.5 million of state and local funds will be needed to match federal formula program grants, \$105.4 million of which is planned for investment during FY2016.

### State and Local Passenger Rail Investment and Improvement Act

The FY2016-2021 Approved CIP financial plan assumes that the District of Columbia, the State of Maryland, and the Commonwealth of Virginia will contribute a total of \$953.2 million, approximately \$193.6 million per year, consistent with the jurisdictional commitment to fund the safety, state of good repair, and preventive maintenance needs of the Metro system.

### System Performance

A total of \$765.3 million from state and local system performance funding will support the FY2016-2021 CIP, with \$118.6 million programmed for investment during FY2016. Established by the CFA, system performance funding is contributed by the jurisdictions to advance additional capital investments beyond those funded by federal grants and match.

### Metro 2025 Investments

The Approved CIP includes investments begun in FY2015 to advance Metro 2025 initiatives. These projects help the region to sustain its economic competitiveness and quality of life through a robust and growing transit system. A total of \$32.5 million of Metro 2025 funds are scheduled for investment in FY2016.

### Financing/Debt Strategy

The Approved FY2016-2021 CIP financial plan includes a total of \$984.4 million of planned long-term debt. There is no long-term debt planned in FY2016.

In accordance with the CFA, Metro will identify the portion of future allocated contributions for debt service payments in future Approved budgets and Metro will notify the jurisdictions at least 120 days in advance of any long-term debt issuance.

Table 4.2

<b>FY2016-2021 Capital Improvement Program (CIP)</b>										
<b>Planned Financing Plan</b>										
(dollars in millions)										
	Six-Year Plan									
	FY11-14 Estimate	FY2015 Forecast	<b>FY2016 Budget</b>	FY2017 Forecast	FY2018 Forecast	FY2019 Forecast	FY2020 Forecast	FY2021 Forecast	<b>FY16-FY21 Total</b>	<b>FY11-21 Total</b>
<b>Financing</b>										
Planned Long-Term Financing \$	-	\$ -	<b>\$ -</b>	\$ 355.0	\$ 235.9	\$ 165.9	\$ 140.3	\$ 87.3	<b>\$ 984.4</b>	<b>\$ 984.4</b>

### Jurisdictional Allocated Contributions

Consistent with the CFA, jurisdictional capital funding, except for PRIIA, is allocated among the jurisdictions based on operating subsidy by mode as applied to the CIP by asset type. There are three separate jurisdictional operating subsidy allocations, one each for Bus, Rail, and MetroAccess. These three allocations are applied to Metrobus, Metrorail, and MetroAccess projects to determine an overall blended allocation rate by jurisdiction for CIP contributions.

Under the terms of the CFA, the allocation of jurisdictional contributions will be recalculated every three years to reflect the then-current Approved Operating Budget subsidy allocation and applied prospectively to the three subsequent Annual Work Plans. The allocation was updated prior to the adoption of the FY2014 budget. The FY2014 Operations Allocation formula, which has been used to allocate jurisdictional capital contributions through FY2016, allocates Metrobus, Metrorail, MetroAccess, and Dedicated Funding costs as follows:

- The Rail allocation formula will apply to rail projects and debt issued for rail projects.
- The Bus allocation formula will apply to bus projects and debt issued for bus projects.
- The MetroAccess formula will apply to paratransit projects and debt issued for paratransit projects.
- An average of the Rail and Bus allocation formulas will apply to general financing expenditures and for project expenditures that cannot be allocated to Metrorail, Metrobus, or MetroAccess.
- Dedicated Funding projects will be divided equally among the District of Columbia, State of Maryland, and Commonwealth of Virginia subject to the provisions of the various state laws establishing dedicated funding sources to match federal funds made available under the Passenger Rail Investment and Improvement Act (PRIIA) of 2008.

Table 4.3

FY2016-2021 Capital Improvement Program (CIP) Financial Plan - Allocation of State and Local Contributions (dollars in millions)										
	FY2011-FY2014 Estimate	FY2015 Forecast	Six-Year Plan						FY16-21 Total	FY11-21 Total
			FY2016 Budget	FY2017 Forecast	FY2018 Forecast	FY2019 Forecast	FY2020 Forecast	FY2021 Forecast		
<b>Formula Match, System Performance &amp; Resiliency Grant Match</b>										
District of Columbia	\$ 239.7	\$ 70.6	\$ 68.0	\$ 84.0	\$ 71.2	\$ 73.1	\$ 74.6	\$ 77.0	\$ 79.5	\$ 769.8
Montgomery County	110.9	32.4	31.2	38.5	32.7	33.5	34.2	35.3	36.5	\$ 354.1
Prince George's County	120.3	33.6	32.4	40.0	33.9	34.8	35.6	36.7	37.9	\$ 372.9
Maryland Subtotal	231.2	66.0	63.6	78.5	66.6	68.4	69.8	72.0	74.4	\$ 727.0
City of Alexandria	27.0	8.5	8.2	10.1	8.6	8.8	9.0	9.3	9.6	\$ 90.9
Arlington County	50.3	15.9	15.3	18.9	16.0	16.4	16.8	17.3	17.9	\$ 169.4
City of Fairfax	1.7	0.5	0.5	0.6	0.5	0.5	0.5	0.5	0.6	\$ 05.3
Fairfax County	89.0	27.8	26.8	33.1	28.1	28.9	29.5	30.4	31.4	\$ 181.3
City of Falls Church	1.8	0.6	0.6	0.7	0.6	0.6	0.6	0.7	0.7	\$ 6.3
Virginia Subtotal	168.0	52.7	51.3	63.4	53.4	56.0	57.2	58.4	60.3	\$ 569.3
Subtotal Formula Match, System Performance & Resiliency Grant Match	640.7	189.9	182.9	226.0	191.6	196.8	200.8	207.2	213.9	\$ 1,236.3
<b>CMAQ Grant Match</b>										
Commonwealth of Virginia (DRPT)	-	-	6.0	6.0	0.2	1.4	1.5	0.9	0.9	\$ 10.9
Subtotal CMAQ Match	-	-	6.0	6.0	0.2	1.4	1.5	0.9	0.9	\$ 10.9
<b>State and Local PRIIA</b>										
District of Columbia	190.5	41.2	49.5	64.5	53.2	50.0	50.0	50.0	50.0	\$ 317.7
State of Maryland	190.5	41.2	49.5	64.5	53.2	50.0	50.0	50.0	50.0	\$ 317.7
Commonwealth of Virginia	190.5	41.2	49.5	64.5	53.2	50.0	50.0	50.0	50.0	\$ 317.7
Subtotal State and Local PRIIA	571.5	123.7	148.5	193.6	159.6	150.0	150.0	150.0	150.0	\$ 953.2
<b>Rail Power System Upgrades</b>										
District of Columbia	-	-	6.6	6.6	-	-	-	-	-	\$ 6.6
State of Maryland	-	-	6.2	6.2	-	-	-	-	-	\$ 6.2
Commonwealth of Virginia (NVRTA)	-	-	5.0	5.0	-	-	-	-	-	\$ 5.0
Subtotal Power Upgrades	-	-	17.7	17.7	-	-	-	-	-	\$ 17.7
<b>Metro 2025 Investment</b>										
District of Columbia	-	14.2	10.8	10.8	-	-	-	-	-	\$ 25.0
Montgomery County	-	-	-	-	-	-	-	-	-	\$ -
Prince George's County	-	-	-	-	-	-	-	-	-	\$ -
State of Maryland	-	14.2	10.8	10.8	-	-	-	-	-	\$ 25.0
Maryland Subtotal	-	14.2	-	-	-	-	-	-	-	\$ 14.2
City of Alexandria	-	1.4	1.1	1.1	-	-	-	-	-	\$ 1.1
Arlington County	-	2.7	2.1	2.1	-	-	-	-	-	\$ 2.1
City of Fairfax	-	0.1	0.1	0.1	-	-	-	-	-	\$ 0.1
Fairfax County	-	4.7	3.6	3.6	-	-	-	-	-	\$ 3.6
City of Falls Church	-	0.1	0.1	0.1	-	-	-	-	-	\$ 0.1
Commonwealth of Virginia	-	5.1	3.9	3.9	-	-	-	-	-	\$ 3.9
Virginia Subtotal	-	14.2	10.8	10.8	-	-	-	-	-	\$ 10.8
Subtotal Metro 2025 Investment	-	42.5	32.5	32.5	-	-	-	-	-	\$ 32.5
<b>Total</b>	\$ 1,212.2	356.1	355.2	475.9	351.4	348.1	352.3	358.1	364.8	\$ 3,819.0

Table 4.4

<b>FY2016-2021 Capital Improvement Program</b>										
<b>Financial Plan - Allocation of FY2015 and FY2016 State and Local Contributions</b>										
(dollars in thousands)										
	FY2015					FY2016				
	1st Quarter Actual	2nd Quarter Actual	3rd Quarter Actual	4th Quarter Actual	FY2015 Total	1st Quarter Forecast	2nd Quarter Forecast	3rd Quarter Forecast	4th Quarter Forecast	FY2016 Total
<b>Formula Match, System Performance &amp; Resiliency Grant Match</b>										
District of Columbia	\$21,816	\$12,036	\$15,046	\$26,330	<b>\$75,228</b>	\$14,954	\$19,032	\$16,993	\$16,993	<b>\$67,973</b>
Montgomery County	10,008	5,522	6,902	12,079	<b>34,511</b>	6,860	8,731	7,796	7,796	<b>31,183</b>
Prince George's County	10,396	5,736	7,170	12,547	<b>35,848</b>	7,126	9,069	8,098	8,098	<b>32,391</b>
Maryland Subtotal	20,404	11,258	14,072	24,626	<b>70,359</b>	13,986	17,801	15,893	15,893	<b>63,574</b>
City of Alexandria	2,633	1,453	1,816	3,178	<b>9,079</b>	1,805	2,297	2,051	2,051	<b>8,203</b>
Arlington County	4,900	2,703	3,379	5,913	<b>16,895</b>	3,359	4,274	3,817	3,817	<b>15,266</b>
City of Fairfax	151	83	104	182	<b>521</b>	104	132	118	118	<b>471</b>
Fairfax County	8,608	4,749	5,937	10,389	<b>29,683</b>	5,900	7,510	6,705	6,705	<b>26,820</b>
City of Falls Church	186	102	128	224	<b>641</b>	127	162	145	145	<b>579</b>
Virginia Subtotal	16,477	9,091	11,364	19,886	<b>56,819</b>	11,295	14,375	12,835	12,835	<b>51,339</b>
Subtotal Formula Match & System Performance	58,698	32,385	40,481	70,842	<b>202,406</b>	\$40,235	\$51,208	\$45,721	\$45,721	<b>182,885</b>
<b>State and Local PRIIA</b>										
District of Columbia	16,283	8,984	11,230	13,803	<b>50,300</b>	9,900	9,900	13,365	16,335	<b>49,500</b>
State of Maryland	16,283	8,984	11,230	13,803	<b>50,300</b>	9,900	9,900	13,365	16,335	<b>49,500</b>
Commonwealth of Virginia	16,283	8,984	11,230	13,803	<b>50,300</b>	9,900	9,900	13,365	16,335	<b>49,500</b>
Subtotal State and Local PRIIA	48,849	26,951	33,689	41,409	<b>150,900</b>	29,700	29,700	40,095	49,005	<b>148,500</b>
<b>CMAQ Match</b>										
Commonwealth of Virginia (DRPT)	0	0	0	0	<b>0</b>	0	0	2,720	3,324	<b>6,044</b>
Subtotal CMAQ Match	0	0	0	0	<b>0</b>	0	0	2,720	3,324	<b>6,044</b>
<b>Rail Power System Upgrades</b>										
District of Columbia	0	0	0	0	<b>0</b>	989	1,846	1,846	1,912	<b>6,592</b>
State of Maryland	0	0	0	0	<b>0</b>	925	1,726	1,726	1,788	<b>6,165</b>
Commonwealth of Virginia (NVTA)	0	0	0	0	<b>0</b>	747	1,394	1,394	1,444	<b>4,979</b>
Subtotal Power Upgrades	0	0	0	0	<b>0</b>	2,660	4,966	4,966	5,143	<b>17,736</b>
<b>Metro 2025 Investment</b>										
District of Columbia	0	12,500	6,250	6,250	<b>25,000</b>	0	0	0	0	<b>0</b>
State of Maryland	6,250	6,250	6,250	6,250	<b>25,000</b>	0	0	0	0	<b>0</b>
Maryland Subtotal	6,250	6,250	6,250	6,250	<b>25,000</b>	0	0	0	0	<b>0</b>
City of Alexandria	639	639	639	639	<b>2,557</b>	0	0	0	0	<b>0</b>
Arlington County	1,189	1,189	1,189	1,189	<b>4,758</b>	0	0	0	0	<b>0</b>
City of Fairfax	37	37	37	37	<b>147</b>	0	0	0	0	<b>0</b>
Fairfax County	2,090	2,090	2,090	2,090	<b>8,359</b>	0	0	0	0	<b>0</b>
City of Falls Church	45	45	45	45	<b>181</b>	0	0	0	0	<b>0</b>
Commonwealth of Virginia	2,250	2,250	2,250	2,250	<b>9,000</b>	0	0	0	0	<b>0</b>
Virginia Subtotal	6,250	6,250	6,250	6,250	<b>25,000</b>	0	0	0	0	<b>0</b>
Subtotal Metro 2025	12,500	25,000	18,750	18,750	<b>75,000</b>	0	0	0	0	<b>0</b>
<b>Total</b>	<b>\$120,047</b>	<b>\$84,336</b>	<b>\$92,920</b>	<b>\$131,001</b>	<b>\$428,306</b>	<b>\$72,595</b>	<b>\$85,874</b>	<b>\$93,502</b>	<b>\$103,194</b>	<b>\$355,165</b>

### Rebuilding the System – Safety and State of Good Repair Program

The Approved CIP continues to place the highest priority on investing resources in projects that improve safety and reliability. Major planned safety, rehabilitation, and replacement investments in the FY2016-2021 Approved CIP include:

- Safety improvements and implementation of NTSB recommendations, including, but not limited to the examination and replacement of track circuits, the replacement of power cables, and reliability improvements to the Vehicle Monitoring Systems (VMS) on legacy fleets

- Comprehensive 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
  - Replacement of the 1000 Series Railcars (300 railcars)
  - Replacement of the 4000 Series Railcars (100 railcars)
  - Replacement of the 5000 Series Railcars (192 railcars)
  - Initiation of the replacement of the 2000/3000 Series railcars
- Replacement, rehabilitation, and repair of buses
  - Replacement of approximately 100 buses per year
  - Rehabilitation of approximately 100 buses per year
- Procurement of approximately 175 MetroAccess vehicles per year
  - Approximately 150 replacement vehicles
  - Approximately 25 expansion vehicles
- Rehabilitation of rail line segment infrastructure
  - Orange/Blue Line Rehabilitation: Stage 1
  - Red Line Rehabilitation: Stage 2
- Replacement of Southern Avenue and Royal Street bus facilities
- Modernization of Metro's fare collection infrastructure and technology
- Replacement of escalators – approximately 128 escalators
- Rehabilitation of escalators – approximately 144 escalators
- Rehabilitation of elevators – approximately 80 elevators
- Program to replace, maintain, and rehabilitate all of the elements associated with the traction power system and automatic train control systems

### Planned Investments by CIP Category

The Approved FY2016-2021 projects' are grouped into several CIP investment categories, which are summarized in the chart below and presented in detail in Table 4.6 of this report.

Table 4.5

FY2016-2021 CIP Investments (Uses)								
(dollars in millions)	Forecast FY2015	Budget FY2016	Plan FY2017	Plan FY2018	Plan FY2019	Plan FY2020	Plan FY2021	FY 2016- 21 Total
Vehicle / Vehicle Parts	\$ 223.1	\$ 512.7	\$ 504.0	\$ 414.2	\$ 458.7	\$ 464.3	\$ 489.8	\$ 2,843.7
Rail System Infrastructure Rehabilitation	\$ 86.0	\$ 88.7	\$ 80.0	\$ 70.4	\$ 49.9	\$ 36.4	\$ 13.3	\$ 338.7
Maintenance Facilities	\$ 92.8	\$ 165.5	\$ 151.4	\$ 65.7	\$ 26.0	\$ 38.2	\$ 52.4	\$ 499.2
Systems and Technology	\$ 120.1	\$ 147.2	\$ 170.4	\$ 199.0	\$ 164.7	\$ 163.3	\$ 135.7	\$ 980.4
Track and Structures	\$ 67.4	\$ 70.8	\$ 77.3	\$ 79.5	\$ 79.8	\$ 81.9	\$ 81.7	\$ 471.0
Passenger Facilities	\$ 85.5	\$ 129.1	\$ 134.3	\$ 125.8	\$ 112.1	\$ 105.3	\$ 103.6	\$ 710.1
Maintenance Equipment	\$ 35.3	\$ 18.6	\$ 42.9	\$ 72.0	\$ 65.3	\$ 39.6	\$ 26.3	\$ 264.6
Other Facilities	\$ 23.3	\$ 17.0	\$ 13.4	\$ 12.7	\$ 6.7	\$ 7.0	\$ 7.0	\$ 63.7
Project Management and Support	\$ 20.8	\$ 15.4	\$ 6.5	\$ 7.0	\$ 7.2	\$ 6.7	\$ 6.7	\$ 49.6
<b>Total</b>	<b>\$ 754.2</b>	<b>\$ 1,165.1</b>	<b>\$ 1,180.1</b>	<b>\$ 1,046.2</b>	<b>\$ 970.3</b>	<b>\$ 942.8</b>	<b>\$ 916.5</b>	<b>\$ 6,221.1</b>



**FY2016 Approved Capital Improvement Program Investments**

The Approved FY2016 capital investment is the first year of the Approved six-year Capital Improvement Program. The Approved FY2016 budget is estimated at \$1.2 billion. The Approved FY2016 investment is focused on safety improvements, the rebuilding of the Metro system, increasing system capacity, and improving the effectiveness of the current rail and bus networks.

**FY2016 Approved Investments**

Significant investments planned for FY2016 include, but are not limited to:

- Continued investment in projects that address NTSB findings including the examination and replacement of track circuits and the replacement power cables
- Approximately 144 new 7000 Series railcars will be delivered to begin the replacement of the 1000 Series railcars
- Continued rail line segment rehabilitation on the Orange and Blue Lines
- Aggressive rehabilitation of track and structures
- Continue 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 21 escalators and rehabilitation of 17 more
- Rehabilitation of 17 elevators
- Continue development of New Electronics Payment Program
- Replacement of approximately 168 Metro buses and the rehabilitation of 100 more
- Advance the replacement of Southern Avenue bus garage and continue rehabilitations at Western, Northern, Landover, and Bladensburg bus facilities
- Replacement of 150 MetroAccess vehicles and purchase of 25 additional vehicles
- Milestone payment for the procurement of 220 railcars and associated investments to improve the power systems to support more 8-car train service on the Orange and Blue Lines

Approved FY2016 CIP investments are listed in detail in Table 4.6. Metro's Approved FY2016 Capital Improvement Program totals \$1.2 billion. In addition, the capital program includes \$73.7 million in Reimbursable Projects described later in this chapter.

Table 4.6

<b>Multi-Year CIP Investments: FY2016-2021</b>								
(dollars in millions)								
	FY2015 Forecast	FY2016 Budget	FY2017 Plan	FY2018 Plan	FY2019 Plan	FY2020 Plan	FY2021 Plan	<b>FY2016-21 Total</b>
<b>A Vehicles/ Vehicle Parts</b>								
Replacement of Rail Cars	\$12.5	\$266.8	\$265.7	\$196.9	\$222.7	\$213.3	\$234.4	<b>\$1,399.7</b>
Replacement of Buses	\$54.0	\$118.1	\$98.7	\$74.8	\$89.3	\$101.1	\$101.1	<b>\$583.2</b>
Rehabilitation of Rail Cars	\$57.5	\$57.9	\$56.3	\$52.7	\$52.6	\$52.7	\$52.7	<b>\$325.0</b>
Rehabilitation of Buses	\$62.9	\$50.1	\$59.9	\$62.9	\$65.8	\$67.4	\$69.8	<b>\$376.0</b>
Replacement of MetroAccess Vehicle	\$10.9	\$11.3	\$15.1	\$18.3	\$19.4	\$20.5	\$21.5	<b>\$106.1</b>
Replacement of Service Vehicles	\$5.7	\$6.3	\$5.1	\$5.5	\$5.8	\$6.2	\$7.1	<b>\$36.0</b>
Rail Car Fleet Expansion	\$0.3	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	<b>\$0.0</b>
Bus Fleet Expansion	\$15.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	<b>\$0.0</b>
Bus Enhancements	\$4.2	\$2.1	\$3.1	\$3.1	\$3.1	\$3.1	\$3.1	<b>\$17.6</b>
<b>Subtotal</b>	<b>\$223.1</b>	<b>\$512.7</b>	<b>\$504.0</b>	<b>\$414.2</b>	<b>\$458.7</b>	<b>\$464.3</b>	<b>\$489.8</b>	<b>\$2,843.7</b>
<b>B Rail System Infrastructure Rehabilitation</b>								
Rail Line Segment Rehabilitation	\$65.4	\$65.8	\$74.8	\$70.4	\$49.9	\$36.4	\$13.3	<b>\$310.6</b>
Rail System Safety Rehabilitation	\$20.5	\$22.9	\$5.2	\$0.0	\$0.0	\$0.0	\$0.0	<b>\$28.1</b>
<b>Subtotal</b>	<b>\$86.0</b>	<b>\$88.7</b>	<b>\$80.0</b>	<b>\$70.4</b>	<b>\$49.9</b>	<b>\$36.4</b>	<b>\$13.3</b>	<b>\$338.7</b>
<b>C Maintenance Facilities</b>								
Rehabilitation and Replacement of	\$18.9	\$70.8	\$98.1	\$42.7	\$14.4	\$26.3	\$41.3	<b>\$293.7</b>
Maintenance of Bus Garages	\$9.2	\$9.7	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	<b>\$9.7</b>
Maintenance of Rail Yards	\$12.6	\$26.5	\$39.2	\$14.2	\$0.0	\$0.0	\$0.0	<b>\$79.9</b>
Rail Maintenance Facilities	\$30.2	\$42.9	\$3.2	\$0.0	\$0.0	\$0.0	\$0.0	<b>\$46.1</b>
Environmental Compliance Projects	\$5.0	\$7.0	\$8.6	\$6.6	\$9.3	\$9.6	\$8.5	<b>\$49.6</b>
Maintenance Bus and Rail Facilities	\$15.5	\$5.0	\$2.2	\$2.2	\$2.3	\$2.3	\$2.6	<b>\$16.6</b>
Expansion of Bus Garages	\$1.3	\$3.7	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	<b>\$3.7</b>
<b>Subtotal</b>	<b>\$92.8</b>	<b>\$165.5</b>	<b>\$151.4</b>	<b>\$65.7</b>	<b>\$26.0</b>	<b>\$38.2</b>	<b>\$52.4</b>	<b>\$499.2</b>
<b>D Systems and Technology</b>								
Power System Replacement/Upgrac	\$51.7	\$48.9	\$74.4	\$92.3	\$91.9	\$80.2	\$79.5	<b>\$467.2</b>
Operations Support Software	\$28.1	\$26.5	\$28.2	\$27.3	\$28.2	\$32.4	\$31.4	<b>\$174.0</b>
Business Support Software & Equip	\$30.2	\$30.0	\$19.4	\$20.2	\$17.8	\$12.6	\$15.1	<b>\$115.0</b>
Rail Fare Equipment	\$10.2	\$41.8	\$48.4	\$59.2	\$26.9	\$38.1	\$9.7	<b>\$224.2</b>
<b>Subtotal</b>	<b>\$120.1</b>	<b>\$147.2</b>	<b>\$170.4</b>	<b>\$199.0</b>	<b>\$164.7</b>	<b>\$163.3</b>	<b>\$135.7</b>	<b>\$980.4</b>
<b>E Track and Structures</b>								
Track Rehabilitation	\$64.1	\$64.0	\$70.2	\$72.2	\$72.5	\$74.4	\$73.9	<b>\$427.3</b>
Station/Tunnel Rehabilitation	\$3.3	\$6.8	\$7.1	\$7.2	\$7.3	\$7.5	\$7.8	<b>\$43.8</b>
<b>Subtotal</b>	<b>\$67.4</b>	<b>\$70.8</b>	<b>\$77.3</b>	<b>\$79.5</b>	<b>\$79.8</b>	<b>\$81.9</b>	<b>\$81.7</b>	<b>\$471.0</b>
<b>F Passenger Facilities</b>								
Elevator/Escalator Facilities	\$41.4	\$59.1	\$54.4	\$61.0	\$62.2	\$53.3	\$47.6	<b>\$337.7</b>
Maintenance of Rail Station Facilitie	\$32.5	\$43.0	\$53.8	\$37.7	\$21.8	\$28.8	\$27.7	<b>\$212.7</b>
Bicycle & Pedestrian Facilities	\$1.1	\$1.8	\$2.4	\$2.3	\$3.3	\$3.3	\$3.4	<b>\$16.6</b>
Rail Station: Capacity/Enhancement	\$5.0	\$10.5	\$23.5	\$24.6	\$24.5	\$19.6	\$24.6	<b>\$127.4</b>
Bus Priority Corridor Improvements	\$5.5	\$14.5	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	<b>\$14.5</b>
Rail Station Equipment	\$0.1	\$0.3	\$0.2	\$0.2	\$0.2	\$0.2	\$0.2	<b>\$1.4</b>
<b>Subtotal</b>	<b>\$85.5</b>	<b>\$129.2</b>	<b>\$134.3</b>	<b>\$125.8</b>	<b>\$112.1</b>	<b>\$105.3</b>	<b>\$103.6</b>	<b>\$710.2</b>
<b>G Maintenance Equipment</b>								
Rail Maintenance Equipment	\$30.7	\$15.1	\$40.5	\$69.4	\$62.7	\$37.1	\$23.8	<b>\$248.6</b>
Bus Repair Equipment	\$3.8	\$3.3	\$2.3	\$2.4	\$2.4	\$2.4	\$2.4	<b>\$15.2</b>
Business Facilities Equipment	\$0.8	\$0.1	\$0.1	\$0.1	\$0.1	\$0.1	\$0.1	<b>\$0.8</b>
<b>Subtotal</b>	<b>\$35.3</b>	<b>\$18.6</b>	<b>\$42.9</b>	<b>\$72.0</b>	<b>\$65.3</b>	<b>\$39.6</b>	<b>\$26.3</b>	<b>\$264.6</b>
<b>H Other Facilities</b>								
Business Support Facilities	\$6.0	\$13.3	\$12.2	\$11.5	\$5.5	\$5.8	\$5.8	<b>\$53.9</b>
MTPD Support Facilities	\$17.3	\$2.6	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	<b>\$2.6</b>
Other	\$0.0	\$1.2	\$1.2	\$1.2	\$1.2	\$1.2	\$1.2	<b>\$7.2</b>
<b>Subtotal</b>	<b>\$23.3</b>	<b>\$17.0</b>	<b>\$13.4</b>	<b>\$12.7</b>	<b>\$6.7</b>	<b>\$7.0</b>	<b>\$7.0</b>	<b>\$63.7</b>
<b>I Project Management and Support</b>								
Credit Facility	\$3.1	\$4.5	\$2.3	\$2.3	\$2.3	\$2.3	\$2.3	<b>\$16.1</b>
Planning	\$0.3	\$0.5	\$0.6	\$0.6	\$0.7	\$0.7	\$0.7	<b>\$3.8</b>
Project Management and Other	\$17.4	\$10.5	\$3.7	\$4.1	\$4.1	\$3.7	\$3.7	<b>\$29.8</b>
<b>Subtotal</b>	<b>\$20.8</b>	<b>\$15.4</b>	<b>\$6.5</b>	<b>\$7.0</b>	<b>\$7.2</b>	<b>\$6.7</b>	<b>\$6.7</b>	<b>\$49.6</b>
<b>Total</b>	<b>\$754.2</b>	<b>\$1,165.2</b>	<b>\$1,180.1</b>	<b>\$1,046.2</b>	<b>\$970.3</b>	<b>\$942.8</b>	<b>\$916.5</b>	<b>\$6,221.2</b>

## Capital Reimbursable Budget

### Fiscal Year 2016 Approved Budget: \$73.7 Million

Reimbursable capital projects are those unique programs or projects sponsored or directed by jurisdictional partners and for which separate funding has been provided by such sponsors. These projects are outside of the CFA and are not included within the base CIP discussed to this section. A full list of the Approved six-year reimbursable program can be found in Appendix A.

Table 4.8

#### Capital Reimbursable Projects: FY2016

(dollars in Millions)

	FY2016 Proposed Budget
Virginia	\$ 69.0
• Project Development	\$ 0.8
• Dulles	\$ 68.2
District of Columbia	\$ 1.2
• Congress Heights	\$ 0.2
• Project Development	\$ 1.1
Maryland	\$ 3.5
• Project Development	\$ 1.1
All Jurisdictional and Other Partners	\$ 2.4
<b>Total</b>	<b>\$ 73.7</b>



## Appendix A Capital Program

In addition to project level detail of the Capital Improvement Program (CIP), this appendix includes information on the previously approved Reimbursable Projects Program. A summary of projects with multiple funding sources is also provided.

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### Index of Capital Projects

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**ATTACHMENT A-1**
**FY2016-2021 Proposed Capital Improvement Program (CIP)**
**Multi-Year CIP Investments: FY2011-2021**

(dollars in millions)

(\$millions in)

		Six-Year Plan									
		FY2011-2014 Estimate	FY2015 Forecast	FY2016 Plan	FY2017 Plan	FY2018 Plan	FY2019 Plan	FY2020 Plan	FY2021 Plan	FY2016-21 Total	FY2011-21 Total
A Vehicles/ Vehicle Parts											
Replacement of Rail Cars											
CIP0057	1000 Series Rail Car Replacement	\$91.4	\$12.5	\$213.5	\$265.0	\$73.0	\$10.2	\$6.6	\$4.0	\$572.3	\$676.2
CIP0059	2000/3000 Series Rail Car Replacement	\$0.0	\$0.0	\$0.3	\$0.7	\$2.4	\$4.2	\$29.7	\$69.7	\$107.0	\$107.0
CIP0060	4000 Series Rail Car Replacement	\$22.7	\$0.0	\$0.0	\$0.0	\$121.5	\$75.2	\$39.3	\$0.7	\$236.8	\$259.5
CIP0068	Rail Car Acquisition (220 Railcars)	\$0.0	\$0.0	\$53.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$53.0	\$53.0
Subtotal		\$114.1	\$12.5	\$266.8	\$265.7	\$196.9	\$89.6	\$75.7	\$74.4	\$969.1	\$1,095.7
Replacement of Buses											
CIP0006	Bus Replacement	\$267.0	\$54.0	\$118.1	\$98.7	\$74.8	\$89.3	\$101.1	\$101.1	\$583.2	\$904.1
Subtotal		\$267.0	\$54.0	\$118.1	\$98.7	\$74.8	\$89.3	\$101.1	\$101.1	\$583.2	\$904.1
Rehabilitation of Rail Cars											
CIP0058	2000/3000 Series Rail Car Mid-Life Rehabilitation	\$7.9	\$0.4	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$8.3
CIP0061	5000 Series Rail Car Mid-Life Rehabilitation	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
CIP0063	Railcar Rehabilitation Program	\$70.4	\$31.0	\$31.0	\$31.0	\$31.0	\$31.0	\$31.0	\$31.0	\$185.9	\$287.2
CIP0064	1000 Series Rail Car HVAC Rehabilitation	\$3.9	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$3.9
CIP0067	Rail Car Safety & Reliability Enhancements	\$23.2	\$3.7	\$4.0	\$1.7	\$1.5	\$1.4	\$1.5	\$1.5	\$11.5	\$38.4
CIP0125	Rail Preventive Maintenance	\$20.8	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$20.8
CIP0142	Rail Lifecycle Overhaul	\$81.0	\$20.5	\$20.3	\$20.3	\$20.3	\$20.3	\$20.3	\$20.3	\$121.6	\$223.1
CIP0148	Repair of Damaged Railcars	\$0.7	\$1.8	\$2.7	\$3.4	\$0.0	\$0.0	\$0.0	\$0.0	\$6.1	\$8.6
Subtotal		\$207.8	\$57.5	\$57.9	\$56.3	\$52.7	\$52.6	\$52.7	\$52.7	\$325.0	\$590.4
Rehabilitation of Buses											
CIP0005	Bus Rehabilitation Program	\$121.6	\$38.0	\$34.0	\$39.0	\$42.0	\$43.9	\$45.5	\$46.8	\$251.1	\$410.6
CIP0008	Bus Repairables	\$33.5	\$14.5	\$5.7	\$10.5	\$10.5	\$11.5	\$11.6	\$12.6	\$62.4	\$110.4
CIP0137	Bus Preventative Maintenance	\$11.4	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$11.4
CIP0143	Bus Lifecycle Overhaul	\$41.6	\$10.4	\$10.4	\$10.4	\$10.4	\$10.4	\$10.4	\$10.4	\$62.6	\$114.6
Subtotal		\$208.1	\$62.9	\$50.1	\$59.9	\$62.9	\$65.8	\$67.4	\$69.8	\$376.0	\$647.0
Replacement of MetroAccess Vehicles											
CIP0015	MetroAccess Fleet Acquisition	\$38.0	\$10.9	\$11.3	\$15.1	\$18.3	\$19.4	\$20.5	\$21.5	\$106.1	\$155.0
Subtotal		\$38.0	\$10.9	\$11.3	\$15.1	\$18.3	\$19.4	\$20.5	\$21.5	\$106.1	\$155.0
Replacement of Service Vehicles											
CIP0009	Service Vehicle Replacement & Leasing	\$19.9	\$5.7	\$6.3	\$5.1	\$5.5	\$5.8	\$6.2	\$7.1	\$36.0	\$61.6
Subtotal		\$19.9	\$5.7	\$6.3	\$5.1	\$5.5	\$5.8	\$6.2	\$7.1	\$36.0	\$61.6
Rail Car Fleet Expansion											
CIP0062	6000 Series Rail Car Procurement	\$8.9	\$0.3	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$9.3
Subtotal		\$8.9	\$0.3	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$9.3
Bus Fleet Expansion											
CIP0003	Bus Fleet Expansion	\$0.0	\$15.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$15.0
Subtotal		\$0.0	\$15.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$15.0
Bus Enhancements											
CIP0002	Automatic Vehicle Location Equipment Replacement	\$38.6	\$3.8	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$42.4
CIP0007	Bus Camera Installation & Replacement	\$2.9	\$0.4	\$2.1	\$3.1	\$3.1	\$3.1	\$3.1	\$3.1	\$17.6	\$20.9
Subtotal		\$41.5	\$4.2	\$2.1	\$3.1	\$3.1	\$3.1	\$3.1	\$3.1	\$17.6	\$63.3
Subtotal		\$905.2	\$223.1	\$512.7	\$504.0	\$414.2	\$325.7	\$326.7	\$329.8	\$2,413.1	\$3,541.4
B Rail System Infrastructure Rehabilitation											
Rail Line Segment Rehabilitation											
CIP0107	Red Line Rehabilitation Stage One	\$256.6	\$9.4	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$266.0
CIP0108	Red Line Rehabilitation Stage Two	\$3.2	\$4.0	\$7.8	\$26.8	\$36.4	\$49.9	\$36.4	\$13.3	\$170.6	\$177.7
CIP0110	Orange/Blue Line Rehabilitation Stage One	\$192.9	\$52.0	\$58.0	\$48.0	\$34.0	\$0.0	\$0.0	\$0.0	\$140.0	\$384.9
Subtotal		\$452.7	\$65.4	\$65.8	\$74.8	\$70.4	\$49.9	\$36.4	\$13.3	\$310.6	\$828.7
Rail System Safety Rehabilitation											
CIP0139	National Transportation Safety Board Recommendations	\$153.6	\$20.5	\$22.9	\$5.2	\$0.0	\$0.0	\$0.0	\$0.0	\$28.1	\$202.3
Subtotal		\$153.6	\$20.5	\$22.9	\$5.2	\$0.0	\$0.0	\$0.0	\$0.0	\$28.1	\$202.3
Subtotal		\$606.3	\$86.0	\$88.7	\$80.0	\$70.4	\$49.9	\$36.4	\$13.3	\$338.7	\$1,030.9
C Maintenance Facilities											
Rehabilitation and Replacement of Bus Garages											
CIP0084	Southern Avenue Bus Garage Replacement	\$24.1	\$11.9	\$39.2	\$66.6	\$38.2	\$6.6	\$0.1	\$0.8	\$151.5	\$187.5
CIP0085	Royal Street Bus Garage Replacement (Cinder Bed Road)	\$21.7	\$7.0	\$30.9	\$24.1	\$0.0	\$0.0	\$0.0	\$0.0	\$54.9	\$83.6
CIP0086	Shepherd Parkway Bus Facility	\$2.0	\$0.0	\$0.7	\$6.1	\$3.3	\$0.0	\$0.0	\$0.0	\$10.1	\$12.0
CIP0240	Bladensburg Garage	\$0.0	\$0.0	\$0.0	\$1.5	\$1.2	\$7.8	\$26.2	\$40.5	\$77.2	\$77.2
Subtotal		\$47.7	\$18.9	\$70.8	\$98.1	\$42.7	\$14.4	\$26.3	\$41.3	\$293.7	\$360.3

**ATTACHMENT A-1**
**FY2016-2021 Proposed Capital Improvement Program (CIP)**
**Multi-Year CIP Investments: FY2011-2021**

(dollars in millions)

(\$dollars in millions)

		Sub-Year Plan										
		FY2011-2014 Estimate	FY2015 Forecast	FY2016 Plan	FY2017 Plan	FY2018 Plan	FY2019 Plan	FY2020 Plan	FY2021 Plan	FY2016-21 Total	FY2011-21 Total	
Maintenance of Bus Garages												
CIP0119	Bus Garage Facility Repairs	\$88.8	\$9.2	\$9.7	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$9.7	\$107.7	
Subtotal		\$88.8	\$9.2	\$9.7	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$9.7	\$107.7	
Maintenance of Rail Yards												
CIP0116	Rail Yard Facility Repairs	\$57.4	\$12.6	\$26.5	\$39.2	\$14.2	\$0.0	\$0.0	\$0.0	\$79.9	\$150.0	
Subtotal		\$57.4	\$12.6	\$26.5	\$39.2	\$14.2	\$0.0	\$0.0	\$0.0	\$79.9	\$150.0	
Rail Maintenance Facilities												
CIP0071	Test Track & Railcar Commissioning Facility	\$65.0	\$28.7	\$5.2	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$5.2	\$98.9	
CIP0201	8-car Train Facility Design	\$2.5	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$2.5	
CIP0204	7000 Series Rail Car HVAC Maintenance Facility	\$0.4	(\$0.3)	\$2.2	\$3.2	\$0.0	\$0.0	\$0.0	\$0.0	\$5.4	\$5.5	
CIP0224	New Carrollton Yard Capacity Improvements	\$0.0	\$1.2	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$1.2	
CIP0225	Railcar Heavy Repair and Overhaul Facility	\$0.0	\$0.5	\$0.5	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.5	\$1.0	
CIP0231	Relocation of Maintenance Departments from Rail Yards	\$0.0	\$0.0	\$35.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$35.0	\$35.0	
Subtotal		\$67.9	\$30.2	\$42.9	\$3.2	\$0.0	\$0.0	\$0.0	\$0.0	\$46.1	\$144.2	
Environmental Compliance Projects												
CIP0010	Environmental Compliance Project	\$5.2	\$1.5	\$1.7	\$2.0	\$2.5	\$3.5	\$3.5	\$2.5	\$15.5	\$22.2	
CIP0011	Underground Storage Tank Replacement	\$10.9	\$2.3	\$2.2	\$2.3	\$3.4	\$3.7	\$3.4	\$3.3	\$18.4	\$31.5	
CIP0210	Pollution Prevention for Track Fueling Areas	\$0.2	\$0.1	\$0.7	\$2.1	\$0.7	\$2.1	\$2.7	\$2.7	\$11.1	\$11.4	
CIP0211	Storm Water Facility Assessment	\$0.0	\$0.6	\$1.0	\$1.2	\$0.0	\$0.0	\$0.0	\$0.0	\$2.2	\$2.8	
CIP0212	Sustainability Investments - Pilot Program	\$0.0	\$0.6	\$1.5	\$1.0	\$0.0	\$0.0	\$0.0	\$0.0	\$2.5	\$3.0	
Subtotal		\$16.3	\$5.0	\$7.0	\$8.6	\$6.6	\$9.3	\$9.6	\$8.5	\$49.6	\$70.9	
Maintenance Bus and Rail Facilities												
CIP0127	Support Equipment - MTPD	\$7.0	\$0.2	\$1.7	\$1.1	\$1.0	\$1.1	\$1.1	\$1.3	\$7.2	\$14.5	
CIP0145	Rail Yard Hardening and Bus Security	\$32.1	\$14.2	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$46.3	
CIP0155	Rehabilitation of Backlick Road Facility	\$0.2	\$0.3	\$2.2	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$2.2	\$2.6	
CIP0213	8-Car Train Maintenance and Storage Facilities	\$1.0	\$0.2	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$1.3	
CIP0221	Bus Customer Facility Improvements	\$0.0	\$0.7	\$1.1	\$1.2	\$1.2	\$1.2	\$1.2	\$1.3	\$7.2	\$7.9	
Subtotal		\$40.4	\$15.5	\$5.0	\$2.2	\$2.2	\$2.3	\$2.3	\$2.6	\$16.6	\$72.6	
Expansion of Bus Garages												
CIP0038	Future Bus Facilities	\$0.3	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.3	
CIP0078	Bladensburg Bus Facility Rehabilitation & Reconfiguration	\$8.5	\$1.3	\$3.7	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$3.7	\$13.5	
Subtotal		\$8.9	\$1.3	\$3.7	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$3.7	\$13.8	
Subtotal		\$327.6	\$92.8	\$165.5	\$151.4	\$65.7	\$26.0	\$38.2	\$52.4	\$499.2	\$919.6	
D Systems and Technology												
Power System Replacement/Upgrades - Rail												
CIP0076	Rail Power System Upgrades	\$9.6	\$35.2	\$31.6	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$31.6	\$76.4	
CIP0077	8-Car Train Power Upgrades	\$4.4	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$4.4	
CIP0223	8-Car Train Power Cable Upgrades	\$0.0	\$16.1	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$16.1	
CIP0232	Automatic Train Control System Upgrades	\$0.0	\$0.4	\$2.7	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$2.7	\$3.1	
CIP0251	Automatic Train Control State of Good Repair	\$0.0	\$0.0	\$9.4	\$14.5	\$20.9	\$22.4	\$24.5	\$31.9	\$123.6	\$123.6	
CIP0252	AC Power Systems State of Good Repair	\$0.0	\$0.0	\$0.0	\$0.0	\$1.3	\$3.5	\$3.9	\$5.4	\$14.1	\$14.1	
CIP0253	Traction Power State of Good Operations	\$0.0	\$0.0	\$5.2	\$9.0	\$9.5	\$10.3	\$12.5	\$14.3	\$60.8	\$60.8	
Subtotal		\$14.0	\$51.7	\$48.9	\$23.5	\$31.7	\$36.2	\$40.9	\$51.5	\$232.7	\$298.5	
Operations Support Software												
CIP0042	Bus & Rail Asset Management Software	\$11.8	\$2.5	\$3.7	\$2.9	\$2.5	\$3.2	\$3.4	\$3.8	\$19.5	\$33.8	
CIP0043	Bus Operations Support Software	\$8.4	\$1.9	\$0.9	\$1.7	\$3.3	\$1.8	\$2.0	\$2.0	\$11.8	\$22.0	
CIP0044	IT Capital Program Business Process Reengineering and Program Support	\$21.7	\$6.1	\$5.2	\$6.5	\$5.6	\$6.3	\$6.8	\$6.9	\$37.3	\$65.1	
CIP0045	Data Centers and Infrastructures	\$24.0	\$4.9	\$2.5	\$4.0	\$3.5	\$4.1	\$6.1	\$4.4	\$24.7	\$53.7	
CIP0047	Enterprise Geographic Information System	\$6.1	\$0.7	\$0.9	\$1.4	\$1.3	\$1.4	\$1.6	\$1.7	\$8.3	\$15.1	
CIP0051	Police Dispatch and Records Management	\$4.0	\$3.0	\$2.8	\$1.1	\$1.3	\$1.4	\$1.5	\$1.5	\$9.7	\$16.7	
CIP0052	Network and Communications	\$16.4	\$4.6	\$3.6	\$4.0	\$4.5	\$5.4	\$5.8	\$6.0	\$29.4	\$50.4	
CIP0053	Metro Enterprise Monitoring Center (MEMC)	\$3.6	\$0.4	\$0.5	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.5	\$4.5	
CIP0056	Rail Operations Support Software	\$8.2	\$1.4	\$2.3	\$3.5	\$3.4	\$3.7	\$4.4	\$4.5	\$21.9	\$31.6	
CIP0128	Data Governance and Business Intelligence	\$3.9	\$1.2	\$1.2	\$0.9	\$0.8	\$0.7	\$0.7	\$0.4	\$4.6	\$9.7	
CIP0140	Rail Mileage Based Asset Management	\$10.1	\$0.4	\$0.2	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.2	\$10.7	
CIP0144	Bus Operations Control Center	\$1.3	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$1.3	
CIP0149	Transit Asset Management System	\$3.7	\$0.4	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$4.1	
CIP0215	Rail Scheduling System Upgrade	\$0.1	\$0.5	\$2.7	\$2.2	\$1.1	\$0.0	\$0.0	\$0.0	\$6.1	\$6.7	
Subtotal		\$123.4	\$28.1	\$26.5	\$28.2	\$27.3	\$28.2	\$32.4	\$31.4	\$174.0	\$325.5	



**ATTACHMENT A-1**
**FY2016-2021 Proposed Capital Improvement Program (CIP)**
**Multi-Year CIP Investments: FY2011-2021**

(dollars in millions)

(dollars in millions)

		Six-Year Plan									
		FY2011-2014 Estimate	FY2015 Forecast	FY2016 Plan	FY2017 Plan	FY2018 Plan	FY2019 Plan	FY2020 Plan	FY2021 Plan	FY2016-21 Total	FY2011-21 Total
Business Support Software & Equipment											
CIP0030	Currency Processing Machines	\$2.3	\$0.3	\$0.4	\$0.0	\$0.0	\$0.0	\$0.0	\$1.7	\$2.0	\$4.6
CIP0046	Document Management System	\$7.3	\$3.0	\$1.9	\$2.4	\$2.2	\$2.4	\$1.3	\$1.8	\$12.0	\$22.4
CIP0048	Sensitive Data Protection Technology	\$17.3	\$3.3	\$1.1	\$1.3	\$1.2	\$1.3	\$1.5	\$1.5	\$8.0	\$28.6
CIP0049	Management Support Software	\$47.9	\$14.6	\$17.5	\$11.1	\$13.8	\$12.5	\$7.9	\$7.4	\$70.3	\$132.8
CIP0050	Metro IT One Stop and Office Automation	\$9.0	\$0.8	\$0.8	\$0.8	\$0.8	\$0.9	\$0.9	\$0.9	\$5.2	\$15.0
CIP0054	Customer Electronic Communications & Outreach	\$8.9	\$0.8	\$1.6	\$0.8	\$1.2	\$0.6	\$0.9	\$0.8	\$5.8	\$15.6
CIP0103	Police Portable Radio Replacement	\$2.0	\$0.0	\$0.9	\$0.9	\$0.9	\$0.1	\$0.0	\$0.9	\$3.6	\$5.6
CIP0147	FBI National Electronic Countermeasures Program	\$0.4	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.4
CIP0195	Radio Project - Additional Coverage	\$5.1	\$0.8	\$0.9	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.9	\$6.8
CIP0196	Safety Measurement System	\$5.1	\$3.7	\$2.8	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$2.8	\$11.6
CIP0202	Non-Revenue Vehicle Management System	\$0.0	\$1.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$1.0
CIP0230	Wireless Communication Infrastructure	\$0.0	\$1.8	\$2.2	\$2.2	\$0.0	\$0.0	\$0.0	\$0.0	\$4.4	\$6.1
Subtotal		\$105.2	\$30.2	\$30.0	\$19.4	\$20.2	\$17.8	\$12.6	\$15.1	\$115.0	\$250.4
Rail Fare Equipment											
CIP0031	Debit/Credit Processing Requirements	\$1.4	\$0.0	\$0.4	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.4	\$1.8
CIP0092	Ethernet Wiring for Rail Fare Machines	\$7.1	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$7.1
CIP0093	Integrating regional NEXTFARE System	\$22.4	\$1.1	\$1.5	\$0.4	\$0.2	\$0.0	\$0.1	\$0.0	\$2.2	\$25.7
CIP0094	Coin Collection Machines Improvements	\$5.6	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$5.6
CIP0097	New Electronic Payments Program	\$11.8	\$9.1	\$40.0	\$48.0	\$59.0	\$26.8	\$38.1	\$9.7	\$221.6	\$242.4
Subtotal		\$48.3	\$10.2	\$41.8	\$48.4	\$59.2	\$26.9	\$38.1	\$9.7	\$224.2	\$282.6
Subtotal		\$291.0	\$120.1	\$147.2	\$119.5	\$138.4	\$109.1	\$124.1	\$107.7	\$745.9	\$1,157.0
E Track and Structures											
Track Rehabilitation											
CIP0018	Track Welding Program	\$8.4	\$5.7	\$6.3	\$6.2	\$6.2	\$6.4	\$6.8	\$5.1	\$37.0	\$51.2
CIP0019	Track Floating Slab Rehabilitation	\$5.6	\$0.6	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$6.2
CIP0021	Track Grout Pad Rehabilitation	\$10.2	\$2.4	\$2.7	\$2.8	\$3.5	\$3.6	\$4.0	\$4.2	\$20.9	\$33.5
CIP0022	Track Structural Rehabilitation	\$11.2	\$1.8	\$2.1	\$2.1	\$6.4	\$6.6	\$6.9	\$7.3	\$31.4	\$44.5
CIP0023	Third Rail Rehabilitation and Replacement	\$14.4	\$5.0	\$5.8	\$6.1	\$6.4	\$6.5	\$6.7	\$6.9	\$38.4	\$57.8
CIP0024	Track Rehabilitation	\$183.1	\$47.8	\$46.3	\$48.4	\$48.4	\$49.4	\$49.9	\$50.4	\$292.9	\$523.8
CIP0089	Track Fasteners	\$7.7	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$7.7
CIP0141	Cheverly Abutment	\$7.9	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$7.9
CIP0146	Switch Replacement Program	\$14.9	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$14.9
CIP0205	Bush Hill Aerial Structure Rehabilitation	\$0.0	\$0.8	\$0.8	\$4.6	\$1.3	\$0.0	\$0.0	\$0.0	\$6.7	\$7.5
Subtotal		\$263.5	\$64.1	\$64.0	\$70.2	\$72.2	\$72.5	\$74.4	\$73.9	\$427.3	\$754.9
Station/Tunnel Rehabilitation											
CIP0026	Station/Tunnel Leak Mitigation	\$12.6	\$3.3	\$6.8	\$7.1	\$7.2	\$7.3	\$7.5	\$7.8	\$43.8	\$59.6
Subtotal		\$12.6	\$3.3	\$6.8	\$7.1	\$7.2	\$7.3	\$7.5	\$7.8	\$43.8	\$59.6
Subtotal		\$276.1	\$67.4	\$70.8	\$77.3	\$79.5	\$79.8	\$81.9	\$81.7	\$471.0	\$814.5
F Passenger Facilities											
Elevator/Escalator Facilities											
CIP0072	Elevator Rehabilitation	\$14.5	\$7.6	\$9.6	\$6.6	\$6.4	\$7.0	\$8.6	\$8.6	\$46.8	\$68.8
CIP0073	Escalator Rehabilitation	\$46.5	\$9.5	\$10.8	\$12.4	\$12.7	\$13.8	\$13.8	\$14.8	\$78.2	\$134.2
CIP0132	Elevator/Escalator Repairables	\$24.5	\$4.3	\$7.7	\$7.6	\$7.7	\$7.8	\$7.9	\$8.0	\$46.5	\$75.2
CIP0185	Escalator Replacement	\$22.4	\$20.0	\$31.0	\$27.8	\$34.2	\$33.8	\$23.1	\$16.3	\$166.2	\$208.5
Subtotal		\$107.8	\$41.4	\$59.1	\$54.4	\$61.0	\$62.2	\$53.3	\$47.6	\$337.7	\$486.9
Maintenance of Rail Station Facilities											
CIP0087	Station Rehabilitation Program	\$37.7	\$8.7	\$11.7	\$10.9	\$11.2	\$11.6	\$11.9	\$12.3	\$69.6	\$115.9
CIP0138	System-wide Infrastructure Rehabilitation	\$160.0	\$1.9	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$161.9
CIP0150	Fire Systems	\$14.0	\$4.9	\$6.7	\$7.2	\$4.7	\$0.0	\$0.0	\$0.0	\$18.6	\$37.5
CIP0151	Station Cooling Program	\$24.4	\$5.6	\$6.0	\$4.1	\$3.6	\$4.3	\$11.7	\$10.5	\$40.3	\$70.3
CIP0152	Parking Garage Rehabilitation	\$7.7	\$3.8	\$5.3	\$5.8	\$7.9	\$5.9	\$5.1	\$4.9	\$34.9	\$46.4
CIP0153	Accessible Station Signage	\$0.1	\$6.6	\$6.7	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$6.7	\$13.5
CIP0198	Platform to Mezzanine Stairs – Bethesda Station	\$0.5	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.5
CIP0199	Station & Right-of-Way Improvements	\$5.6	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$5.6
CIP0216	Farragut North Beam Rehabilitation	\$0.0	\$0.8	\$1.3	\$8.9	\$4.7	\$0.0	\$0.0	\$0.0	\$14.9	\$15.7
CIP0241	Raising Vent Shafts Vicinity Federal Triangle & Protecting System Core	\$0.0	\$0.3	\$3.3	\$10.8	\$3.6	\$0.0	\$0.0	\$0.0	\$17.7	\$17.9
CIP0242	Improving Drainage	\$0.0	\$0.0	\$2.0	\$6.0	\$2.0	\$0.0	\$0.0	\$0.0	\$10.0	\$10.0
Subtotal		\$250.0	\$32.5	\$43.0	\$53.8	\$37.7	\$21.8	\$28.8	\$27.7	\$212.7	\$495.2

**ATTACHMENT A-1**
**FY2016-2021 Proposed Capital Improvement Program (CIP)**

Multi-Year CIP Investments: FY2011-2021

(dollars in millions)

		Six-Year Plan									
		FY2011-2014 Estimate	FY2015 Forecast	FY2016 Plan	FY2017 Plan	FY2018 Plan	FY2019 Plan	FY2020 Plan	FY2021 Plan	FY2016-21 Total	FY2011-21 Total
Bicycle & Pedestrian Facilities											
CIP0035	Bicycle & Pedestrian Facilities: Capacity Improvements	\$5.2	\$1.1	\$1.8	\$2.4	\$2.3	\$3.3	\$3.3	\$3.4	\$16.6	\$22.8
Subtotal		\$5.2	\$1.1	\$1.8	\$2.4	\$2.3	\$3.3	\$3.3	\$3.4	\$16.6	\$22.8
Rail Station: Capacity/Enhancements											
CIP0017	Station Platform Safety Improvement (Truncated Domes)	\$4.4	\$1.2	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$5.6
CIP0039	Core & System Capacity Project Development	\$6.5	\$2.1	\$1.7	\$3.2	\$2.3	\$3.1	\$2.7	\$3.4	\$16.4	\$25.0
CIP0074	Installation of Parking Lot Credit Card Readers - Parking Automation	\$11.0	\$0.0	\$0.0	\$0.0	\$1.0	\$1.0	\$1.0	\$1.2	\$4.1	\$15.1
CIP0088	Station Entrance Canopies	\$0.9	\$1.5	\$5.5	\$13.9	\$13.3	\$12.2	\$7.5	\$11.4	\$63.8	\$66.1
CIP0178	Union Station Access & Capacity Improvements	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
CIP0179	Gallery Place Access & Capacity Improvements	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
CIP0218	Station Upgrades	\$0.5	\$0.1	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.5
CIP0219	Station Lighting Improvements	\$5.5	\$0.2	\$3.3	\$6.4	\$8.0	\$8.2	\$8.4	\$8.7	\$43.1	\$48.7
Subtotal		\$28.7	\$5.0	\$10.5	\$23.5	\$24.6	\$24.5	\$19.6	\$24.6	\$127.4	\$161.0
Bus Priority Corridor Improvements											
CIP0037	Bus Priority Corridor & Network	\$13.6	\$5.5	\$14.5	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$14.5	\$33.5
Subtotal		\$13.6	\$5.5	\$14.5	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$14.5	\$33.5
Rail Station Equipment											
CIP0099	Police Emergency Management Equipment	\$1.4	\$0.1	\$0.3	\$0.2	\$0.2	\$0.2	\$0.2	\$0.2	\$1.4	\$2.9
Subtotal		\$1.4	\$0.1	\$0.3	\$0.2	\$0.2	\$0.2	\$0.2	\$0.2	\$1.4	\$2.9
Subtotal		\$406.7	\$85.5	\$129.2	\$134.3	\$125.8	\$112.1	\$105.3	\$103.6	\$710.2	\$1,202.4
G Maintenance Equipment											
Rail Maintenance Equipment											
CIP0020	Replacement of Rail Track Signage	\$4.5	\$1.1	\$1.3	\$1.4	\$1.4	\$1.5	\$1.5	\$1.6	\$8.7	\$14.3
CIP0025	Track Maintenance Equipment	\$40.4	\$9.6	\$1.0	\$0.0	\$0.0	\$6.9	\$10.2	\$10.8	\$28.9	\$78.9
CIP0027	Switch Machine Rehabilitation Project	\$4.4	\$1.8	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$6.2
CIP0065	Geometry Vehicle	\$12.3	\$0.7	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$13.0
CIP0066	Rail Shop Repair Equipment	\$17.4	\$9.3	\$0.4	\$0.0	\$0.0	\$0.0	\$0.0	\$3.1	\$3.5	\$30.2
CIP0133	Wayside Work Equipment	\$7.5	\$1.9	\$2.1	\$2.6	\$1.4	\$0.0	\$0.0	\$0.0	\$6.1	\$15.5
CIP0135	Train Control Signal and Traction Power System Interface	\$3.5	\$2.1	\$0.2	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.2	\$5.7
CIP0136	Radio Infrastructure Replacement - T-Band Relocation	\$3.1	\$4.1	\$10.2	\$36.5	\$66.5	\$54.4	\$25.3	\$8.2	\$201.2	\$208.4
CIP0222	Rail Operations Upgrade	\$0.0	\$0.1	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.1
Subtotal		\$93.2	\$30.7	\$15.1	\$40.5	\$69.4	\$62.7	\$37.1	\$23.8	\$248.6	\$372.4
Bus Repair Equipment											
CIP0004	Bus Repair Equipment	\$13.7	\$3.8	\$3.3	\$2.3	\$2.4	\$2.4	\$2.4	\$2.4	\$15.2	\$32.7
Subtotal		\$13.7	\$3.8	\$3.3	\$2.3	\$2.4	\$2.4	\$2.4	\$2.4	\$15.2	\$32.7
Business Facilities Equipment											
CIP0028	Materials Handling Equipment	\$0.5	\$0.1	\$0.1	\$0.1	\$0.1	\$0.1	\$0.1	\$0.1	\$0.8	\$1.4
CIP0029	Warehouse Vertical Storage Unit	\$8.5	\$0.8	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$9.2
Subtotal		\$9.0	\$0.8	\$0.1	\$0.1	\$0.1	\$0.1	\$0.1	\$0.1	\$0.8	\$10.6
Subtotal		\$115.8	\$35.3	\$18.6	\$42.9	\$72.0	\$65.3	\$39.6	\$26.3	\$264.6	\$415.7
H Other Facilities											
Business Support Facilities											
CIP0033	Revenue Facility Equipment	\$0.8	\$0.1	\$1.8	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$1.8	\$2.7
CIP0034	Revenue Collection Facility	\$1.1	\$1.2	\$1.1	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$1.1	\$3.4
CIP0080	Building Infrastructure & Systems Renewal	\$17.5	\$0.9	\$3.7	\$7.8	\$4.9	\$0.0	\$0.0	\$0.0	\$16.4	\$34.7
CIP0170	Roof Rehabilitation and Replacement	\$0.4	\$1.8	\$1.1	\$3.5	\$5.7	\$4.7	\$4.8	\$4.8	\$24.6	\$26.7
CIP0197	Rehabilitation of Non-Revenue Facilities	\$1.2	\$0.8	\$1.0	\$0.9	\$0.9	\$0.8	\$1.0	\$1.0	\$5.5	\$7.6
CIP0206	Carmen Turner Facility Electrical Distribution Upgrade	\$0.1	\$1.3	\$4.5	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$4.5	\$5.9
Subtotal		\$21.0	\$6.0	\$13.3	\$12.2	\$11.5	\$5.5	\$5.8	\$5.8	\$53.9	\$81.0
MTPD Support Facilities											
CIP0101	Police Substation- New District 2/Training Facility	\$22.8	\$8.2	\$2.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$2.0	\$32.9
CIP0106	Special Operations Division Facility	\$20.5	\$9.1	\$0.6	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.6	\$30.1
Subtotal		\$43.2	\$17.3	\$2.6	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$2.6	\$63.0
Other											
CIP0247	Emergency Construction	\$0.0	\$0.0	\$1.2	\$1.2	\$1.2	\$1.2	\$1.2	\$1.2	\$7.2	\$7.2
Subtotal		\$0.0	\$0.0	\$1.2	\$1.2	\$1.2	\$1.2	\$1.2	\$1.2	\$7.2	\$7.2
Subtotal		\$64.3	\$23.3	\$17.0	\$13.4	\$12.7	\$6.7	\$7.0	\$7.0	\$63.7	\$151.2

**ATTACHMENT A-1**
**FY2016-2021 Proposed Capital Improvement Program (CIP)**
**Multi-Year CIP Investments: FY2011-2021**

(dollars in millions)

(dollars in millions)

		FY2011-2014 Estimate	FY2015 Forecast	Six-Year Plan						FY2016-21 Total	FY2011-21 Total
				FY2016 Plan	FY2017 Plan	FY2018 Plan	FY2019 Plan	FY2020 Plan	FY2021 Plan		
I	Project Management and Support										
	Credit Facility										
	CIP0131 Credit Facility	\$4.6	\$3.1	\$4.5	\$2.3	\$2.3	\$2.3	\$2.3	\$2.3	\$16.1	\$23.7
	Subtotal	\$4.6	\$3.1	\$4.5	\$2.3	\$2.3	\$2.3	\$2.3	\$2.3	\$16.1	\$23.7
	Planning										
	CIP0220 Bus Planning	\$0.0	\$0.3	\$0.5	\$0.6	\$0.6	\$0.7	\$0.7	\$0.7	\$3.8	\$4.1
	Subtotal	\$0.0	\$0.3	\$0.5	\$0.6	\$0.6	\$0.7	\$0.7	\$0.7	\$3.8	\$4.1
	Project Management and Other										
	CIP0126 Financial Planning, Project Administration, and System Wide Infrastructure Upgrades	\$20.7	\$17.4	\$8.9	\$2.2	\$2.2	\$2.2	\$1.8	\$1.8	\$19.0	\$57.2
	CIP0246 General Engineering	\$0.0	\$0.0	\$1.6	\$1.5	\$1.9	\$1.9	\$1.9	\$1.9	\$10.8	\$10.8
	Subtotal	\$20.7	\$17.4	\$10.5	\$3.7	\$4.1	\$4.1	\$3.7	\$3.7	\$29.8	\$67.9
	Subtotal	\$25.4	\$20.8	\$15.4	\$6.5	\$7.0	\$7.2	\$6.7	\$6.7	\$49.6	\$95.7
	Total	\$3,018.2	\$754.2	\$1,165.2	\$1,129.2	\$985.6	\$781.7	\$765.9	\$728.5	\$5,556.1	\$9,328.5

**ATTACHMENT A-2**  
**Washington Metropolitan Area Transit Authority**  
**FY2016-2021 Proposed Capital Improvement Program (CIP)**  
**Proposed Financial Plan**  
(dollars in millions)

									Six-Year Plan							
	FY2011 Estimate	FY2012 Estimate	FY2013 Estimate	FY2014 Estimate	FY2011-FY2014 Estimate	FY2015 Forecast	FY2015 Roll-Over	FY2016 NEW	FY2016 Proposed	FY2017 Forecast	FY2018 Forecast	FY2019 Forecast	FY2020 Forecast	FY2021 Forecast	FY16-FY21 Total	FY11-21 Total
<b>Federal</b>																
Federal Formula Programs	\$ 160.9	\$ 286.1	\$ 248.6	\$ 234.0	\$ 929.7	\$ 242.7	\$ 134.3	\$ 287.3	\$ 421.5	\$ 287.3	\$ 287.3	\$ 287.3	\$ 287.3	\$ 287.3	\$ 1,857.9	\$ 3,030.2
Federal PRIIA	\$ 118.5	\$ 112.3	\$ 169.5	\$ 171.1	\$ 571.5	\$ 123.7	\$ 45.1	\$ 148.5	\$ 193.6	\$ 159.6	\$ 150.0	\$ 150.0	\$ 150.0	\$ 150.0	\$ 953.2	\$ 1,648.5
Resiliency Grant	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 0.2	\$ 0.6	\$ 3.4	\$ 3.9	\$ 8.0	\$ 6.0	\$ -	\$ -	\$ -	\$ 17.9	\$ 18.1
Other Federal Grants	\$ -	\$ 6.7	\$ 12.6	\$ 25.7	\$ 45.1	\$ 13.2	\$ 3.0	\$ 27.2	\$ 30.2	\$ 0.6	\$ 5.5	\$ 5.9	\$ 3.6	\$ 3.6	\$ 49.5	\$ 107.8
Subtotal Federal	\$ 279.5	\$ 405.2	\$ 430.7	\$ 430.8	\$ 1546.2	\$ 379.8	\$ 183.0	\$ 466.4	\$ 649.3	\$ 455.5	\$ 448.8	\$ 443.2	\$ 440.9	\$ 440.9	\$ 2,878.5	\$ 4,804.5
<b>State and Local</b>																
Match to Federal Formula	\$ 40.2	\$ 71.5	\$ 62.1	\$ 58.2	\$ 232.2	\$ 60.9	\$ 33.6	\$ 71.8	\$ 105.4	\$ 71.8	\$ 71.8	\$ 71.8	\$ 71.8	\$ 71.8	\$ 464.5	\$ 757.6
System Performance	\$ 59.1	\$ 111.7	\$ 126.6	\$ 105.7	\$ 403.0	\$ 127.6	\$ 9.2	\$ 109.5	\$ 118.6	\$ 117.2	\$ 122.9	\$ 129.0	\$ 135.4	\$ 142.1	\$ 765.3	\$ 1,295.9
State and Local PRIIA	\$ 118.5	\$ 112.3	\$ 169.5	\$ 171.1	\$ 571.5	\$ 123.7	\$ 45.1	\$ 148.5	\$ 193.6	\$ 159.6	\$ 150.0	\$ 150.0	\$ 150.0	\$ 150.0	\$ 953.2	\$ 1,648.5
Match to Resiliency Grant	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 0.1	\$ 0.2	\$ 1.1	\$ 1.3	\$ 2.7	\$ 2.0	\$ -	\$ -	\$ -	\$ 6.0	\$ 6.0
Rail Power System Upgrades	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 17.7	\$ 17.7	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 17.7	\$ 17.7
Other State and Local	\$ -	\$ 1.5	\$ 2.2	\$ 1.9	\$ 5.6	\$ 1.3	\$ 0.2	\$ 6.5	\$ 6.7	\$ 0.2	\$ 1.4	\$ 1.5	\$ 0.9	\$ 0.9	\$ 11.5	\$ 18.3
Subtotal State and Local	\$ 217.8	\$ 297.0	\$ 360.5	\$ 336.9	\$ 1212.2	\$ 313.6	\$ 88.2	\$ 355.2	\$ 443.4	\$ 351.4	\$ 348.1	\$ 352.3	\$ 358.1	\$ 364.8	\$ 2,218.2	\$ 3,744.0
<b>Other Sources</b>																
MetroMatters	\$ 113.7	\$ 39.4	\$ 19.2	\$ 12.4	\$ 184.8	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 184.8
Insurance Proceeds	\$ 0.1	\$ -	\$ 22.8	\$ -	\$ 23.0	\$ 1.8	\$ 1.3	\$ 7.8	\$ 9.2	\$ 3.4	\$ -	\$ -	\$ -	\$ -	\$ 12.6	\$ 37.3
Land Sale Proceeds	\$ -	\$ 12.6	\$ 13.2	\$ 2.5	\$ 28.3	\$ 1.5	\$ -	\$ 27.3	\$ 27.3	\$ 3.7	\$ -	\$ -	\$ -	\$ -	\$ 31.0	\$ 60.8
Joint Development Proceeds	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3.5	\$ 3.5	\$ 11.1	\$ 13.5	\$ 8.9	\$ 3.5	\$ 23.5	\$ 64.0	\$ 64.0
Miscellaneous	\$ -	\$ 16.2	\$ -	\$ 7.6	\$ 23.8	\$ 15.0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 38.8
Subtotal Other Sources	\$ 113.9	\$ 68.2	\$ 55.2	\$ 22.6	\$ 259.8	\$ 18.4	\$ 1.3	\$ 38.6	\$ 39.9	\$ 18.2	\$ 13.5	\$ 8.9	\$ 3.5	\$ 23.5	\$ 107.6	\$ 385.7
<b>Financing</b>																
Planned Long-Term Financing	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 355.0	\$ 235.9	\$ 165.9	\$ 140.3	\$ 59.3	\$ 956.4	\$ 956.4
Subtotal Financing	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 355.0	\$ 235.9	\$ 165.9	\$ 140.3	\$ 59.3	\$ 956.4	\$ 956.4
<b>Metro 2025 Investment</b>																
Metro 2025 Investment	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 42.5	\$ 32.5	\$ -	\$ 32.5	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 32.5	\$ 75.0
Subtotal Metro 2025	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 42.5	\$ 32.5	\$ -	\$ 32.5	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 32.5	\$ 75.0
<b>Total</b>	<b>\$ 611.2</b>	<b>\$ 770.3</b>	<b>\$ 846.3</b>	<b>\$ 790.4</b>	<b>\$ 3,018.2</b>	<b>\$ 754.2</b>	<b>\$ 305.1</b>	<b>\$ 860.1</b>	<b>\$ 1,165.2</b>	<b>\$ 1,180.1</b>	<b>\$ 1,046.2</b>	<b>\$ 970.3</b>	<b>\$ 942.8</b>	<b>\$ 888.5</b>	<b>\$ 6,193.2</b>	<b>\$ 9,965.6</b>

ATTACHMENT A-3  
FY2016-2021 Proposed Capital Improvement Program (CIP)  
Proposed Financial Plan - Allocation of State and Local Contributions  
(dollars in millions)

(dollars in millions)

	Six-Year Plan												
	FY2011-FY2014 Estimate	FY2015 Forecast	Forecast Carry-Over	FY2016 Contribution	FY2016 Proposed	FY2017 Forecast	FY2018 Forecast	FY2019 Forecast	FY2020 Forecast	FY2021 Forecast	FY16-21 Total	FY11-21 Total	
Formula Match, System Performance & Resiliency Grant Match													
District of Columbia	\$ 239.7	\$ 70.6	\$ 16.0	\$ 68.0	\$ 84.0	\$ 71.2	\$ 73.1	\$ 74.6	\$ 77.0	\$ 79.5	\$ 459.5	\$ 769.8	
Montgomery County	110.9	32.4	7.3	31.2	38.5	32.7	33.5	34.2	35.3	36.5	\$ 210.8	\$ 354.1	
Prince George's County	120.3	33.6	7.6	32.4	40.0	33.9	34.8	35.6	36.7	37.9	\$ 219.0	\$ 372.9	
Maryland Subtotal	231.2	66.0	15.0	63.6	78.5	66.6	68.4	69.8	72.0	74.4	\$ 429.8	\$ 727.0	
City of Alexandria	27.0	8.5	1.9	8.2	10.1	8.6	8.8	9.0	9.3	9.6	\$ 55.5	\$ 90.9	
Arlington County	50.3	15.9	3.6	15.3	18.9	16.0	16.4	16.8	17.3	17.9	\$ 103.2	\$ 169.4	
City of Fairfax	1.7	0.5	0.1	0.5	0.6	0.5	0.5	0.5	0.5	0.6	\$ 03.2	\$ 05.3	
Fairfax County	89.0	27.8	6.3	26.8	33.1	28.1	28.9	29.5	30.4	31.4	\$ 181.3	\$ 298.2	
City of Falls Church	1.8	0.6	0.1	0.6	0.7	0.6	0.6	0.6	0.7	0.7	\$ 3.9	\$ 6.3	
Virginia Subtotal	168.0	52.7	12.1	51.3	63.4	53.4	56.0	57.2	58.4	60.3	\$ 348.7	\$ 569.3	
Subtotal Formula Match, System Performance & Resiliency Grant Match	640.7	189.9	43.1	182.9	226.0	191.6	196.8	200.8	207.2	213.9	\$ 1,236.3	\$ 2,067.0	
CMAQ Grant Match													
Commonwealth of Virginia (DRPT)	-	-	-	6.0	6.0	0.2	1.4	1.5	0.9	0.9	\$ 10.9	\$ 10.9	
Subtotal CMAQ Match	-	-	-	6.0	6.0	0.2	1.4	1.5	0.9	0.9	\$ 10.9	\$ 10.9	
State and Local PRIIA													
District of Columbia	190.5	41.2	15.0	49.5	64.5	53.2	50.0	50.0	50.0	50.0	\$ 317.7	\$ 549.5	
State of Maryland	190.5	41.2	15.0	49.5	64.5	53.2	50.0	50.0	50.0	50.0	\$ 317.7	\$ 549.5	
Commonwealth of Virginia	190.5	41.2	15.0	49.5	64.5	53.2	50.0	50.0	50.0	50.0	\$ 317.7	\$ 549.5	
Subtotal State and Local PRIIA	571.5	123.7	45.1	148.5	193.6	159.6	150.0	150.0	150.0	150.0	\$ 953.2	\$ 1,648.5	
Rail Power System Upgrades													
District of Columbia	-	-	-	6.6	6.6	-	-	-	-	-	\$ 6.6	\$ 6.6	
State of Maryland	-	-	-	6.2	6.2	-	-	-	-	-	\$ 6.2	\$ 6.2	
Commonwealth of Virginia (NVTa)	-	-	-	5.0	5.0	-	-	-	-	-	\$ 5.0	\$ 5.0	
Subtotal Power Upgrades	-	-	-	17.7	17.7	-	-	-	-	-	\$ 17.7	\$ 17.7	
Metro 2025 Investment													
District of Columbia	-	14.2	10.8	-	10.8	-	-	-	-	-	\$ 10.8	\$ 25.0	
Montgomery County	-	-	-	-	-	-	-	-	-	-	\$ -	\$ -	
Prince George's County	-	-	-	-	-	-	-	-	-	-	\$ -	\$ -	
State of Maryland	-	14.2	10.8	-	10.8	-	-	-	-	-	\$ 10.8	\$ 25.0	
Maryland Subtotal	-	14.2	-	-	-	-	-	-	-	-	\$ -	\$ 14.2	
City of Alexandria	-	1.4	1.1	-	1.1	-	-	-	-	-	\$ 1.1	\$ 2.6	
Arlington County	-	2.7	2.1	-	2.1	-	-	-	-	-	\$ 2.1	\$ 4.8	
City of Fairfax	-	0.1	0.1	-	0.1	-	-	-	-	-	\$ 0.1	\$ 0.1	
Fairfax County	-	4.7	3.6	-	3.6	-	-	-	-	-	\$ 3.6	\$ 8.4	
City of Falls Church	-	0.1	0.1	-	0.1	-	-	-	-	-	\$ 0.1	\$ 0.2	
Commonwealth of Virginia	-	5.1	3.9	-	3.9	-	-	-	-	-	\$ 3.9	\$ 9.0	
Virginia Subtotal	-	14.2	10.8	-	10.8	-	-	-	-	-	\$ 10.8	\$ 25.0	
Subtotal Metro 2025 Investment	-	42.5	32.5	-	32.5	-	-	-	-	-	\$ 32.5	\$ 75.0	
Total	\$ 1,212.2	356.1	120.7	355.2	475.9	351.4	348.1	352.3	358.1	364.8	\$ 2,250.7	\$ 3,819.0	

<b>Capital Improvement Program</b>											
Project ID:		CIP0004		Project Name:		Bus Repair Equipment					
Department:		BMNT		Project Type:		BUS		Project Manager:			Darin Welt
Project Description:											
This project replaces existing equipment that is past its useful life and provides new equipment which is used by personnel and support staff for repair and maintenance of the bus and non-revenue fleets to improve performance and safety needs. 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. This project also provides support for all Bus Services training equipment, special needs, and capital projects needed to support Bus Services. Minor construction projects and scheduled replacement of major equipment such as portable bus lifts and storeroom modernization. This project supports all Bus Services equipment and work area needs.											
FY2016 Project Deliverables:											
Major projects include upgrade of the WMATA fluid management system at all facilities. Replacement of portable bus lifts, tow tractors' floor scrubbers, pallet jacks, tire changers, snow blowers, vacuums, utility carts, utility vehicles, and other equipment needs. Minor construction needs for Bus Operator break areas, Bus Services training and engineering renovations, garage enhancements to include improved lighting for visibility, and enhanced work areas. Replacement and upgrade of specialized diagnostic equipment and Information Technology requirements.											
6-Year Project Deliverables:											
Continue the purchase of equipment required to support bus services. Replacement, modernization and upgrades of equipment, bus specific Information Technology requirements, minor construction needs to support safe, clean, and the modernization of work areas.											
Operating Impact:											
Replacing equipment will prevent future reliability loss due to broken equipment.											
Total Project Budget ( <i>in thousands</i> ) :											
Previous Approved (FY2011-20):		\$36,310.4									
Approved Budget (FY2011-21):		<u>32,744.2</u>									
Change:		<u>(\$3,566.2)</u>									
Description of Significant Changes:											
Addition of FY2021 planned investment to ongoing vehicle equipment replacement project.											
Planned Investments ( <i>in thousands</i> ) :											
	<u>Total</u> <u>Budget</u>	<u>Prior Year</u> <u>Estimate</u>	<u>FY2015</u> <u>Forecast</u>	<u>FY2016</u> <u>Budget</u>	<u>FY2017</u> <u>Plan</u>	<u>FY2018</u> <u>Plan</u>	<u>FY2019</u> <u>Plan</u>	<u>FY2020</u> <u>Plan</u>	<u>FY2021</u> <u>Plan</u>	<u>FY2016-21</u> <u>Total</u>	
Total Budget	\$32,744.2	\$13,725.7	\$3,775.0	\$3,329.2	\$2,257.9	\$2,414.1	\$2,414.1	\$2,414.1	\$2,414.1	\$15,243.4	

<b>Capital Improvement Program</b>											
Project ID:		CIP0005		Project Name:		Bus Rehabilitation Program					
Department:		BMNT		Project Type:		BUS		Project Manager:			David Michels
Project Description:											
This program will maintain the 1,500 plus bus fleet in a state of good repair. The Bus Rehabilitation Program is a commitment to good 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 on 100 buses per year is performed, at approximately 7.5 years of age and provides for the complete rehabilitation of bus mechanical, electrical, and structural systems including a major interior and exterior cosmetic makeover. This fleet improvement project enhances overall safety, reliability and performance.											
FY2016 Project Deliverables:											
Rehabilitation of approximately 100 buses, 118 engines, 161 transmissions, electronic components and small components.											
6-Year Project Deliverables:											
Rehabilitation of approximately 600 buses, 750 engines, 1,080 transmissions, electronic components, and small components.											
Operating Impact:											
Rehabilitated buses improve Metrobus service reliability by reducing breakdowns. A rehabilitated bus also has lower ongoing maintenance costs than a bus that has not been rehabilitated.											
Total Project Budget ( <i>in thousands</i> ) :											
Previous Approved (FY2011-20):		\$368,799.0									
Approved Budget (FY2011-21):		<u>410,613.2</u>									
Change:		\$41,814.1									
Description of Significant Changes:											
Addition of FY2021 planned investment to ongoing vehicle rehabilitation project. Six-year plan increased to align with current cost estimates.											
Planned Investments ( <i>in thousands</i> ) :											
	<u>Total</u> <u>Budget</u>	<u>Prior Year</u> <u>Estimate</u>	<u>FY2015</u> <u>Forecast</u>	<u>FY2016</u> <u>Budget</u>	<u>FY2017</u> <u>Plan</u>	<u>FY2018</u> <u>Plan</u>	<u>FY2019</u> <u>Plan</u>	<u>FY2020</u> <u>Plan</u>	<u>FY2021</u> <u>Plan</u>	<u>FY2016-21</u> <u>Total</u>	
Total Budget	\$410,613.2	\$121,552.5	\$38,000.0	\$34,000.0	\$39,000.0	\$41,952.7	\$43,893.9	\$45,455.0	\$46,759.0	\$251,060.6	

<b>Capital Improvement Program</b>																																
Project ID: CIP0006		Project Name: Bus Replacement																														
Department: BMNT		Project Type: BUS		Project Manager: Robert Golden																												
<p>Project Description:</p> <p>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. Metro will continue to procure buses that utilize clean fuel technologies to reduce emissions and lower fuel costs. This project supports Metro's long term goal of a fleet composition of 50 percent hybrid/electric diesel and 50 percent Compressed Natural Gas (CNG).</p>																																
<p>FY2016 Project Deliverables:</p> <p>Procure and place in service 91 forty-foot Compressed Natural Gas (CNG) heavy duty transit buses, 56 forty-foot Hybrid Electrical Diesel heavy duty transit buses, and 21 sixty-foot hybrid Electrical Diesel Articulated buses.</p>																																
<p>6-Year Project Deliverables:</p> <p>Procure, deliver and place into service the following types of buses: approximately 238 hybrid/electric forty-foot heavy duty transit buses; 22 articulated sixty-foot heavy duty transit buses for use on high capacity bus routes; and 414 CNG forty-foot heavy duty transit buses.</p>																																
<p>Operating Impact:</p> <p>New buses placed into service save approximately \$0.52 per mile over the bus it replaces.</p>																																
<p>Total Project Budget (<i>in thousands</i>) :</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 60%;">Previous Approved (FY2011-20):</td> <td style="text-align: right;">\$803,705.3</td> </tr> <tr> <td>Approved Budget (FY2011-21):</td> <td style="text-align: right;"><u>904,143.6</u></td> </tr> <tr> <td>Change:</td> <td style="text-align: right;">\$100,438.3</td> </tr> </table>											Previous Approved (FY2011-20):	\$803,705.3	Approved Budget (FY2011-21):	<u>904,143.6</u>	Change:	\$100,438.3																
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<p>Description of Significant Changes:</p> <p>Addition of FY2021 planned investment to ongoing Metrobus replacement project. Six-year plan decreased to align with current cost estimates.</p>																																
<p>Planned Investments (<i>in thousands</i>) :</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th style="text-align: center;">Total Budget</th> <th style="text-align: center;">Prior Year Estimate</th> <th style="text-align: center;">FY2015 Forecast</th> <th style="text-align: center;">FY2016 Budget</th> <th style="text-align: center;">FY2017 Plan</th> <th style="text-align: center;">FY2018 Plan</th> <th style="text-align: center;">FY2019 Plan</th> <th style="text-align: center;">FY2020 Plan</th> <th style="text-align: center;">FY2021 Plan</th> <th style="text-align: center;">FY2016-21 Total</th> </tr> </thead> <tbody> <tr> <td style="text-align: right;">Total Budget</td> <td style="text-align: right;">\$904,143.6</td> <td style="text-align: right;">\$266,993.1</td> <td style="text-align: right;">\$54,000.0</td> <td style="text-align: right;">\$118,120.0</td> <td style="text-align: right;">\$98,730.0</td> <td style="text-align: right;">\$74,760.0</td> <td style="text-align: right;">\$89,324.9</td> <td style="text-align: right;">\$101,110.8</td> <td style="text-align: right;">\$101,104.6</td> <td style="text-align: right;">\$583,150.4</td> </tr> </tbody> </table>												Total Budget	Prior Year Estimate	FY2015 Forecast	FY2016 Budget	FY2017 Plan	FY2018 Plan	FY2019 Plan	FY2020 Plan	FY2021 Plan	FY2016-21 Total	Total Budget	\$904,143.6	\$266,993.1	\$54,000.0	\$118,120.0	\$98,730.0	\$74,760.0	\$89,324.9	\$101,110.8	\$101,104.6	\$583,150.4
	Total Budget	Prior Year Estimate	FY2015 Forecast	FY2016 Budget	FY2017 Plan	FY2018 Plan	FY2019 Plan	FY2020 Plan	FY2021 Plan	FY2016-21 Total																						
Total Budget	\$904,143.6	\$266,993.1	\$54,000.0	\$118,120.0	\$98,730.0	\$74,760.0	\$89,324.9	\$101,110.8	\$101,104.6	\$583,150.4																						



<b>Capital Improvement Program</b>																																
Project ID: <input type="text" value="CIP0007"/>		Project Name: <input type="text" value="Bus Camera Installation &amp; Replacement"/>																														
Department: <input type="text" value="BMNT"/>		Project Type: <input type="text" value="BUS"/>		Project Manager: <input type="text" value="Larry Skelton"/>																												
<p>Project Description:</p> <p>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. All buses in the WMATA fleet are equipped with a CCTV system. Each CCTV systems has a useful life of six years and this program provides for the scheduled replacement after seven years of active use on the bus. Each individual bus systems includes a Digital Video Recorder (DVR) and 5 to 7 cameras with wireless capabilities.</p>																																
<p>FY2016 Project Deliverables:</p> <p>Replace bus camera systems scheduled for replacement. Each system include a wireless DVR with 5 to 7 cameras, and enhanced software with specialized viewing and recording capabilities.</p>																																
<p>6-Year Project Deliverables:</p> <p>Scheduled replacements include approximately 1,150 bus camera systems and support systems: FY2016 - 148 bus camera systems, FY2017 - 281 bus camera systems, FY2018 - 205 bus camera systems, FY2019 - 231 bus camera systems, FY2020 - 171 bus camera systems, FY2021 - 115 bus camera systems.</p>																																
<p>Operating Impact:</p> <p>Bus cameras will require maintenance of approximately \$725 per vehicle per year.</p>																																
<p>Total Project Budget (<i>in thousands</i>) :</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 60%;">Previous Approved (FY2011-20):</td> <td style="width: 40%; text-align: right;">\$24,895.6</td> </tr> <tr> <td>Approved Budget (FY2011-21):</td> <td style="text-align: right;"><u>20,882.7</u></td> </tr> <tr> <td>Change:</td> <td style="text-align: right; color: red;">(\$4,012.9)</td> </tr> </table>											Previous Approved (FY2011-20):	\$24,895.6	Approved Budget (FY2011-21):	<u>20,882.7</u>	Change:	(\$4,012.9)																
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<p>Description of Significant Changes:</p> <p>Addition of FY2021 planned investments to establish an ongoing Metrobus camera system replacement project. Six-year plan decreased to align with current cost estimates.</p>																																
<p>Planned Investments (<i>in thousands</i>) :</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th><u>Total</u> <u>Budget</u></th> <th><u>Prior Year</u> <u>Estimate</u></th> <th><u>FY2015</u> <u>Forecast</u></th> <th><u>FY2016</u> <u>Budget</u></th> <th><u>FY2017</u> <u>Plan</u></th> <th><u>FY2018</u> <u>Plan</u></th> <th><u>FY2019</u> <u>Plan</u></th> <th><u>FY2020</u> <u>Plan</u></th> <th><u>FY2021</u> <u>Plan</u></th> <th><u>FY2016-21</u> <u>Total</u></th> </tr> </thead> <tbody> <tr> <td>Total Budget</td> <td style="text-align: right;">\$20,882.7</td> <td style="text-align: right;">\$2,921.5</td> <td style="text-align: right;">\$350.000</td> <td style="text-align: right;">\$2,070.2</td> <td style="text-align: right;">\$3,108.2</td> <td style="text-align: right;">\$3,108.2</td> <td style="text-align: right;">\$3,108.2</td> <td style="text-align: right;">\$3,108.2</td> <td style="text-align: right;">\$3,108.2</td> <td style="text-align: right;">\$17,611.3</td> </tr> </tbody> </table>												<u>Total</u> <u>Budget</u>	<u>Prior Year</u> <u>Estimate</u>	<u>FY2015</u> <u>Forecast</u>	<u>FY2016</u> <u>Budget</u>	<u>FY2017</u> <u>Plan</u>	<u>FY2018</u> <u>Plan</u>	<u>FY2019</u> <u>Plan</u>	<u>FY2020</u> <u>Plan</u>	<u>FY2021</u> <u>Plan</u>	<u>FY2016-21</u> <u>Total</u>	Total Budget	\$20,882.7	\$2,921.5	\$350.000	\$2,070.2	\$3,108.2	\$3,108.2	\$3,108.2	\$3,108.2	\$3,108.2	\$17,611.3
	<u>Total</u> <u>Budget</u>	<u>Prior Year</u> <u>Estimate</u>	<u>FY2015</u> <u>Forecast</u>	<u>FY2016</u> <u>Budget</u>	<u>FY2017</u> <u>Plan</u>	<u>FY2018</u> <u>Plan</u>	<u>FY2019</u> <u>Plan</u>	<u>FY2020</u> <u>Plan</u>	<u>FY2021</u> <u>Plan</u>	<u>FY2016-21</u> <u>Total</u>																						
Total Budget	\$20,882.7	\$2,921.5	\$350.000	\$2,070.2	\$3,108.2	\$3,108.2	\$3,108.2	\$3,108.2	\$3,108.2	\$17,611.3																						

<b>Capital Improvement Program</b>										
Project ID: <input type="text" value="CIP0008"/>		Project Name: <input type="text" value="Bus Repairables"/>								
Department: <input type="text" value="BMNT"/>		Project Type: <input type="text" value="BUS"/>		Project Manager: <input type="text" value="Tim Parks"/>						
Project Description:										
<p>This project provides bus components that have reached the end of their useful life and cannot be overhauled or repaired. The components have a value of \$500 or greater and a useful life of at least one year. These purchases are used to replenish inventory and add new parts required to keep the bus fleet in a state of good repair. The components are needed to replace items such as farebox assemblies, radiator assemblies, alternators, and driver seats when the core is beyond economical repair or when the composition of the fleet changes. Additionally, the components are needed for engines and transmissions when technical changes are mandated by Environmental Protection Agency regulations. Examples of Bus Repairables include: air-conditioning units, axles, radiator assemblies, seats, wheel chair ramps, rocker arms, injectors, engineered machined products fans, hybrid/electric batteries, advanced electronic systems, etc.</p>										
FY2016 Project Deliverables:										
<p>Replace bus components that are no longer repairable or past their useful life that have a value of \$500 or greater and a useful life of at least one year. Examples include, but are not limited to: alternators, wheel chair lifts, fuel injectors, HVAC, engines, transmissions, coolers, driver's seats, radiator assemblies, cylinder heads, door and fan motors. This project also includes replacement engines, destination signs, hybrid/electric batteries, soot filters, and engineering for developing technical documents and requirements for the procurement of components.</p>										
6-Year Project Deliverables:										
<p>Continue to replace bus components that are no longer repairable or past their useful life, have a value of \$500 or greater and a useful life of at least one year. Examples include, but are not limited to: alternators, transmissions, coolers, driver's seats, radiator assemblies, cylinder heads, door and fan motors. This project also includes replacement engines, destination signs, hybrid/electric batteries, and soot filters.</p>										
Operating Impact:										
<p>Bus parts and assemblies help to prevent bus breakdowns and keep buses in service.</p>										
Total Project Budget ( <i>in thousands</i> ) :										
Previous Approved (FY2011-20):		\$127,299.0								
Approved Budget (FY2011-21):		<u>110,354.3</u>								
Change:		(\$16,944.7)								
Description of Significant Changes:										
<p>Addition of FY2021 planned investment to ongoing repairable parts and inventory needs. Six-year plan decreased to align with current cost estimates.</p>										
Planned Investments ( <i>in thousands</i> ) :										
	<u>Total</u> <u>Budget</u>	<u>Prior Year</u> <u>Estimate</u>	<u>FY2015</u> <u>Forecast</u>	<u>FY2016</u> <u>Budget</u>	<u>FY2017</u> <u>Plan</u>	<u>FY2018</u> <u>Plan</u>	<u>FY2019</u> <u>Plan</u>	<u>FY2020</u> <u>Plan</u>	<u>FY2021</u> <u>Plan</u>	<u>FY2016-21</u> <u>Total</u>
Total Budget	\$110,354.3	\$33,504.3	\$14,500.0	\$5,700.0	\$10,500.0	\$10,500.0	\$11,500.0	\$11,550.0	\$12,600.0	\$62,350.0

<b>Capital Improvement Program</b>										
Project ID:		CIP0009	Project Name:		Service Vehicle Replacement & Leasing					
Department:		BMNT	Project Type:		BUS/RAIL	Project Manager:		Kevin Newman		
Project Description:										
This project directly impacts keeping support vehicles in a state of good repair by replacing them at the end of their useful life, which varies by vehicle type. This project also funds the lease agreements for service vehicles used in the pursuit of the Capital program. 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 recently changed based on a 2013 evaluation to improve the efficiency of the support fleet. This study resulted in a longer useful life and costs savings in FY2016-17 of approximately \$1,000,000 which is reflected in the proposed six-year plan.										
FY2016 Project Deliverables:										
Procure and deliver vehicles to replace approximately 102 service vehicles in the categories of light, heavy duty and law enforcement vehicles. These vehicles have exceeded the useful life either through mileage or years of service. Execute the lease agreements for 20 vehicles used by WMATA staff for support of the capital program.										
6-Year Project Deliverables:										
Procure and deliver replacement of the following types of service vehicles: approximately 350 passenger vehicles, approximately 285 pickup/utility trucks, approximately 225 various work vehicles and one armored vehicle.										
Operating Impact:										
New service vehicles have warranty protection and result in lower maintenance and higher fuel economy.										
Total Project Budget (in thousands) :										
Previous Approved (FY2011-20):		\$75,381.0								
Approved Budget (FY2011-21):		61,557.9								
Change:		(\$13,823.1)								
Description of Significant Changes:										
Addition of FY2021 planned investment to ongoing service vehicle replacement project. Six-year plan decreased to align with current cost estimates. The future cost to lease vehicles will be removed from CIP projects and centrally budgeted in this project between proposed and approved.										
Planned Investments (in thousands) :										
	<u>Total</u> <u>Budget</u>	<u>Prior Year</u> <u>Estimate</u>	<u>FY2015</u> <u>Forecast</u>	<u>FY2016</u> <u>Budget</u>	<u>FY2017</u> <u>Plan</u>	<u>FY2018</u> <u>Plan</u>	<u>FY2019</u> <u>Plan</u>	<u>FY2020</u> <u>Plan</u>	<u>FY2021</u> <u>Plan</u>	<u>FY2016-21</u> <u>Total</u>
Total Budget	\$61,557.9	\$19,909.4	\$5,672.5	\$6,260.0	\$5,116.5	\$5,536.5	\$5,776.5	\$6,165.0	\$7,121.5	\$35,976.0

<b>Capital Improvement Program</b>																																
Project ID: CIP0010		Project Name: Environmental Compliance Projects																														
Department: SAFE		Project Type: BUS, RAIL & SUPPORT		Project Manager: Carla Grano																												
<b>Project Description:</b> This project designs and constructs upgrades and improvements to equipment and facilities in order to maintain compliance with environmental regulations. Investments in this project respond to directives from environmental regulatory agencies and minimize the risk of civil and criminal citations and fines. The scope of this project includes, but is not limited to, wastewater pretreatment systems, stormwater pretreatment systems, aboveground storage tank systems, underground storage tank systems, air emissions control systems, contamination investigations and corrective action, soil and groundwater remediation systems, pollution prevention systems, and environmental compliance equipment.																																
<b>FY2016 Project Deliverables:</b> Remedial actions and investigations at the New Hampshire Avenue Chiller Plant. Environmental compliance projects at the Four Mile Run Bus Division to include installation of a gray water storage system, upgrades to the wastewater pretreatment system and repairs to the oil/water separator. Installation of a gray water storage system at Bladensburg Bus Division. Upgrades to the vacuum discharge line support system at Largo water treatment facility. Repairs to the Oliver Street oil/water separator bypass valve. Installation of asphalt berm at Shady Grove Rail Yard. Fabrication of spill containment and chemical transfer materials.																																
<b>6-Year Project Deliverables:</b> Remedial actions at the New Hampshire Avenue Chiller Plant. Upgrade wastewater and stormwater pretreatment systems at various bus and rail facilities to include Huntington station, Mississippi Avenue discharge pumping station, and Carmen Turner Facility. Upgrade pond monitoring systems at Franconia-Springfield and West Falls Church. Implement corrective action for transformer oil containment storage systems. Provide containment at dumpster storage areas at various bus and rail facilities. Upgrade storage tank systems and complete minor repairs, when required. Provide materials required for environmental compliance throughout the Authority.																																
<b>Operating Impact:</b> Upgrades to and replacements of environmental control systems reduce environmental impacts and help to maintain compliance with regulations and permits, thereby reducing risk for environmental pollution and cleanup costs and reducing risk of penalties, fines and citations.																																
<b>Total Project Budget (in thousands) :</b> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%;">Previous Approved (FY2011-20):</td> <td style="text-align: right;">\$12,896.1</td> </tr> <tr> <td>Approved Budget (FY2011-21):</td> <td style="text-align: right;">22,192.3</td> </tr> <tr> <td>Change:</td> <td style="text-align: right;">\$9,296.2</td> </tr> </table>											Previous Approved (FY2011-20):	\$12,896.1	Approved Budget (FY2011-21):	22,192.3	Change:	\$9,296.2																
Previous Approved (FY2011-20):	\$12,896.1																															
Approved Budget (FY2011-21):	22,192.3																															
Change:	\$9,296.2																															
<b>Description of Significant Changes:</b> Addition of FY2021 planned investment to ongoing environment compliance improvements. Six-year plan decreased to align with current cost estimates.																																
<b>Planned Investments (in thousands) :</b> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th><u>Total Budget</u></th> <th><u>Prior Year Estimate</u></th> <th><u>FY2015 Forecast</u></th> <th><u>FY2016 Budget</u></th> <th><u>FY2017 Plan</u></th> <th><u>FY2018 Plan</u></th> <th><u>FY2019 Plan</u></th> <th><u>FY2020 Plan</u></th> <th><u>FY2021 Plan</u></th> <th><u>FY2016-21 Total</u></th> </tr> </thead> <tbody> <tr> <td style="text-align: right;">Total Budget</td> <td style="text-align: right;">\$22,192.3</td> <td style="text-align: right;">\$5,157.5</td> <td style="text-align: right;">\$1,513.4</td> <td style="text-align: right;">\$1,671.4</td> <td style="text-align: right;">\$1,970.0</td> <td style="text-align: right;">\$2,470.0</td> <td style="text-align: right;">\$3,470.0</td> <td style="text-align: right;">\$3,470.0</td> <td style="text-align: right;">\$2,470.0</td> <td style="text-align: right;">\$15,521.4</td> </tr> </tbody> </table>												<u>Total Budget</u>	<u>Prior Year Estimate</u>	<u>FY2015 Forecast</u>	<u>FY2016 Budget</u>	<u>FY2017 Plan</u>	<u>FY2018 Plan</u>	<u>FY2019 Plan</u>	<u>FY2020 Plan</u>	<u>FY2021 Plan</u>	<u>FY2016-21 Total</u>	Total Budget	\$22,192.3	\$5,157.5	\$1,513.4	\$1,671.4	\$1,970.0	\$2,470.0	\$3,470.0	\$3,470.0	\$2,470.0	\$15,521.4
	<u>Total Budget</u>	<u>Prior Year Estimate</u>	<u>FY2015 Forecast</u>	<u>FY2016 Budget</u>	<u>FY2017 Plan</u>	<u>FY2018 Plan</u>	<u>FY2019 Plan</u>	<u>FY2020 Plan</u>	<u>FY2021 Plan</u>	<u>FY2016-21 Total</u>																						
Total Budget	\$22,192.3	\$5,157.5	\$1,513.4	\$1,671.4	\$1,970.0	\$2,470.0	\$3,470.0	\$3,470.0	\$2,470.0	\$15,521.4																						

<b>Capital Improvement Program</b>										
Project ID:	CIP0011	Project Name:	Underground Storage Tank Replacement							
Department:	SAFE	Project Type:	BUS, RAIL & SUPPORT	Project Manager:	Carla Grano					
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 mid life to minimize potential liabilities.										
FY2016 Project Deliverables:										
Remove five USTs at Royal Street Bus Division, if required by regulatory directive. Replace USTs at Forest Glen Metrorail station. Replace AST at the Shady Grove Rail Yard. Engineering services to provide FY2016 construction support and design tasks for construction in FY2017.										
6-Year Project Deliverables:										
Provide design and construction support for systematic upgrade and replacement of storage tank systems. Replace tank systems at the Alexandria, New Carrollton, Glenmont and Greenbelt Rail Yards. Upgrade USTs at the Shady Grove Rail Yard. Replace storage tank systems at the Northern and Four Mile Run Bus Divisions and the Franconia-Springfield Metrorail station. Install dispensing systems for Diesel Exhaust Fluid (DEF), where required. Storage tank replacement work and/or mid-life upgrades may be performed at any WMATA facility based on regulatory directive or urgent need to maintain compliance with environmental regulations.										
Operating Impact:										
Tanks must be maintained to comply with environmental regulations. Upgrades to and replacement of storage tank systems minimize the risk of environmental pollution and associated potential cleanup costs and reduce the risk of penalties, fines and citations associated with regulatory non-compliance.										
Total Project Budget ( <i>in thousands</i> ) :										
Previous Approved (FY2011-20):	\$28,561.5									
Approved Budget (FY2011-21):	<u>31,527.1</u>									
Change:	\$2,965.6									
Description of Significant Changes:										
Addition of FY2021 planned investment for ongoing upgrades and replacements of storage tank systems.										
Planned Investments ( <i>in thousands</i> ) :										
	<u>Total</u> <u>Budget</u>	<u>Prior Year</u> <u>Estimate</u>	<u>FY2015</u> <u>Forecast</u>	<u>FY2016</u> <u>Budget</u>	<u>FY2017</u> <u>Plan</u>	<u>FY2018</u> <u>Plan</u>	<u>FY2019</u> <u>Plan</u>	<u>FY2020</u> <u>Plan</u>	<u>FY2021</u> <u>Plan</u>	<u>FY2016-21</u> <u>Total</u>
Total Budget	\$31,527.1	\$10,863.4	\$2,276.2	\$2,217.5	\$2,310.0	\$3,415.0	\$3,715.0	\$3,415.0	\$3,315.0	\$18,387.5

<b>Capital Improvement Program</b>										
Project ID:	<input type="text" value="CIP0015"/>	Project Name:	<input type="text" value="MetroAccess Fleet Acquisition"/>							
Department:	<input type="text" value="ACCS"/>	Project Type:	<input type="text" value="ACCESS"/>	Project Manager:	<input type="text" value="Sherrie Collings"/>					
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 4 years, maximizing fleet safety, reliability and quality of service delivered in-line with projected ridership. Also, in order to accommodate increased ridership, the MetroAccess fleet must increase by approximately 25 vehicles per year starting in FY2016.										
FY2016 Project Deliverables:										
Initiate and award contracts in accordance with fleet plan for replacement of approximately 150 vehicles and ancillary equipment which have exceeded their useful life and a fleet increase of approximately 25 vehicles for a total of 175 vehicles.										
6-Year Project Deliverables:										
Initiate and award contracts in accordance with the MetroAccess fleet plan for replacement of approximately 900 replacement vehicles and ancillary equipment which have exceeded their useful life and a fleet increase of approximately 150 vehicles to accommodate increased ridership.										
Operating Impact:										
Cyclical replacement of vehicles and equipment will maintain steady operational costs.										
Total Project Budget ( <i>in thousands</i> ) :										
Previous Approved (FY2011-20):		\$121,440.3								
Approved Budget (FY2011-21):		<u>155,039.1</u>								
Change:		\$33,598.7								
Description of Significant Changes:										
The chassis currently utilized on MetroAccess vehicles will not be available after 2015. A next generation vehicle pilot program is underway to identify suitable replacement vehicles for future acquisitions.										
Planned Investments( <i>in thousands</i> ) :										
	<u>Total</u>	<u>Prior Year</u>	<u>FY2015</u>	<u>FY2016</u>	<u>FY2017</u>	<u>FY2018</u>	<u>FY2019</u>	<u>FY2020</u>	<u>FY2021</u>	<u>FY2016-21</u>
	<u>Budget</u>	<u>Estimate</u>	<u>Forecast</u>	<u>Budget</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Total</u>
Total Budget	\$155,039.1	\$37,965.0	\$10,941.0	\$11,314.0	\$15,111.4	\$18,307.4	\$19,353.6	\$20,500.0	\$21,546.6	\$106,133.0
* Due to a technical error, the project page reflects the Board approved budget amount for each fiscal year. Finance staff will be returning to the Board for an amendment to this budget in Q1 of FY2016.										

<b>Capital Improvement Program</b>												
Project ID:		CIP0018		Project Name:		Track Welding Program						
Department:		TRST		Project Type:		RAIL		Project Manager:			Darvin Kelly	
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. Currently 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. Flash butt welding joins rails together directly using a high current and enables open joints to be welded at an accelerated rate. In addition, the flash-butt welding process allows for thermal adjustment of the track system, reducing the occurrences of track buckling and rail pull-apart, thus minimizing risk of service delays or shutdown. Thermite welding is also performed in areas where it is not practical to use flash butt welding equipment.												
FY2016 Project Deliverables:												
Procure welding services and specialized equipment to complete approximately 1,200 welds.												
6-Year Project Deliverables:												
Complete 7,200 welds (1,200 annually).												
Operating Impact:												
Well maintained tracks maximize customer satisfaction through convenient, comfortable rail service with minimal service disruptions and delays.												
Total Project Budget ( <i>in thousands</i> ) :												
Previous Approved (FY2011-20):		\$35,681.5										
Approved Budget (FY2011-21):		<u>\$1,158.1</u>										
Change:		\$15,476.6										
Description of Significant Changes:												
Addition of FY2021 planned investment to ongoing track welding rehabilitation project.												
Planned Investments ( <i>in thousands</i> ) :												
	<u>Total</u>	<u>Prior Year</u>	<u>FY2015</u>	<u>FY2016</u>	<u>FY2017</u>	<u>FY2018</u>	<u>FY2019</u>	<u>FY2020</u>	<u>FY2021</u>	<u>FY2016-21</u>		
	<u>Budget</u>	<u>Estimate</u>	<u>Forecast</u>	<u>Budget</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Total</u>		
Total Budget	\$51,158.1	\$8,416.7	\$5,728.1	\$6,316.1	\$6,200.0	\$6,200.0	\$6,400.0	\$6,800.0	\$5,097.3	\$37,013.3		

<b>Capital Improvement Program</b>												
Project ID:		CIP0020		Project Name:		Replacement of Rail Track Signage						
Department:		TRST		Project Type:		RAIL		Project Manager:			Darvin Kelly	
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. 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.)												
FY2016 Project Deliverables:												
Fabricate and install approximately 1,500 roadway signs.												
6-Year Project Deliverables:												
Fabricate and install approximately 9,000 roadway signs (1,500 annually).												
Operating Impact:												
Replacing worn, illegible graphics improve safety by warning employees, customers, and emergency responders of roadway hazards.												
Total Project Budget ( <i>in thousands</i> ) :												
Previous Approved (FY2011-20):		\$12,942.7										
Approved Budget (FY2011-21):		14,287.4										
Change:		\$1,344.7										
Description of Significant Changes:												
Addition of FY2021 planned investment to ongoing Metrorail track signage replacement project. Six-year plan increased to align with current cost estimates.												
Planned Investments ( <i>in thousands</i> ) :												
	<u>Total</u>	<u>Prior Year</u>	<u>FY2015</u>	<u>FY2016</u>	<u>FY2017</u>	<u>FY2018</u>	<u>FY2019</u>	<u>FY2020</u>	<u>FY2021</u>	<u>FY2016-21</u>		
	<u>Budget</u>	<u>Estimate</u>	<u>Forecast</u>	<u>Budget</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Total</u>		
Total Budget	\$14,287.4	\$4,481.4	\$1,067.6	\$1,255.8	\$1,398.9	\$1,440.9	\$1,483.8	\$1,540.9	\$1,618.0	\$8,738.3		



<b>Capital Improvement Program</b>												
Project ID:		CIP0021		Project Name:		Track Grout Pad Rehabilitation						
Department:		TRST		Project Type:		RAIL		Project Manager:			Darvin Kelly	
Project Description:												
This project rehabilitates the grout pads that support the track structure. Metro 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.												
FY2016 Project Deliverables:												
Repair approximately 8,000 linear feet of grout pads; procure cement material.												
6-Year Project Deliverables:												
Repair approximately 48,000 linear feet of grout pads (8,000 annually); procure cement material; replace equipment as required based on life expectancy.												
Operating Impact:												
Well maintained tracks maximize customer satisfaction through comfortable rail service, while minimizing service disruptions and delays.												
Total Project Budget ( <i>in thousands</i> ) :												
Previous Approved (FY2011-20):		\$28,748.8										
Approved Budget (FY2011-21):		<u>33,535.1</u>										
Change:		\$4,786.3										
Description of Significant Changes:												
Addition of FY2021 planned investments to ongoing track grout pad rehabilitation project. Six-year plan increased to align with current cost estimates.												
Planned Investments ( <i>in thousands</i> ) :												
	<u>Total</u>	<u>Prior Year</u>	<u>FY2015</u>	<u>FY2016</u>	<u>FY2017</u>	<u>FY2018</u>	<u>FY2019</u>	<u>FY2020</u>	<u>FY2021</u>	<u>FY2016-21</u>		
	<u>Budget</u>	<u>Estimate</u>	<u>Forecast</u>	<u>Budget</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Total</u>		
Total Budget	\$33,535.1	\$10,248.2	\$2,388.0	\$2,718.5	\$2,805.2	\$3,516.3	\$3,621.8	\$4,018.0	\$4,219.0	\$20,898.9		

<b>Capital Improvement Program</b>											
Project ID:		CIP0022		Project Name:		Track Structural Rehabilitation					
Department:		TRST		Project Type:		RAIL		Project Manager:			Kambezy Forster
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.											
FY2016 Project Deliverables:											
Torque bridge anchor bolts, replace deck joints and rehabilitate deteriorated concrete in aerial structures.											
6-Year Project Deliverables:											
Rehabilitation of bridge anchor bolts, bearing pads, deck joints, deteriorated concrete, structural tees and angles; replace equipment as required based on life expectancy.											
Operating Impact:											
Well maintained track infrastructure maximize customer satisfaction through convenient, comfortable rail service while minimizing service disruptions and delays.											
Total Project Budget ( <i>in thousands</i> ) :											
Previous Approved (FY2011-20):		\$37,686.5									
Approved Budget (FY2011-21):		<u>44,471.3</u>									
Change:		\$6,784.8									
Description of Significant Changes:											
Addition of FY2021 planned investment to ongoing track structural rehabilitation project.											
Planned Investments ( <i>in thousands</i> ) :											
	<u>Total</u> <u>Budget</u>	<u>Prior Year</u> <u>Estimate</u>	<u>FY2015</u> <u>Forecast</u>	<u>FY2016</u> <u>Budget</u>	<u>FY2017</u> <u>Plan</u>	<u>FY2018</u> <u>Plan</u>	<u>FY2019</u> <u>Plan</u>	<u>FY2020</u> <u>Plan</u>	<u>FY2021</u> <u>Plan</u>	<u>FY2016-21</u> <u>Total</u>	
Total Budget	\$44,471.3	\$11,236.2	\$1,824.5	\$2,061.0	\$2,098.6	\$6,417.0	\$6,609.0	\$6,939.0	\$7,286.0	\$31,410.6	

<b>Capital Improvement Program</b>											
Project ID:		CIP0023		Project Name:		Third Rail Rehabilitation and Replacement					
Department:		TRST		Project Type:		RAIL		Project Manager:			Kambezy Forster
Project Description:											
This project replaces the original steel third rail with new aluminum and steel composite third rail, which is necessary to improve electrical current flow for increased revenue service. Composite third rail also reduces stray electrical current which contributes to deterioration of track and third rail components.											
FY2016 Project Deliverables:											
Procure and replace five miles of original steel third rail with aluminum and steel composite third rail and installation of components.											
6-Year Project Deliverables:											
Procure and replace 30 miles of original steel third rail with aluminum and steel composite third rail and installation of components.											
Operating Impact:											
Well maintained tracks maximize customers satisfaction through convenient, comfortable rail service, while minimizing service disruptions and delays.											
Total Project Budget ( <i>in thousands</i> ) :											
Previous Approved (FY2011-20):		\$49,510.9									
Approved Budget (FY2011-21):		<u>57,758.8</u>									
Change:		\$8,247.9									
Description of Significant Changes:											
Addition of FY2021 planned investment to ongoing third rail rehabilitation project. Six-year plan increased to align with current cost estimates.											
Planned Investments ( <i>in thousands</i> ) :											
	<u>Total</u> <u>Budget</u>	<u>Prior Year</u> <u>Estimate</u>	<u>FY2015</u> <u>Forecast</u>	<u>FY2016</u> <u>Budget</u>	<u>FY2017</u> <u>Plan</u>	<u>FY2018</u> <u>Plan</u>	<u>FY2019</u> <u>Plan</u>	<u>FY2020</u> <u>Plan</u>	<u>FY2021</u> <u>Plan</u>	<u>FY2016-21</u> <u>Total</u>	
Total Budget	\$57,758.8	\$14,446.8	\$4,955.2	\$5,750.0	\$6,103.0	\$6,406.7	\$6,502.0	\$6,697.0	\$6,898.0	\$38,356.7	

<b>Capital Improvement Program</b>										
Project ID: <input type="text" value="CIP0024"/>		Project Name: <input type="text" value="Track Rehabilitation"/>								
Department: <input type="text" value="TRST"/>		Project Type: <input type="text" value="RAIL"/>		Project Manager: <input type="text" value="Kambezy Forster"/>						
Project Description:										
This project utilizes Metro workforces and contracted labor to rehabilitate 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. This program will also include the procurement of material to facilitate the renewal of track components and switch panels.										
FY2016 Project Deliverables:										
Replace approximately 12.5 miles of running rail, 27,000 direct fixation fasteners, 15,000 crossties, 7,000 third rail insulators, and 16 turnouts; complete 40 miles of tamping, and 1,000 linear feet of track stabilization throughout the Metrorail system; procure various track critical components such as 78 foot running rail, direct fixation fasteners, crossties and switches.										
6-Year Project Deliverables:										
Replacement of approximately 75 miles of running rail, 162,000 direct fixation fasteners, 90,000 crossties, 42,000 third rail insulators, and 120 turnouts; completion of 240 miles of tamping, and 6,000 linear feet of track stabilization throughout the Metrorail system; procure various track critical components such as 78 foot running rail, direct fixation fasteners, crossties and switches.										
Operating Impact:										
Well maintained tracks maximize customers satisfaction through convenient, comfortable rail service, while minimizing service disruptions and delays. Newer equipment reduces maintenance costs and the probability of breakdowns on mainline.										
Total Project Budget ( <i>in thousands</i> ) :										
Previous Approved (FY2011-20):		\$478,039.7								
Approved Budget (FY2011-21):		<u>\$23,755.0</u>								
Change:		\$45,715.4								
Description of Significant Changes:										
Addition of FY2021 planned investment to ongoing track rehabilitation project.										
Planned Investments ( <i>in thousands</i> ) :										
	<u>Total</u> <u>Budget</u>	<u>Prior Year</u> <u>Estimate</u>	<u>FY2015</u> <u>Forecast</u>	<u>FY2016</u> <u>Budget</u>	<u>FY2017</u> <u>Plan</u>	<u>FY2018</u> <u>Plan</u>	<u>FY2019</u> <u>Plan</u>	<u>FY2020</u> <u>Plan</u>	<u>FY2021</u> <u>Plan</u>	<u>FY2016-21</u> <u>Total</u>
Total Budget	\$523,755.0	\$183,069.0	\$47,806.8	\$46,313.2	\$48,413.2	\$48,413.2	\$49,413.2	\$49,913.2	\$50,413.2	\$292,879.3

<b>Capital Improvement Program</b>											
Project ID:		CIP0025		Project Name:		Track Maintenance Equipment					
Department:		TRST		Project Type:		RAIL		Project Manager:			Kambezy Forster
Project Description:											
This project replaces heavy-duty track equipment that has reached the end of its useful life and is no longer economically feasible to maintain. Track maintenance equipment is essential to deliver quality service and for the safe execution of track rehabilitation and maintenance work. Timely replacement of self-propelled track equipment will ensure equipment reliability, reduce the probability of delays due to equipment breakdowns, and allow for efficient use of track outages. Heavy-duty track equipment requirements are determined on a life-cycle and as-needed basis and have a lead time of approximately 12 to 36 months.											
FY2016 Project Deliverables:											
No deliverables in FY2016.											
6-Year Project Deliverables:											
Cyclical replacements based on lifetime expectancy of equipment to support track and structure rehabilitation; such as Prime Movers, Flatcars, De-Icer Cars, Volumetric Mixers, vacuum trucks, aerial trucks, grapple trucks, and tractor-trailers.											
Operating Impact:											
Newer equipment reduces maintenance costs..											
Total Project Budget (in thousands) :											
Previous Approved (FY2011-20):		\$68,702.7									
Approved Budget (FY2011-21):		78,922.6									
Change:		\$10,219.8									
Description of Significant Changes:											
Addition of FY2021 planned investment to ongoing track maintenance equipment project.											
Planned Investments (in thousands) :											
	<u>Total</u>	<u>Prior Year</u>	<u>FY2015</u>	<u>FY2016</u>	<u>FY2017</u>	<u>FY2018</u>	<u>FY2019</u>	<u>FY2020</u>	<u>FY2021</u>	<u>FY2016-21</u>	
	<u>Budget</u>	<u>Estimate</u>	<u>Forecast</u>	<u>Budget</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Total</u>	
Total Budget	\$78,922.6	\$40,411.4	\$9,595.1	\$1,010.0	-	-	\$6,877.8	\$10,225.4	\$10,802.9	\$28,916.1	

<b>Capital Improvement Program</b>											
Project ID:		CIP0026		Project Name:		Station/Tunnel Leak Mitigation					
Department:		TRST		Project Type:		RAIL		Project Manager:			Kambezy Forster
Project Description:											
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 drain from the track bed. Station Tunnel Leak Mitigation eliminates unsafe conditions created by water leaks for Metrorail passengers and prevents service delays resulting from water intrusion.											
FY2016 Project Deliverables:											
Mitigate approximately 2,750 water leaks and rehabilitate 210,000 linear feet of associated drains throughout the Metrorail System; procure leak repair material and drain cleaning equipment.											
6-Year Project Deliverables:											
Repair approximately 16,500 water leaks and rehabilitate 1,260,000 linear feet of drains throughout the Metrorail System; procure leak repair material.											
Operating Impact:											
Station and tunnel water leaks create slipping hazards for Metro passengers and employees. In addition, water leaks deteriorate vital wayside equipment, leading to service disruptions and delays.											
Total Project Budget ( <i>in thousands</i> ) :											
Previous Approved (FY2011-20):		\$42,638.8									
Approved Budget (FY2011-21):		<u>59,618.6</u>									
Change:		\$16,979.8									
Description of Significant Changes:											
Increased funding for additional work on improving drainage on the rail roadway.											
Planned Investments ( <i>in thousands</i> ) :											
	<u>Total</u> <u>Budget</u>	<u>Prior Year</u> <u>Estimate</u>	<u>FY2015</u> <u>Forecast</u>	<u>FY2016</u> <u>Budget</u>	<u>FY2017</u> <u>Plan</u>	<u>FY2018</u> <u>Plan</u>	<u>FY2019</u> <u>Plan</u>	<u>FY2020</u> <u>Plan</u>	<u>FY2021</u> <u>Plan</u>	<u>FY2016-21</u> <u>Total</u>	
Total Budget	\$59,618.6	\$12,567.9	\$3,277.0	\$6,848.0	\$7,100.3	\$7,202.5	\$7,300.3	\$7,520.3	\$7,802.5	\$43,773.8	

<b>Capital Improvement Program</b>											
Project ID:		CIP0028		Project Name:		Materials Handling Equipment					
Department:		CPDO		Project Type:		BUS/RAIL		Project Manager:			Kenneth Spain
Project Description:											
This project replaces warehouse and supply and inventory shop equipment such as forklifts, man lifts, material transport equipment, components, and support infrastructures that have reached the end of its useful life.											
FY2016 Project Deliverables:											
Continue procuring material handling equipment for warehouse facilities. Install infrastructure as required to support the new material handling equipment.											
6-Year Project Deliverables:											
Install high efficiency material handling equipment and support infrastructure at the Metro Supply Facility. Install and rehabilitate material handling equipment and support infrastructure at other Metro storerooms on a prioritized basis.											
Operating Impact:											
Newer equipment will require less maintenance and have lower operating costs.											
Total Project Budget ( <i>in thousands</i> ) :											
Previous Approved (FY2011-20):		\$1,552.6									
Approved Budget (FY2011-21):		<u>1,352.4</u>									
Change:		(\$200.3)									
Description of Significant Changes:											
Addition of FY2021 planned investment to ongoing equipment replacement project.											
Planned Investments ( <i>in thousands</i> ) :											
	<u>Total</u> <u>Budget</u>	<u>Prior Year</u> <u>Estimate</u>	<u>FY2015</u> <u>Forecast</u>	<u>FY2016</u> <u>Budget</u>	<u>FY2017</u> <u>Plan</u>	<u>FY2018</u> <u>Plan</u>	<u>FY2019</u> <u>Plan</u>	<u>FY2020</u> <u>Plan</u>	<u>FY2021</u> <u>Plan</u>	<u>FY2016-21</u> <u>Total</u>	
Total Budget	\$1,352.4	\$476.1	\$57.3	\$136.5	\$136.5	\$136.5	\$136.5	\$136.5	\$136.5	\$819.0	

<b>Capital Improvement Program</b>												
Project ID:		CIP0030		Project Name:		Currency Processing Machines						
Department:		TRES		Project Type:		BUS/RAIL		Project Manager:			Travis Davidson	
Project Description:												
This project replaces existing currency machines that have exceeded their life expectancy with newer machines with advanced technology and software that will reduce breakdowns, increase efficiency by up to 50 percent, and increase reliability.												
FY2016 Project Deliverables:												
Installation of machines purchased in FY2015 and update to advanced technology software.												
6-Year Project Deliverables:												
Purchases to replace the existing machines in FY2021 due to their useful life coming to an end.												
Operating Impact:												
Newer equipment will require less maintenance.												
Total Project Budget ( <i>in thousands</i> ) :												
Previous Approved (FY2011-20):		\$2,697.3										
Approved Budget (FY2011-21):		<u>4,640.7</u>										
Change:		\$1,943.4										
Description of Significant Changes:												
Addition of FY2021 planned investment to continue replacing revenue processing machines based on asset life cycles.												
Planned Investments ( <i>in thousands</i> ) :												
	<u>Total</u>	<u>Prior Year</u>	<u>FY2015</u>	<u>FY2016</u>	<u>FY2017</u>	<u>FY2018</u>	<u>FY2019</u>	<u>FY2020</u>	<u>FY2021</u>	<u>FY2016-21</u>		
	<u>Budget</u>	<u>Estimate</u>	<u>Forecast</u>	<u>Budget</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Total</u>		
Total Budget	\$4,640.7	\$2,284.7	\$323.0	\$357.0	-	-	-	-	\$1,676.1	\$2,033.1		



<b>Capital Improvement Program</b>												
Project ID:		CIP0031		Project Name:		Debit/Credit Processing Requirements						
Department:		TRES		Project Type:		BUS/RAIL		Project Manager:			Jim Bongiorno	
Project Description:												
This project replaces or upgrades software and equipment required to satisfy the Payment Card Industry (PCI) security standards for payment card processing. Non-compliance may result in substantial fines and penalties. The penalties may include revocation of the privilege to process payment card transactions.												
FY2016 Project Deliverables:												
Renewal of payment switch software and address any issues stemming from the annual PCI audits.												
6-Year Project Deliverables:												
Payment switch software renewal and address any issues stemming from PCI audits.												
Operating Impact:												
None.												
Total Project Budget ( <i>in thousands</i> ) :												
Previous Approved (FY2011-20):		\$3,005.4										
Approved Budget (FY2011-21):		<u>1,822.0</u>										
Change:		<span style="color: red;">(\$1,183.4)</span>										
Description of Significant Changes:												
Six-year plan decreased to align with current cost estimates.												
Planned Investments ( <i>in thousands</i> ) :												
	<u>Total</u>	<u>Prior Year</u>	<u>FY2015</u>	<u>FY2016</u>	<u>FY2017</u>	<u>FY2018</u>	<u>FY2019</u>	<u>FY2020</u>	<u>FY2021</u>	<u>FY2016-21</u>		
	<u>Budget</u>	<u>Estimate</u>	<u>Forecast</u>	<u>Budget</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Total</u>		
Total Budget	\$1,822.0	\$1,429.6	\$4.0	\$388.4	-	-	-	-	-	\$388.4		

<b>Capital Improvement Program</b>												
Project ID:		CIP0033		Project Name:		Revenue Facility Equipment						
Department:		TRES		Project Type:		BUS/RAIL		Project Manager:			Travis Davidson	
Project Description:												
This project replaces and upgrades equipment, hardware and software, such as revenue carts, revenue cash collection boxes, fiber modules, scanners, and Global Positioning System (GPS) at the Revenue Collection Facility (RCF).												
FY2016 Project Deliverables:												
Accept the delivery of 176 revenue carts.												
6-Year Project Deliverables:												
Replacement of 176 revenue carts for a total of 228 carts replaced during the life of the project.												
Operating Impact:												
Improved ergonomics of new revenue transfer carts is expected to reduce worker injuries and insurance claims.												
Total Project Budget ( <i>in thousands</i> ) :												
Previous Approved (FY2011-20):		\$2,754.8										
Approved Budget (FY2011-21):		<u>2,667.4</u>										
Change:		<span style="color: red;">(\$87.4)</span>										
Description of Significant Changes:												
Six-year plan decreased due to favorable contracting conditions.												
Planned Investments ( <i>in thousands</i> ) :												
	<u>Total</u>	<u>Prior Year</u>	<u>FY2015</u>	<u>FY2016</u>	<u>FY2017</u>	<u>FY2018</u>	<u>FY2019</u>	<u>FY2020</u>	<u>FY2021</u>	<u>FY2016-21</u>		
	<u>Budget</u>	<u>Estimate</u>	<u>Forecast</u>	<u>Budget</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Total</u>		
Total Budget	\$2,667.4	\$766.6	\$63.3	\$1,837.5	-	-	-	-	-	\$1,837.5		

<b>Capital Improvement Program</b>												
Project ID:		CIP0034		Project Name:		Revenue Collection Facility						
Department:		TRES		Project Type:		BUS/RAIL		Project Manager:			Travis Davidson	
Project Description:												
This project expands the Alexandria Revenue Collection Facility to accommodate future demand, including revenue collection needs of the Silver Line extension. The building has reached its maximum capacity to house both equipment and personnel required to maintain efficient service and operation of the revenue collection functions.												
FY2016 Project Deliverables:												
Upgrade of coin room floor and hallways, painting of building, HVAC, ADA upgrades, loading dock, replacement of three boilers, hot water heater, and the rehabilitation of the elevator.												
6-Year Project Deliverables:												
Upgrade of coin room floor and hallways, painting of building, HVAC, ADA upgrades, loading dock, replacement of three boilers, hot water heater, and the rehabilitation of the elevator.												
Operating Impact:												
Increased operational support for expanded service.												
Total Project Budget ( <i>in thousands</i> ) :												
Previous Approved (FY2011-20):		\$3,232.9										
Approved Budget (FY2011-21):		<u>3,425.5</u>										
Change:		\$192.6										
Description of Significant Changes:												
None.												
Planned Investments ( <i>in thousands</i> ) :												
	<u>Total</u> <u>Budget</u>	<u>Prior Year</u> <u>Estimate</u>	<u>FY2015</u> <u>Forecast</u>	<u>FY2016</u> <u>Budget</u>	<u>FY2017</u> <u>Plan</u>	<u>FY2018</u> <u>Plan</u>	<u>FY2019</u> <u>Plan</u>	<u>FY2020</u> <u>Plan</u>	<u>FY2021</u> <u>Plan</u>	<u>FY2016-21</u> <u>Total</u>		
Total Budget	\$3,425.5	\$1,064.0	\$1,236.6	\$1,125.0	-	-	-	-	-	\$1,125.0		

<b>Capital Improvement Program</b>											
Project ID:		CIP0035		Project Name:		Bicycle & Pedestrian Facilities: Capacity Improvements					
Department:		PARK		Project Type:		RAIL		Project Manager:			Gail Tait-Nouri
Project Description:											
This project will increase bicycle parking capacity at Metrorail stations and improve bicycle and pedestrian connections to stations from local communities. Additionally, this project replaces bike racks and lockers that are structurally damaged.											
FY2016 Project Deliverables:											
Complete final design of two additional Bike & Ride facilities. Initiate construction of one Bike & Ride facility at West Hyattsville. Design, construct, and install the following at various locations: security cameras, lighting, lockers, bikeways, bike racks, signs, and ADA compliant sidewalks, and miscellaneous improvements that support the increase of bike capacity and improve pedestrian and bike connections.											
6-Year Project Deliverables:											
Continue design and construction of secured bicycle parking facilities and implementation of priority pedestrian and bicycle improvements. Complete design and construction of secured Bike & Ride facilities at Twinbrook, Takoma, NoMa-Gallaudet, Fort Totten, King Street and Silver Spring stations.											
Operating Impact:											
Minor increase in maintenance will be necessary.											
Total Project Budget ( <i>in thousands</i> ) :											
Previous Approved (FY2011-20):		\$18,604.2									
Approved Budget (FY2011-21):		22,820.4									
Change:		\$4,216.2									
Description of Significant Changes:											
Addition of FY2021 planned investment to ongoing bicycle and pedestrian facility improvement project.											
Planned Investments ( <i>in thousands</i> ) :											
	<u>Total</u> <u>Budget</u>	<u>Prior Year</u> <u>Estimate</u>	<u>FY2015</u> <u>Forecast</u>	<u>FY2016</u> <u>Budget</u>	<u>FY2017</u> <u>Plan</u>	<u>FY2018</u> <u>Plan</u>	<u>FY2019</u> <u>Plan</u>	<u>FY2020</u> <u>Plan</u>	<u>FY2021</u> <u>Plan</u>	<u>FY2016-21</u> <u>Total</u>	
Total Budget	\$22,820.4	\$5,154.4	\$1,105.8	\$1,800.0	\$2,400.0	\$2,291.2	\$3,323.8	\$3,322.7	\$3,422.5	\$16,560.2	

<b>Capital Improvement Program</b>												
Project ID:		CIP0037		Project Name:		Bus Priority Corridor & Network						
Department:		BPLN		Project Type:		BUS		Project Manager:			James Hamre	
Project Description:												
<p>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 implementation, customer information, bus stops and transit centers, transit operations, traffic operations and fare collection.</p>												
FY2016 Project Deliverables:												
<p>Implementation of Tiger Grant Funded projects during FY2016 will include installation of the final 20 Customer Information Electronics Display Signs (CIEDS) at bus stop shelters where electrical power is available in the District, Maryland and Virginia. The Traffic Signal Priority Project on VA-7 (Leesburg Pike) will be completed as will detailed design development of additional bus bays and safety and access improvements at the Franconia-Springfield Metro Station. Construction of 17 improvements at the Pentagon Transit Center will be completed and construction will begin for a new bus station on Army-Navy Drive in Arlington, VA. Livable Communities and New Freedom grant-funded projects will complete accessibility improvements at approximately 40 bus stops.</p>												
6-Year Project Deliverables:												
<p>Implementation of Tiger Grant Funded projects will include installation of the final 20 Customer Information Electronics Display Signs (CIEDS) at bus stop shelters where electrical power is available in the District, Maryland and Virginia. The Traffic Signal Priority Project on VA-7 (Leesburg Pike) will be completed as will detailed design development of additional bus bays and safety and access improvements at the Franconia-Springfield Metro Station. Construction of 17 improvements at the Pentagon Transit Center will be completed and construction will begin for a new bus station on Army-Navy Drive in Arlington, VA. Livable Communities and New Freedom grant-funded projects will complete accessibility improvements at approximately 40 bus stops.</p>												
Operating Impact:												
<p>Operational savings via more efficient, reliable and timely bus services, enhanced customer safety, improved bus stop accessibility to fixed-route transit for the general public and MetroAccess clients and more effective and timely customer information. Communication and maintenance costs for CEIDS will be incurred.</p>												
Total Project Budget (in thousands) :												
Previous Approved (FY2011-20):		\$34,133.9										
Approved Budget (FY2011-21):		<u>33,545.3</u>										
Change:		<u>(\$588.6)</u>										
Description of Significant Changes:												
None.												
Planned Investments (in thousands) :												
	<u>Total</u>	<u>Prior Year</u>	<u>FY2015</u>	<u>FY2016</u>	<u>FY2017</u>	<u>FY2018</u>	<u>FY2019</u>	<u>FY2020</u>	<u>FY2021</u>	<u>FY2016-21</u>		
	<u>Budget</u>	<u>Estimate</u>	<u>Forecast</u>	<u>Budget</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Total</u>		
Total Budget	\$33,545.3	\$13,568.0	\$5,477.3	\$14,500.0	-	-	-	-	-	\$14,500.0		

<b>Capital Improvement Program</b>												
Project ID:		CIP0039		Project Name:		Core & System Capacity Project Development						
Department:		PLAN		Project Type:		BUS/RAIL		Project Manager:			Sid Mohsberg	
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.												
FY2016 Project Deliverables:												
Transportation Planning Tasks: Fare Policy Modeling/Analysis, Development –Related Ridership Research, Line Load Completion and Visualization, Proposal of future scenario for Metrobus, Core Capacity/MAP-21 Application and Administration.												
6-Year Project Deliverables:												
Evaluate the region's two joint-use bus garages (West Ox and Central Maryland); update the Metrorail line load application; develop standards for integration of local transit systems with Metro; evaluate Next Generations Communications infrastructure; study the relocation of CSX from the core and the re-use of the former CSX rights-of-way for transit; balance the loading of the Metrorail system through supportive land uses; update the Metrorail and Metrobus fleet management plans; analyze further station access and capacity.												
Operating Impact:												
Total Project Budget ( <i>in thousands</i> ) :												
Previous Approved (FY2011-20):		\$22,297.2										
Approved Budget (FY2011-21):		<u>25,004.9</u>										
Change:		\$2,707.7										
Description of Significant Changes:												
Addition of FY2021 planned investment.												
Planned Investments ( <i>in thousands</i> ) :												
	<u>Total</u>	<u>Prior Year</u>	<u>FY2015</u>	<u>FY2016</u>	<u>FY2017</u>	<u>FY2018</u>	<u>FY2019</u>	<u>FY2020</u>	<u>FY2021</u>	<u>FY2016-21</u>		
	<u>Budget</u>	<u>Estimate</u>	<u>Forecast</u>	<u>Budget</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Total</u>		
Total Budget	\$25,004.9	\$6,469.9	\$2,100.0	\$1,700.0	\$3,185.0	\$2,324.8	\$3,102.7	\$2,687.6	\$3,434.9	\$16,435.0		

<b>Capital Improvement Program</b>												
Project ID:		CIP0042		Project Name:		Bus & Rail Asset Management Software						
Department:		IT		Project Type:		BUS/RAIL		Project Manager:			Robert Dunham	
Project Description:												
This project funds upgrades and enhancements to Maximo, Metro'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, the procurement of the necessary hardware, software, and resources; the development, construction, provisioning, installation, configuration, validation and testing, and implementation of software and hardware products into an enterprise solution, training and documentation to properly utilize and administer the solution, and the transition of the solution into a production environment until Operations and Maintenance elements can assume control and responsibility, with a planned system refresh to keep the system up to date.												
FY2016 Project Deliverables:												
Test multiple mobile solutions and execute a pilot deployment of the successful platform; design an enterprise wide solution for storeroom management and deploy it; replace the existing server farm, which is reaching obsolescence; commence design and development to upgrade to Maximo 7.6 (which will be delivered in FY2017).												
6-Year Project Deliverables:												
Complete the following: implementation and roll-out of Phase II of warehouse management; implementation and roll-out of Mobile Asset, Work, and Inventory Management; implementation of Illustrated Parts Catalog solution and integrate with Maximo; Maximo integration with Business Intelligence solutions; development of Decision Support System dashboard; Maximo Data Warehouse development; procurement of additional licenses for user expansion; Maximo and necessary software upgrades; expansion of asset and work management tracking system; deployment of integrated mobile solutions; and establishment of knowledge portals that will enhance users' experience and expertise.												
Operating Impact:												
This project may require additional operating budget.												
Total Project Budget ( <i>in thousands</i> ) :												
Previous Approved (FY2011-20):		\$37,187.9										
Approved Budget (FY2011-21):		33,829.1										
Change:		(\$3,358.8)										
Description of Significant Changes:												
Addition of FY2021 planned investments for the ongoing asset management system update program. Six-year plan decreased to align with updated project schedule.												
Planned Investments ( <i>in thousands</i> ) :												
	<u>Total</u> <u>Budget</u>	<u>Prior Year</u> <u>Estimate</u>	<u>FY2015</u> <u>Forecast</u>	<u>FY2016</u> <u>Budget</u>	<u>FY2017</u> <u>Plan</u>	<u>FY2018</u> <u>Plan</u>	<u>FY2019</u> <u>Plan</u>	<u>FY2020</u> <u>Plan</u>	<u>FY2021</u> <u>Plan</u>	<u>FY2016-21</u> <u>Total</u>		
Total Budget	\$33,829.1	\$11,803.9	\$2,525.0	\$3,704.9	\$2,866.8	\$2,467.5	\$3,224.4	\$3,420.2	\$3,816.4	\$19,500.3		

<b>Capital Improvement Program</b>												
Project ID:		CIP0043		Project Name:		Bus Operations Support Software						
Department:		IT		Project Type:		BUS		Project Manager:			Brian Fisher	
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 as well as integrates all data and provides tools that are required to meet customer information needs.												
FY2016 Project Deliverables:												
Enhance the integrated bus data warehouse to consolidate new bus systems data including AVL, APC, Bus Scheduling, Fare Collection, Incidents and Customer Complaints; fully integrate the new bus systems with existing Metro business systems; complete phased rollout of new integrated bus systems across bus depots; integrate bus operations with rail operations employee data; provide tools including development of mobile apps for more efficient data collection and data value for Bus Planning; perform technology refresh of hardware and software; improve High Availability and Disaster Recovery capabilities.												
6-Year Project Deliverables:												
Perform Phase II enhancements to the integrated bus data warehouse; consolidate bus systems data including APC, AVM, AVL, Transit Yard Maintenance, Scheduling, Fare Collection, Incidents and Customer Complaints; provide tools including develop mobile apps for more efficient data collection and data value for Bus Planning; perform technology refresh of hardware and software; improve High Availability and Disaster Recovery capabilities. Enhance bus operation software and integrated applications; implement and integrate a new scheduling application.												
Operating Impact:												
This project may require additional operating budget due to maintaining and integrating 2 scheduling systems (Trapeze for Bus, Hastus for Rail), and more CoABE (Consolidated On Board Ancillary Bus Equipment) applications being deployed including SmartYard (yard management) and CleverWorks (for preparation and deployment of quarterly bus schedule distribution).												
Total Project Budget ( <i>in thousands</i> ) :												
Previous Approved (FY2011-20):		\$27,519.1										
Approved Budget (FY2011-21):		<u>22,036.7</u>										
Change:		<u>(\$5,482.4)</u>										
Description of Significant Changes:												
None.												
Planned Investments ( <i>in thousands</i> ) :												
	<u>Total</u>	<u>Prior Year</u>	<u>FY2015</u>	<u>FY2016</u>	<u>FY2017</u>	<u>FY2018</u>	<u>FY2019</u>	<u>FY2020</u>	<u>FY2021</u>	<u>FY2016-21</u>		
	<u>Budget</u>	<u>Estimate</u>	<u>Forecast</u>	<u>Budget</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Total</u>		
Total Budget	\$22,036.7	\$8,418.7	\$1,863.4	\$858.3	\$1,741.9	\$3,343.4	\$1,782.9	\$1,997.8	\$2,030.2	\$11,754.6		



<b>Capital Improvement Program</b>											
Project ID:		CIP0044		Project Name:		IT Capital Program Business Process Reengineering and Program Support					
Department:		IT		Project Type:		BUS/RAIL		Project Manager:		Mary Bauer	
Project Description:											
This project provides business process support to IT Capital projects in which expertise in reviewing and documenting the current state and providing input into future state business processes as well as evaluating future state change management planning is required.											
FY2016 Project Deliverables:											
Implement portfolio, project management and business intelligence tools; reengineer business processes for enterprise wide programs supporting bus, rail, access, and administrative functions; define conformed dimensions for business intelligence data marts; coordinate definitions with ongoing Service Oriented Architecture (SOA) activities, assist with enterprise data warehouse planning, stabilize Application Program Interface (API) environment across all data sources; and define support strategy for SOA implementation and quality management framework processes.											
6-Year Project Deliverables:											
Reengineering business processes for enterprise wide programs supporting bus, rail, access, and administrative functions; planning of change management for major system implementations, upgrades, and future state for capital projects. Develop API functions in connection with the SOA implementation and monitor and modernize API functions in connection with multi-platform implementations. Deliver a quality management framework for IT. Establish an Enterprise Architecture governance model and future state model.											
Operating Impact:											
This project may require additional operating budget.											
Total Project Budget ( <i>in thousands</i> ) :											
Previous Approved (FY2011-20):		\$48,894.2									
Approved Budget (FY2011-21):		65,058.6									
Change:		\$16,164.4									
Description of Significant Changes:											
The increased funding is in support of the quality management function that has been established in support of capital projects within and outside of IT. The quality function is responsible for monitoring and auditing capital projects for compliance with established performance measures. Additionally the CIP funds the Business Process Reengineering associated with technology project implementation for capially funded projects within IT and with operational business units. The enterprise architecture function is funded from the CIP and provides the overall technology roadmap and standards to insure capially funded projects are compatible with WMATA's IT go forward strategy.											
Planned Investments ( <i>in thousands</i> ) :											
	<u>Total</u>	<u>Prior Year</u>	<u>FY2015</u>	<u>FY2016</u>	<u>FY2017</u>	<u>FY2018</u>	<u>FY2019</u>	<u>FY2020</u>	<u>FY2021</u>	<u>FY2016-21</u>	
	<u>Budget</u>	<u>Estimate</u>	<u>Forecast</u>	<u>Budget</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Total</u>	
Total Budget	\$65,058.6	\$21,673.6	\$6,087.8	\$5,214.1	\$6,451.2	\$5,569.5	\$6,301.2	\$6,825.3	\$6,935.8	\$37,297.1	

<b>Capital Improvement Program</b>										
Project ID: <input type="text" value="CIP0045"/>		Project Name: <input type="text" value="Data Centers and Infrastructures"/>								
Department: <input type="text" value="IT"/>		Project Type: <input type="text" value="BUS/RAIL"/>		Project Manager: <input type="text" value="Claude Swanson"/>						
Project Description:										
The Data Center Technologies Integration & Optimization 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.										
FY2016 Project Deliverables:										
Improve data center power and access control; Mobile Device Management platform convergence; continuous conformance; Standardize Disaster Recovery for Virtual Server-based Business Applications; deployment support, Virtual Tape Library (VTL) sunset; Enterprise Storage Consolidation; infusion of cloud-based technologies; Continuity of Operations (COOP) support; Operational optimization and improved availability with hosting infrastructure in co-location site(s); and Information Lifecycle Management.										
6-Year Project Deliverables:										
Enterprise-wide end-point device standardization and management; cloud-based hosting of business applications; achieve 100 percent conformance of servers environment; server and storage hardware/software refresh; large scale virtual desktop deployment; infusion of cost-effective appliance based infrastructure technologies; and data center capacity enhancements; Consolidation of Unix environment to Open Source Platforms; Redundant Data Center Environmental Systems; Hardware Refresh and Consolidation; Enhance infrastructure capacity to support Integration of New Electronic Payments Program (NEPP); Automation of user provisioning processes; Building Directory and Wayfinder; Enterprise-wide Video, Voice and Document Collaboration; On-premise Email Migration to Cloud-based hosted Services.										
Operating Impact:										
Utilization of our budget to implement SAN Storage Consolidation project would require Operating budget to fund contractor staff.										
Total Project Budget (in thousands) :										
Previous Approved (FY2011-20):		\$58,217.8								
Approved Budget (FY2011-21):		\$3,675.8								
Change:		(\$4,542.0)								
Description of Significant Changes:										
Implementation of the SAN Storage Consolidation Project will be delayed, we will instead renew the maintenance agreements already in place.										
Planned Investments (in thousands) :										
	<u>Total</u> <u>Budget</u>	<u>Prior Year</u> <u>Estimate</u>	<u>FY2015</u> <u>Forecast</u>	<u>FY2016</u> <u>Budget</u>	<u>FY2017</u> <u>Plan</u>	<u>FY2018</u> <u>Plan</u>	<u>FY2019</u> <u>Plan</u>	<u>FY2020</u> <u>Plan</u>	<u>FY2021</u> <u>Plan</u>	<u>FY2016-21</u> <u>Total</u>
Total Budget	\$53,675.8	\$23,996.1	\$4,940.0	\$2,526.1	\$4,001.3	\$3,528.0	\$4,142.2	\$6,115.8	\$4,426.3	\$24,739.7

<b>Capital Improvement Program</b>												
Project ID:		CIP0046		Project Name:		Document Management System						
Department:		IT		Project Type:		BUS/RAIL		Project Manager:			Viola Davies	
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 such as PeopleSoft and Maximo to easily be linked to electronic records and forms as well as enhance the ability to respond to information requests.												
FY2016 Project Deliverables:												
Scan and automate accounting, labor, payroll, and medical records information for storing and managing official records, and upgrade Documentum application from version 6.6 to 7.1 to continue receiving software vendor support.												
6-Year Project Deliverables:												
Build out the document management solution to the rest of the Authority to move manual, paper-based processes to electronic processes. Implement an enterprise wide records management program that incorporates data governance and records life cycle from creation to destruction.												
Operating Impact:												
Total Project Budget ( <i>in thousands</i> ) :												
Previous Approved (FY2011-20):		\$25,184.0										
Approved Budget (FY2011-21):		<u>22,378.8</u>										
Change:		<u>(\$2,805.2)</u>										
Description of Significant Changes:												
This project will assist in decreasing the amount of storage space and paper supplies required to maintain and retain records. In addition this project will also assist in moving many manual paper based processes to electronic processes by enabling enterprise applications such as PeopleSoft and Maximo to easily link to electronic records and forms thereby enhancing the ability to respond to information requests. To date, the ERM project has supported multiple departments across WMATA including: Bus (forms and personnel records), Rail (personnel records), MTPD (training manuals), CFO (Accounting invoices, Asset Management contracts and property transactions, Payroll employee files and retirement records), Human Resources( interview packages, personnel files, personnel action forms) Counsel (internal opinions) and will support additional departments in the future.												
Planned Investments ( <i>in thousands</i> ) :												
	<u>Total</u>	<u>Prior Year</u>	<u>FY2015</u>	<u>FY2016</u>	<u>FY2017</u>	<u>FY2018</u>	<u>FY2019</u>	<u>FY2020</u>	<u>FY2021</u>	<u>FY2016-21</u>		
	<u>Budget</u>	<u>Estimate</u>	<u>Forecast</u>	<u>Budget</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Total</u>		
Total Budget	\$22,378.8	\$7,297.4	\$3,043.0	\$1,901.8	\$2,396.5	\$2,194.3	\$2,424.1	\$1,325.9	\$1,795.8	\$12,038.4		

<b>Capital Improvement Program</b>												
Project ID:		CIP0047		Project Name:		Enterprise Geographic Information System						
Department:		IT		Project Type:		BUS/RAIL		Project Manager:			Edwin Wells	
Project Description:												
This project creates an enterprise Geographic Information System (GIS) to support agency-wide integrated mapping and data. The GIS will make information consistent and easily accessible through the authority. This project will also integrate key maps, drawings, asset records, and emergency access locations that are critical for timely emergency responses.												
FY2016 Project Deliverables:												
Provide 3-D spatial data to support wayfinding; create facilities maps of rail yards, bus garages, and administrative facilities; develop infrastructure and business processes for a regional bus stop geodatabase; combine bus, rail, and rail station networks to create a complete intermodal transit network to support MetroAccess accessible trip planner; assist other systems and projects requiring spatial data, including scheduling, on-board bus systems, emergency mapping, safety management, and business intelligence.												
6-Year Project Deliverables:												
Implement enterprise GIS agency-wide to support safer and more efficient asset management, transit operations, planning, public safety, and public information; conduct legacy data mapping; integrate GIS with other systems, applications, and web services.												
Operating Impact:												
This project may require additional operating budget.												
Total Project Budget ( <i>in thousands</i> ) :												
Previous Approved (FY2011-20):		\$17,386.2										
Approved Budget (FY2011-21):		<u>15,083.3</u>										
Change:		<u>(\$2,302.9)</u>										
Description of Significant Changes:												
GIS is rapidly proving its value in mapping alarms, alerts, outages and open work orders. Work this year will be restricted to small in-house applications. No resources will be available for more complex applications or field data collection/conversion. The GIS maps of rail station interiors have proven their value in numerous ways. We will not get corresponding maps of our railyard, bus garage, and administrative structures, not this year. GIS 3-D mapping, needed to support rail station emergency planning, cable installation within the tunnels, and flood vulnerability analysis, will be restricted to a pilot project done by in-house staff.												
Planned Investments ( <i>in thousands</i> ) :												
	<u>Total</u> <u>Budget</u>	<u>Prior Year</u> <u>Estimate</u>	<u>FY2015</u> <u>Forecast</u>	<u>FY2016</u> <u>Budget</u>	<u>FY2017</u> <u>Plan</u>	<u>FY2018</u> <u>Plan</u>	<u>FY2019</u> <u>Plan</u>	<u>FY2020</u> <u>Plan</u>	<u>FY2021</u> <u>Plan</u>	<u>FY2016-21</u> <u>Total</u>		
Total Budget	\$15,083.3	\$6,127.9	\$657.8	\$875.8	\$1,417.7	\$1,280.9	\$1,449.0	\$1,623.9	\$1,650.2	\$8,297.5		

<b>Capital Improvement Program</b>										
Project ID: <input type="text" value="CIP0048"/>		Project Name: <input type="text" value="Sensitive Data Protection Technology"/>								
Department: <input type="text" value="IT"/>		Project Type: <input type="text" value="BUS/RAIL"/>		Project Manager: <input type="text" value="Corey Bobb"/>						
Project Description:										
This project provides a comprehensive company-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.										
FY2016 Project Deliverables:										
Establish a comprehensive cyber security program that is based on distinct Communities of Interest (COI) aligned to organizational services i.e. safety (critical infrastructure), financial, law enforcement, people, and customer. Each COI will have a tailored cost effective risk management program instituted based on the unique needs of that business unit. Capabilities intended to be deployed include: two factor authentication, computer emergency response team- resilience management model, finalization of single sign on deployment, finalization of Role Based Access Control, and the beginning of enterprise encryption for data at rest and data in transit.										
6-Year Project Deliverables:										
Establish comprehensive enterprise security program and various security zones, such as Payment Card Industry (PCI); deploy database monitoring software; enable single sign on, other services, and systems; integrate access management into physical security; preserve security incident event logging, event correlation, and security zones for internal business units and external partners.										
Operating Impact:										
This project may require additional operating budget.										
Total Project Budget (in thousands) :										
Previous Approved (FY2011-20):		\$30,388.0								
Approved Budget (FY2011-21):		<u>28,557.3</u>								
Change:		<u>(\$1,830.7)</u>								
Description of Significant Changes:										
The items that were under CIP0048 are no-longer improvement projects they have been moved to production / operations because they are no longer in production and instead need to be maintained. The operational tasks require SME's to run, integrate, operate, troubleshoot and perform any other operational task(s) that are required. These are the projects that were moved that were on the CIP0048 list for 2015:										
Identity and Access Management, Two Factor Authentication, PCI-DSS Compliance Operations and Scheduled Tasks, and Implementation of the Resiliency Maturity model.										
Planned Investments (in thousands) :										
	<u>Total</u> <u>Budget</u>	<u>Prior Year</u> <u>Estimate</u>	<u>FY2015</u> <u>Forecast</u>	<u>FY2016</u> <u>Budget</u>	<u>FY2017</u> <u>Plan</u>	<u>FY2018</u> <u>Plan</u>	<u>FY2019</u> <u>Plan</u>	<u>FY2020</u> <u>Plan</u>	<u>FY2021</u> <u>Plan</u>	<u>FY2016-21</u> <u>Total</u>
Total Budget	\$28,557.3	\$17,276.5	\$3,300.0	\$1,133.1	\$1,250.1	\$1,234.3	\$1,276.5	\$1,543.2	\$1,543.5	\$7,980.8

<b>Capital Improvement Program</b>										
Project ID: CIP0049		Project Name: Management Support Software								
Department: IT		Project Type: BUS/RAIL		Project Manager: Naheed Monower						
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 Metro to maintain sufficient fiscal controls to manage its corporate operations. 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, the development, construction, provisioning, installation, configuration, validation and testing, and implementation of software and hardware products into an enterprise solution, training and documentation to properly utilize and administer the solution, and the transition of the solution into a production environment until Operations and Maintenance elements can assume control and responsibility, with a planned system refresh to keep the system up to date.										
FY2016 Project Deliverables:										
Asset Management: Induction of representative rail cars and buses into the PDM tool, establishment of change management over those items, and integration of that data to Maximo; Contract Lifecycle Management: system implementation to include solicitation management and contract management phases; HCM: upgrade and implementation; SOA: develop and establish an enterprise-wide service bus to facilitate integration of enterprise applications; and contract digitization implementation.										
6-Year Project Deliverables:										
Integration of the PDM tool with key current systems; improvements to PeopleSoft technology infrastructure; upgrades to next generation of Enterprise Resource Planning system; SOA: establish a sustainable enterprise wide governance model and center of excellence; and implementation of asset management tools in both facilities and bus groups; Automation of Procure to Pay processes, Procurement business operations and vendor interactions.										
Operating Impact:										
This project may require additional operating budget.										
Total Project Budget (in thousands) :										
Previous Approved (FY2011-20):		\$96,062.0								
Approved Budget (FY2011-21):		132,814.3								
Change:		\$36,752.4								
Description of Significant Changes:										
Addition of FY2021 planned investments for ongoing management support software.										
Planned Investments (in thousands) :										
	<u>Total Budget</u>	<u>Prior Year Estimate</u>	<u>FY2015 Forecast</u>	<u>FY2016 Budget</u>	<u>FY2017 Plan</u>	<u>FY2018 Plan</u>	<u>FY2019 Plan</u>	<u>FY2020 Plan</u>	<u>FY2021 Plan</u>	<u>FY2016-21 Total</u>
Total Budget	\$132,814.3	\$47,900.4	\$14,647.7	\$17,465.7	\$11,102.5	\$13,843.0	\$12,529.3	\$7,911.8	\$7,413.9	\$70,266.2

<b>Capital Improvement Program</b>												
Project ID:		CIP0050		Project Name:		Metro IT One Stop and Office Automation						
Department:		IT		Project Type:		BUS/RAIL		Project Manager:			Williams-Hall, Terrian	
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.												
FY2016 Project Deliverables:												
Replace/upgrade all out-of warranty devices ensuring business continuity efforts; consolidate helpdesk support levels; develop a more transparent robust problem-to-resolution model; standardize the current imaging process and limit the number of images needed for deployment; develop a comprehensive application and driver package to be deployed with standard image; increase the efficiency of the desktop deployment; and complete the implementation of the knowledgebase system.												
6-Year Project Deliverables:												
Replace approximately 4,500 desktop computers and enhance knowledge base and desktop technology infusion programs.												
Operating Impact:												
Total Project Budget ( <i>in thousands</i> ) :												
Previous Approved (FY2011-20):		\$18,228.8										
Approved Budget (FY2011-21):		14,981.1										
Change:		(\$3,247.7)										
Description of Significant Changes:												
We will not be able to replace more than 500 PC including Software as a result of a reduced budget, however, we will incur additional cost from buying extended warranties. The final costs for the PC upgrades is not yet known because the supplier is considering changes in billing to move toward charging flat fee instead of per PC. We will also reduce the provisioning of Software.												
Planned Investments ( <i>in thousands</i> ) :												
	<u>Total</u>	<u>Prior Year</u>	<u>FY2015</u>	<u>FY2016</u>	<u>FY2017</u>	<u>FY2018</u>	<u>FY2019</u>	<u>FY2020</u>	<u>FY2021</u>	<u>FY2016-21</u>		
	<u>Budget</u>	<u>Estimate</u>	<u>Forecast</u>	<u>Budget</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Total</u>		
Total Budget	\$14,981.1	\$9,044.1	\$757.0	\$757.0	\$812.0	\$841.0	\$912.0	\$916.0	\$942.0	\$5,180.0		

<b>Capital Improvement Program</b>										
Project ID: CIP0051		Project Name: Police Dispatch and Records Management								
Department: IT		Project Type: BUS/RAIL		Project Manager: John Bercher						
<b>Project Description:</b> This project replaces the current Metro Transit Police Department (MTPD) legacy dispatch system with an up-to-date Computer Aided Dispatch and Records Management System, Organizational and Criminal Reporting, Automated Vehicle 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. The project involves the development, analysis, and documentation of organizational and business requirements and its associated processes by WMATA and industry-specific subject matter experts, the procurement of the necessary hardware, software, and resources, the development, construction, provisioning, installation, configuration, validation and testing, and implementation of software and hardware products into an enterprise solution, training and documentation to properly utilize and administer the solution, and the transition of the solution into Operations and Maintenance environment, with a planned system refresh to keep the system up to date.										
<b>FY2016 Project Deliverables:</b>										
Development, configuration, testing, and implementation of PremierOne 4.0, supporting mobile applications and devices, business process software development, automated vehicle locator integration, and telephony integration.										
<b>6-Year Project Deliverables:</b>										
Complete CAD/RMS system implementation, business intelligence reporting package, automatic vehicle locator, communications integration, complete business processes tracking systems, logistical integration, system monitoring, system operations processes and procedures, inclusion of CCTV system, and system refresh.										
<b>Operating Impact:</b>										
This system requires highly technical support and will have require operating budget support to maintain and operate the system.										
<b>Total Project Budget (in thousands) :</b>										
Previous Approved (FY2011-20):		\$14,267.7								
Approved Budget (FY2011-21):		16,744.6								
Change:		\$2,476.8								
<b>Description of Significant Changes:</b>										
Addition of FY2021 planned investments to ongoing police dispatch and records management.										
<b>Planned Investments (in thousands) :</b>										
	<u>Total Budget</u>	<u>Prior Year Estimate</u>	<u>FY2015 Forecast</u>	<u>FY2016 Budget</u>	<u>FY2017 Plan</u>	<u>FY2018 Plan</u>	<u>FY2019 Plan</u>	<u>FY2020 Plan</u>	<u>FY2021 Plan</u>	<u>FY2016-21 Total</u>
Total Budget	\$16,744.6	\$4,019.3	\$3,017.2	\$2,776.0	\$1,123.0	\$1,312.0	\$1,432.9	\$1,532.1	\$1,532.1	\$9,708.1



<b>Capital Improvement Program</b>												
Project ID:		CIP0052		Project Name:		Network and Communications						
Department:		IT		Project Type:		BUS/RAIL		Project Manager:			Al Pegram	
Project Description:												
This project provides a communications network that supports Metro's current and future Networking and communication needs. This project will also provide a 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.												
FY2016 Project Deliverables:												
This project will begin upgrading the Rail station routers and will replace 50% of the remaining network components that have surpassed the manufacturer's prescribed useful life.												
6-Year Project Deliverables:												
Completion of the of the Rail Station Router upgrade program, an upgrade of the administrative location routers, completion of the program to build wireless networks in all rail yards and bus stations; implementation of a Supervisory Control And Data Acquisition network; replacement of end-of-life network components; technology adaptations, decommission old data networks and cables; and the upgrade of the end-of-line network equipment and infrastructure.												
Operating Impact:												
Total Project Budget (in thousands) :												
Previous Approved (FY2011-20):		\$45,926.4										
Approved Budget (FY2011-21):		<u>50,429.3</u>										
Change:		\$4,502.9										
Description of Significant Changes:												
Addition of FY2021 planned investments to ongoing project to replace and update communications network.												
Planned Investments (in thousands) :												
	<u>Total</u>	<u>Prior Year</u>	<u>FY2015</u>	<u>FY2016</u>	<u>FY2017</u>	<u>FY2018</u>	<u>FY2019</u>	<u>FY2020</u>	<u>FY2021</u>	<u>FY2016-21</u>		
	<u>Budget</u>	<u>Estimate</u>	<u>Forecast</u>	<u>Budget</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Total</u>		
Total Budget	\$50,429.3	\$16,428.8	\$4,643.9	\$3,576.0	\$3,976.0	\$4,510.0	\$5,431.0	\$5,843.2	\$6,020.4	\$29,356.6		

<b>Capital Improvement Program</b>												
Project ID:		CIP0053		Project Name:		Metro Enterprise Monitoring Center (MEMC)						
Department:		IT		Project Type:		BUS/RAIL		Project Manager:			Tahir Kazmi	
Project Description:												
This project supports and enhances all the monitoring tools for Metro Enterprise Monitoring Center(MEMC) enabling monitoring of major and critical events impacting WMATA's IT and non IT infrastructure. The goal is to refine WMATA monitoring tools to continually perform efficiently, use advanced features to create more proactive monitoring capabilities to prevent service degradation and outages from occurring.												
FY2016 Project Deliverables:												
Installation of Application Performance Monitoring (APM) solution in the WMATA development and production Environments. Configuration of two critical business services and provide knowledge transfer to WMATA staff to run reports and manage the tool. Upgrade ecoMeter to DCIM (Datacenter Infrastructure Manager) and carry out pre and post upgrade activities including testing and quality check as well as demonstrating functionality to WMATA staff and provide training. Create accurate Business Service Model in CMDDB (Configuration Management Database) to capture accurate Change impact analysis. Configure Fault Monitoring Tools that are representative of an accurate business service impact of a fault.												
6-Year Project Deliverables:												
None.												
Operating Impact:												
Total Project Budget (in thousands) :												
Previous Approved (FY2011-20):		\$13,459.9										
Approved Budget (FY2011-21):		4,453.6										
Change:		(\$9,006.3)										
Description of Significant Changes:												
Six-year plan decreased as future costs will be funded through the operating budget.												
Planned Investments (in thousands) :												
	<u>Total</u>	<u>Prior Year</u>	<u>FY2015</u>	<u>FY2016</u>	<u>FY2017</u>	<u>FY2018</u>	<u>FY2019</u>	<u>FY2020</u>	<u>FY2021</u>	<u>FY2016-21</u>		
	<u>Budget</u>	<u>Estimate</u>	<u>Forecast</u>	<u>Budget</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Total</u>		
Total Budget	\$4,453.6	\$3,551.4	\$378.2	\$524.0	-	-	-	-	-	\$524.0		

<b>Capital Improvement Program</b>												
Project ID:		CIP0054		Project Name:		Customer Electronic Communications & Outreach						
Department:		IT		Project Type:		BUS/RAIL		Project Manager:			Mary Kaye Vavasour	
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 Metro communications, schedules, system alerts, commuting benefits, and fares. 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, the development, construction, provisioning, installation, configuration, validation and testing, and implementation of software and hardware products into enterprise solutions, development of training and documentation to properly utilize and administer the solutions, and transition of the solutions into a production environment until Operations and Maintenance elements can assume control and responsibility, with a planned system refresh to keep the systems up to date.												
FY2016 Project Deliverables:												
Enhancements to internal and public-facing websites and internal web applications, such as the General Orders and Track Rights System (GOTRS), and Pick system; expanded delivery of digital communications through cross-channel design for web, mobile, and interactive/touch screen platforms.												
6-Year Project Deliverables:												
Facilitate external and internal access to communications and web-based services; enhance internet and intranet performance and navigation; expand the delivery of web-based content and services by providing on-demand access through a variety of digital devices and formats; enhance the delivery of transit service via automation of appropriate internal and externally focused business activities; and execute application and platform upgrades for GOTRS and the public-facing website, and SmarTrip web application.												
Operating Impact:												
This project may require additional operating budget.												
Total Project Budget (in thousands) :												
Previous Approved (FY2011-20):		\$16,037.3										
Approved Budget (FY2011-21):		15,582.6										
Change:		(\$454.6)										
Description of Significant Changes:												
Addition of FY2021 planned investments to ongoing project to provide customer electronic communication and outreach improvements.												
Planned Investments (in thousands) :												
	<u>Total</u>	<u>Prior Year</u>	<u>FY2015</u>	<u>FY2016</u>	<u>FY2017</u>	<u>FY2018</u>	<u>FY2019</u>	<u>FY2020</u>	<u>FY2021</u>	<u>FY2016-21</u>		
	<u>Budget</u>	<u>Estimate</u>	<u>Forecast</u>	<u>Budget</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Total</u>		
Total Budget	\$15,582.6	\$8,903.7	\$830.9	\$1,608.3	\$791.0	\$1,199.9	\$588.6	\$874.5	\$785.8	\$5,848.1		

<b>Capital Improvement Program</b>												
Project ID:		CIP0056		Project Name:		Rail Operations Support Software						
Department:		IT		Project Type:		RAIL		Project Manager:			Albert Fehrens	
Project Description:												
<p>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, the development, construction, provisioning, installation, configuration, validation and testing, and implementation of software and hardware products into an enterprise solution, training and documentation to properly utilize and administer the solution, and the transition of the solution into a production environment until Operations and Maintenance elements can assume control and responsibility, with a planned system refresh to keep the system up to date.</p>												
FY2016 Project Deliverables:												
<p>Redesign graphical user interface for the Rail Performance Management System (RPM); provide external and internal training, execute performance monitoring, and install hardware upgrades to the Passenger Information Display System (PIDS); document and install the Disaster Recovery System; purchase Liquid Crystal Display (LCD) signs, software services, installation services, and equipment; complete enterprise architecture documentation; document existing functionality; and install upgrades.</p>												
6-Year Project Deliverables:												
<p>Replace aging server, workstation, and software in support of Metrorail system; migrate to a full LCD technology base system wide for PIDS; develop new PIDS predictor to include single tracking support and automated schedule input; implement new releases of RPM and Dulles Phase II; upgrade AIM to current release; migrate all Rail Operations Control applications to Data Center Infrastructure virtual environment.</p>												
Operating Impact:												
<p>This project may require additional operating budget.</p>												
Total Project Budget ( <i>in thousands</i> ) :												
Previous Approved (FY2011-20):		\$36,151.6										
Approved Budget (FY2011-21):		31,594.1										
Change:		(\$4,557.5)										
Description of Significant Changes:												
<p>Addition of FY2021 planned investments to ongoing project to provide software applications for rail operations control centers. Six-year plan decreased to align with updated schedule.</p>												
Planned Investments ( <i>in thousands</i> ) :												
	<u>Total</u> <u>Budget</u>	<u>Prior Year</u> <u>Estimate</u>	<u>FY2015</u> <u>Forecast</u>	<u>FY2016</u> <u>Budget</u>	<u>FY2017</u> <u>Plan</u>	<u>FY2018</u> <u>Plan</u>	<u>FY2019</u> <u>Plan</u>	<u>FY2020</u> <u>Plan</u>	<u>FY2021</u> <u>Plan</u>	<u>FY2016-21</u> <u>Total</u>		
Total Budget	\$31,594.1	\$8,235.8	\$1,418.4	\$2,337.2	\$3,526.8	\$3,370.1	\$3,745.4	\$4,411.3	\$4,549.1	\$21,939.8		

<b>Capital Improvement Program</b>												
Project ID:		CIP0057		Project Name:		1000 Series Rail Car Replacement						
Department:		CENV		Project Type:		RAIL		Project Manager:			Timothy O. Bach	
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 \$765 million. The FY2016-2021 project plan includes \$572 million, consistent with the current project schedule. The remaining \$105 million is planned beyond FY2021.												
FY2016 Project Deliverables:												
Begin delivery and testing of approximately 144 7000-Series railcars.												
6-Year Project Deliverables:												
Acquire 300 new 7000 Series railcars, to include warranty, training and manuals.												
Operating Impact:												
New railcars improve reliability, safety, and performance.												
Total Project Budget ( <i>in thousands</i> ) :												
Previous Approved (FY2011-20):		\$697,939.3										
Approved Budget (FY2011-21):		676,200.5										
Change:		(\$21,738.8)										
Description of Significant Changes:												
Addition of FY2021 planned investments to rail car replacement. Six-year plan revised to align with updated cash-flow schedule. Additional investment is required beyond FY2021 to complete the project. Total project budget has been reduced by \$21.7 million compared to previous approved plan due to a reduction in project contingency.												
Planned Investments ( <i>in thousands</i> ) :												
	<u>Total</u>	<u>Prior Year</u>	<u>FY2015</u>	<u>FY2016</u>	<u>FY2017</u>	<u>FY2018</u>	<u>FY2019</u>	<u>FY2020</u>	<u>FY2021</u>	<u>FY2016-21</u>		
	<u>Budget</u>	<u>Estimate</u>	<u>Forecast</u>	<u>Budget</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Total</u>		
Total Budget	\$676,200.5	\$91,378.6	\$12,535.7	\$213,481.2	\$265,000.0	\$73,000.0	\$10,239.8	\$6,599.3	\$3,965.9	\$572,286.1		

<b>Capital Improvement Program</b>										
Project ID:		CIP0059		Project Name: 2000/3000 Series Rail Car Replacement						
Department:		CENV		Project Type:		RAIL		Project Manager: Debo Ogunrinde		
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 FY2011-2021 project plan includes \$107M million, consistent with the current project schedule. The remaining \$1.3 billion is planned beyond FY2021.										
FY2016 Project Deliverables:										
Begin design and development activities for the replacement of the 2000/3000 Series railcars.										
6-Year Project Deliverables:										
Design and development activities for the replacement of the 2000/3000 Series railcars. Begin replacement of the 2000/3000 Series railcars.										
Operating Impact:										
New railcars will improve the reliability and performance of Metro's service.										
Total Project Budget ( <i>in thousands</i> ) :										
Previous Approved (FY2011-20):		\$34,934.0								
Approved Budget (FY2011-21):		<u>107,040.4</u>								
Change:		\$72,106.5								
Description of Significant Changes:										
Addition FY2021 planned investments to replace rail cars. Six-year plan revised to align with updated cash-flow schedule. Significant additional investment is required beyond FY2021 to complete the project.										
Planned Investments ( <i>in thousands</i> ) :										
	<u>Total</u> <u>Budget</u>	<u>Prior Year</u> <u>Estimate</u>	<u>FY2015</u> <u>Forecast</u>	<u>FY2016</u> <u>Budget</u>	<u>FY2017</u> <u>Plan</u>	<u>FY2018</u> <u>Plan</u>	<u>FY2019</u> <u>Plan</u>	<u>FY2020</u> <u>Plan</u>	<u>FY2021</u> <u>Plan</u>	<u>FY2016-21</u> <u>Total</u>
Total Budget	\$107,040.4	-	-	\$300.0	\$700.0	\$2,435.0	\$4,192.1	\$29,745.8	\$69,667.5	\$107,040.4

**Capital Improvement Program**

Project ID: CIP0060

Project Name: 4000 Series Rail Car Replacement

Department: CENV

Project Type: RAIL

Project Manager: Debo Ogunrinde

**Project Description:**

This project replaces all 100 of the 4000 Series railcars, which were purchased during 1992-1994, in order to meet current safety standards. To meet current safety standards and based on pricing, it is more economical to replace the 4000 Series railcars than to do a mid-life rehabilitation. In order to gain economies of scale and improve quality, this work is to be done through an option on the 7000 Series railcar contract. The FY2011-2021 project plan includes \$259 million, consistent with the current project schedule.

**FY2016 Project Deliverables:**

None.

**6-Year Project Deliverables:**

Replace all 100 of the 4000 Series railcars. Includes spare parts, warranty, and manuals.

**Operating Impact:**

Newer railcars will improve reliability, and car availability. Furthermore, operating efficiencies will be realized due to reduced maintenance requirements and expenditures.

**Total Project Budget (in thousands) :**

Current Approved (FY2011-20):	\$258,716.4
Proposed Budget (FY2011-21):	259,459.8
Change:	\$743.4

**Description of Significant Changes:**

Addition of FY2021 planned investments to rail car replacement. Six-year plan revised to align with updated cash-flow schedule. Additional investment is required beyond FY2021 to complete the project.

**Planned Investments (in thousands) :**

	<u>Total</u>	<u>Prior Year</u>	<u>FY2015</u>	<u>FY2016</u>	<u>FY2017</u>	<u>FY2018</u>	<u>FY2019</u>	<u>FY2020</u>	<u>FY2021</u>	<u>FY2016-21</u>
	<u>Budget</u>	<u>Estimate</u>	<u>Forecast</u>	<u>Proposed</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Total</u>
Total Budget	\$259,459.8	\$22,695.4	-	-	-	\$121,467.7	\$75,210.6	\$39,342.7	\$743.4	\$236,764.4

<b>Capital Improvement Program</b>												
Project ID:		CIP0063		Project Name:		Railcar Rehabilitation Program						
Department:		CMNT		Project Type:		RAIL		Project Manager:			Damon Cannon	
Project Description:												
<p>This project provides for the scheduled overhaul of repairable railcar components to sustain the rail car life cycle. This project will fund the labor necessary to support and accomplish the scheduled overhauls in order to maintain a good state of railcar repair and maintain and improve life-cycle safety and railcar reliability. Approximately one-fifth of the fleet, or 225 cars, are subject to heavy overhaul annually. Major heavy overhaul components include replacement of wheels, brake systems, traction motors, and truck overhaul.</p>												
FY2016 Project Deliverables:												
<p>Labor costs required to perform scheduled major overhauls necessary to maintain scheduled component, assembly, and subassembly overhauls. Identification of scheduled overhaul components, assembly, and subassembly float levels.</p>												
6-Year Project Deliverables:												
<p>Labor necessary to maintain scheduled component, assembly, and subassembly overhauls. Identification and repair of sheduled overhaul components, assembly, and subassembly float levels.</p>												
Operating Impact:												
<p>Annual scheduled overhaul repairs extend railcar life cycles, provide safety to the riding public and keep railcars in service.</p>												
Total Project Budget ( <i>in thousands</i> ) :												
Previous Approved (FY2011-20):		\$203,838.3										
Approved Budget (FY2011-21):		<u>287,232.7</u>										
Change:		\$83,394.4										
Description of Significant Changes:												
<p>The budget for this project has increased compared to the previously approved six year plan. The updated budget ensures that all of the labor for this federally eligible capital activity is now funded out of the capital budget.</p>												
Planned Investments ( <i>in thousands</i> ) :												
	<u>Total</u>	<u>Prior Year</u>	<u>FY2015</u>	<u>FY2016</u>	<u>FY2017</u>	<u>FY2018</u>	<u>FY2019</u>	<u>FY2020</u>	<u>FY2021</u>	<u>FY2016-21</u>		
	<u>Budget</u>	<u>Estimate</u>	<u>Forecast</u>	<u>Budget</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Total</u>		
Total Budget	\$287,232.7	\$70,407.7	\$30,975.0	\$30,975.0	\$30,975.0	\$30,975.0	\$30,975.0	\$30,975.0	\$30,975.0	\$185,850.0		



<b>Capital Improvement Program</b>												
Project ID:		CIP0066		Project Name:		Rail Shop Repair Equipment						
Department:		CPDO		Project Type:		RAIL		Project Manager:			Kenneth Spain	
Project Description:												
This project replaces WMATA rail shop maintenance and shop equipment, such as overhead cranes, rail train lifts, hoists, industrial shop air compressors, service elevators, hoisting mechanisms, wheel truing machines (WTM), wheel presses and electrical controls that have reached the end of its useful life in order to provide reliability for the delivery of quality service.												
FY2016 Project Deliverables:												
Field work for the current contract is complete. Contract closeout is in process and will be completed in FY16. There are no deliverables in FY2016 except for closeout of the current contract.												
6-Year Project Deliverables:												
Replace rail shop equipment based on lifecycle attributes of machinery. Unfunded needs will result with significantly less 6-year project deliverables beyond the closeout of the current contract. This will impact replacement of S&I shop equipment such as wheel truing machines at Alexandria and Falls Church S&I Shops, vertical turret lathes at Brentwood Yard S&I Shop along with various other shop equipment.												
Operating Impact:												
Newly purchased wheel truing equipment will replace older, unreliable equipment. Other items will replace older, less capable non-automated machining equipment, and wash tanks as necessary for on-going transit truck overhaul.												
Total Project Budget ( <i>in thousands</i> ) :												
Previous Approved (FY2011-20):		\$27,200.3										
Approved Budget (FY2011-21):		<u>30,203.2</u>										
Change:		\$3,002.9										
Description of Significant Changes:												
Addition of FY2021 planned investments to rail shop repair equipment.												
Planned Investments ( <i>in thousands</i> ) :												
	<u>Total</u>	<u>Prior Year</u>	<u>FY2015</u>	<u>FY2016</u>	<u>FY2017</u>	<u>FY2018</u>	<u>FY2019</u>	<u>FY2020</u>	<u>FY2021</u>	<u>FY2016-21</u>		
	<u>Budget</u>	<u>Estimate</u>	<u>Forecast</u>	<u>Budget</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Total</u>		
Total Budget	\$30,203.2	\$17,396.2	\$9,260.0	\$400.0	-	-	-	-	\$3,147.0	\$3,547.0		

<b>Capital Improvement Program</b>										
Project ID: <input type="text" value="CIP0067"/>		Project Name: <input type="text" value="Rail Car Safety &amp; Reliability Enhancements"/>								
Department: <input type="text" value="CENV"/>		Project Type: <input type="text" value="RAIL"/>		Project Manager: <input type="text" value="Kenneth Morford"/>						
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 in technology and components which improves the safety and reliability of railcars.										
FY2016 Project 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, install wrong side door openings, install communications control panels, install railcar rollback prevention and precision stopping, install LED lighting and resilient flooring, 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.										
6-Year Project 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, install wrong side door openings, install communications control panels, install railcar rollback prevention and precision stopping, install LED lighting and resilient flooring, 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.										
Operating Impact:										
This project will result in greater efficiency and productivity.										
Total Project Budget ( <i>in thousands</i> ) :										
Previous Approved (FY2011-20):		\$36,204.8								
Approved Budget (FY2011-21):		<u>38,381.8</u>								
Change:		\$2,177.0								
Description of Significant Changes:										
Addition of FY2020 planned investments to ongoing railcar safety and reliability improvement project. Six-year plan updated based on revised cost estimates and schedule.										
Planned Investments ( <i>in thousands</i> ) :										
	<u>Total</u> <u>Budget</u>	<u>Prior Year</u> <u>Estimate</u>	<u>FY2015</u> <u>Forecast</u>	<u>FY2016</u> <u>Budget</u>	<u>FY2017</u> <u>Plan</u>	<u>FY2018</u> <u>Plan</u>	<u>FY2019</u> <u>Plan</u>	<u>FY2020</u> <u>Plan</u>	<u>FY2021</u> <u>Plan</u>	<u>FY2016-21</u> <u>Total</u>
Total Budget	\$38,381.8	\$23,150.8	\$3,700.0	\$4,000.0	\$1,670.0	\$1,500.0	\$1,405.0	\$1,478.0	\$1,478.0	\$11,531.0

<b>Capital Improvement Program</b>												
Project ID:		CIP0068		Project Name:		Railcar Acquisition (220 Railcars)						
Department:		CENV		Project Type:		RAIL		Project Manager:			Tim Bach	
Project Description:												
<p>This project will procure 220 railcars, 192 of these cars will be used to replace existing railcars with safer more reliable 7000 series railcars. The remaining 28 vehicles will be used to increase the size of WMATA's fleet and be used to eliminate turnbacks on the Red Line. The total estimated cost of this project is \$615 million. The FY2011-2021 project plan includes \$484 million, consistent with the current project schedule. The remaining \$131M is planned beyond FY2021.</p>												
FY2016 Project Deliverables:												
Milestone payment associated with exercising option for 220 rail cars.												
6-Year Project Deliverables:												
The railcars will be delivered and placed into service by the end of calendar year 2021.												
Operating Impact:												
The expansion of WMATA's fleet and the planned changes to WMATA's service plan to eliminate turnbacks on the Red Line will have impacts on the operating budget.												
Total Project Budget ( <i>in thousands</i> ) :												
Previous Approved (FY2011-20):		\$53,080.6										
Approved Budget (FY2011-21):		<u>483,646.9</u>										
Change:		\$430,566.3										
Description of Significant Changes:												
Addition of the additional required investments necessary for the rail car procurement based on current schedule. Significant additional investment is required beyond FY2021 to complete this project.												
Planned Investments ( <i>in thousands</i> ) :												
	<u>Total</u>	<u>Prior Year</u>	<u>FY2015</u>	<u>FY2016</u>	<u>FY2017</u>	<u>FY2018</u>	<u>FY2019</u>	<u>FY2020</u>	<u>FY2021</u>	<u>FY2016-21</u>		
	<u>Budget</u>	<u>Estimate</u>	<u>Forecast</u>	<u>Budget</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Total</u>		
Total Budget	\$483,646.9	-	-	\$53,033.0	-	-	\$133,008.0	\$137,605.5	\$160,000.4	\$483,646.9		
* Fiscal year budget dollars for this project reflect the amendment to the 6-year approved plan by the Board as referenced by the June 25, 2015 resolution.												

<b>Capital Improvement Program</b>										
Project ID:	<input type="text" value="CIP0071"/>	Project Name:	<input type="text" value="Test Track &amp; Railcar Commissioning Facility"/>							
Department:	<input type="text" value="MCAP"/>	Project Type:	<input type="text" value="RAIL"/>	Project Manager:	<input type="text" value="John Thomas"/>					
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 multistory building and parking facility in the Greenbelt Rail Yard. Both facilities will be used to commission and test new and rehabilitated railcars.										
FY2016 Project Deliverables:										
Completing construction of the Test Track.										
6-Year Project Deliverables:										
Complete Test Track										
Operating Impact:										
Additional operating and maintenance will be required for the facility and test track, however testing will no longer interfere with the revenue rail system. The new track infrastructure and building will add new facilities that must be maintained and will increase utility costs.										
Total Project Budget ( <i>in thousands</i> ) :										
Previous Approved (FY2011-20):		\$93,871.3								
Approved Budget (FY2011-21):		<u>98,941.1</u>								
Change:		\$5,069.8								
Description of Significant Changes:										
Project delays, design and contract modifications have increased the cost to deliver this project.										
Planned Investments ( <i>in thousands</i> ) :										
	<u>Total</u> <u>Budget</u>	<u>Prior Year</u> <u>Estimate</u>	<u>FY2015</u> <u>Forecast</u>	<u>FY2016</u> <u>Budget</u>	<u>FY2017</u> <u>Plan</u>	<u>FY2018</u> <u>Plan</u>	<u>FY2019</u> <u>Plan</u>	<u>FY2020</u> <u>Plan</u>	<u>FY2021</u> <u>Plan</u>	<u>FY2016-21</u> <u>Total</u>
Total Budget	\$98,941.1	\$65,031.1	\$28,700.0	\$5,210.0	-	-	-	-	-	\$5,210.0

<b>Capital Improvement Program</b>											
Project ID:		CIP0072		Project Name:		Elevator Rehabilitation					
Department:		ELES		Project Type:		RAIL		Project Manager:			Cedric Watson
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.											
FY2016 Project Deliverables:											
Rehabilitate 17 elevators.											
6-Year Project Deliverables:											
Rehabilitate 90 elevators.											
Operating Impact:											
Newer equipment will require less maintenance and have a lower overall impact, in addition to utility savings.											
Total Project Budget ( <i>in thousands</i> ) :											
Previous Approved (FY2011-20):		\$47,627.4									
Approved Budget (FY2011-21):		68,843.0									
Change:		\$21,215.6									
Description of Significant Changes:											
The project budget has been increased compared to the previously approved six year plan to include the recently awarded contract to rehabilitate 100 elevators over the next 10 years. The increase to the budget also includes the addition of the FY2021 to the plan.											
Planned Investments ( <i>in thousands</i> ) :											
	<u>Total</u>	<u>Prior Year</u>	<u>FY2015</u>	<u>FY2016</u>	<u>FY2017</u>	<u>FY2018</u>	<u>FY2019</u>	<u>FY2020</u>	<u>FY2021</u>	<u>FY2016-21</u>	
	<u>Budget</u>	<u>Estimate</u>	<u>Forecast</u>	<u>Budget</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Total</u>	
Total Budget	\$68,843.0	\$14,488.3	\$7,580.6	\$9,609.4	\$6,615.0	\$6,378.8	\$6,951.0	\$8,610.0	\$8,610.0	\$46,774.1	

<b>Capital Improvement Program</b>											
Project ID:		CIP0073		Project Name:		Escalator Rehabilitation					
Department:		ELES		Project Type:		RAIL		Project Manager:			Cedric Watson
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.											
FY2016 Project Deliverables:											
Rehabilitate approximately 17 escalators, including the following but not limited to: Stadium-Armory, National Airport, Capitol South, L'Enfant Plaza, McPherson Square, Crystal City and Smithsonian stations.											
6-Year Project Deliverables:											
Rehabilitate approximately 145 escalators.											
Operating Impact:											
Newer equipment will require less maintenance and have a lower overall impact, in addition to utility savings.											
Total Project Budget ( <i>in thousands</i> ) :											
Previous Approved (FY2011-20):		\$131,486.3									
Approved Budget (FY2011-21):		<u>134,230.4</u>									
Change:		\$2,744.1									
Description of Significant Changes:											
Addition of FY2021 planned investments to ongoing escalator rehabilitation project. Six-year plan increased to align with updated cost estimates.											
Planned Investments ( <i>in thousands</i> ) :											
	<u>Total</u>	<u>Prior Year</u>	<u>FY2015</u>	<u>FY2016</u>	<u>FY2017</u>	<u>FY2018</u>	<u>FY2019</u>	<u>FY2020</u>	<u>FY2021</u>	<u>FY2016-21</u>	
	<u>Budget</u>	<u>Estimate</u>	<u>Forecast</u>	<u>Budget</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Total</u>	
Total Budget	\$134,230.4	\$46,534.2	\$9,517.2	\$10,794.0	\$12,395.0	\$12,710.0	\$13,760.0	\$13,760.0	\$14,760.0	\$78,179.0	

<b>Capital Improvement Program</b>										
Project ID: <input type="text" value="CIP0076"/>		Project Name: <input type="text" value="Rail Power System Upgrades"/>								
Department: <input type="text" value="CPDO"/>		Project Type: <input type="text" value="RAIL"/>		Project Manager: <input type="text" value="Kelly Reahl"/>						
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.										
FY2016 Project Deliverables:										
Completion of upgrade at (6) Tie-Breakers, Completion of upgrade at (6) Traction Power Substations, and upgrades at (6) additional TBS on the Orange an Blue lines.										
6-Year Project Deliverables:										
Improve and upgrade (10) Traction Power Substations (5) DC Gear upgrades, and (24) Tie Breaker Stations to prepare for expanded use of eight car trains.										
Operating Impact:										
Additional infrastructure maintenance will be offset by decreased frequency of breakdowns.										
Total Project Budget ( <i>in thousands</i> ) :										
Previous Approved (FY2011-20):		\$79,656.5								
Approved Budget (FY2011-21):		<u>310,811.8</u>								
Change:		\$231,155.4								
Description of Significant Changes:										
Addition of the investments to do power upgrades on the orange and blue lines, and the FY2021 planned work on the red line preparation for additional eight car trains.										
Planned Investments ( <i>in thousands</i> ) :										
	<u>Total</u>	<u>Prior Year</u>	<u>FY2015</u>	<u>FY2016</u>	<u>FY2017</u>	<u>FY2018</u>	<u>FY2019</u>	<u>FY2020</u>	<u>FY2021</u>	<u>FY2016-21</u>
	<u>Budget</u>	<u>Estimate</u>	<u>Forecast</u>	<u>Budget</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Total</u>
Total Budget	\$310,811.8	\$9,579.2	\$35,232.6	\$31,567.2	\$50,896.1	\$60,614.0	\$55,663.0	\$39,259.7	\$28,000.0	\$266,000.0
* Fiscal year budget dollars for this project reflect the amendment to the 6-year approved plan by the Board as referenced by the June 25, 2015 resolution.										

<b>Capital Improvement Program</b>											
Project ID:		CIP0078		Project Name:		Bladensburg Bus Facility Rehabilitation & Reconfiguration					
Department:		CPDO		Project Type:		BUS		Project Manager:			Kenneth Spain
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.											
FY2016 Project Deliverables:											
Complete installation of one replacement CNG Compressor. Complete installation of bus wash improvements. Issue design task, complete design, procure contract and complete installation of other CNG fueling plant upgrades for dispensers, dryer, and recovery system. Close out contracts.											
6-Year Project Deliverables:											
Complete installation of CNG upgrades and bus wash improvements and close out contracts. Unfunded needs could result with scope reduction if bids exceed current budget amounts.											
Operating Impact:											
The facility requires investment in infrastructure rehabilitation in order to maintain a safe and functional environment and to support existing CNG buses until the facility is replaced.											
Total Project Budget ( <i>in thousands</i> ) :											
Previous Approved (FY2011-20):		\$14,469.0									
Approved Budget (FY2011-21):		13,472.5									
Change:		(\$996.5)									
Description of Significant Changes:											
None.											
Planned Investments ( <i>in thousands</i> ) :											
	<u>Total</u> <u>Budget</u>	<u>Prior Year</u> <u>Estimate</u>	<u>FY2015</u> <u>Forecast</u>	<u>FY2016</u> <u>Budget</u>	<u>FY2017</u> <u>Plan</u>	<u>FY2018</u> <u>Plan</u>	<u>FY2019</u> <u>Plan</u>	<u>FY2020</u> <u>Plan</u>	<u>FY2021</u> <u>Plan</u>	<u>FY2016-21</u> <u>Total</u>	
Total Budget	\$13,472.5	\$8,520.0	\$1,300.6	\$3,651.9	-	-	-	-	-	\$3,651.9	



<b>Capital Improvement Program</b>											
Project ID:		CIP0080		Project Name:		Building Infrastructure & Systems Renewal					
Department:		CENI		Project Type:		BUS/RAIL		Project Manager:			Ivailo Karadimov
Project Description:											
This project rehabilitates, replaces, and updates existing infrastructure, systems, and other building assets including, but not limited to building exterior envelope, HVAC, plumbing and electrical systems. The main goal of the project is to improve the utilization of work and support space and incorporate new technologies to improve efficiency in building operation. Investment locations include the Jackson Graham Building (JGB) and other facilities as needed for temporary staff relocation during construction (swing space).											
FY2016 Project Deliverables:											
Finish design system rehabilitation and upgrades at JGB. Begin critical plumbing and sewer line repairs.											
6-Year Project Deliverables:											
Complete design of JGB renovations, complete critical plumbing, sewer and roof repairs at JGB.											
Operating Impact:											
Renovated workspace will better accommodate current and projected space needs. Rehabilitated infrastructure will require less routine maintenance and upgraded systems will be more efficient. Spot workspace renovations continue within JGB, however this approach will not support projected space demand at JGB. Functional efforts need to be reviewed to assure their continuity is maintained with spot renovation approach.											
Total Project Budget ( <i>in thousands</i> ) :											
Previous Approved (FY2011-20):		\$58,796.6									
Approved Budget (FY2011-21):		34,687.0									
Change:		(\$24,109.6)									
Description of Significant Changes:											
Six-year plan decreased due to the removal of the construction of the JGB rehabilitation.											
Planned Investments ( <i>in thousands</i> ) :											
	<u>Total</u> <u>Budget</u>	<u>Prior Year</u> <u>Estimate</u>	<u>FY2015</u> <u>Forecast</u>	<u>FY2016</u> <u>Budget</u>	<u>FY2017</u> <u>Plan</u>	<u>FY2018</u> <u>Plan</u>	<u>FY2019</u> <u>Plan</u>	<u>FY2020</u> <u>Plan</u>	<u>FY2021</u> <u>Plan</u>	<u>FY2016-21</u> <u>Total</u>	
Total Budget	\$34,687.0	\$17,453.6	\$873.4	\$3,700.0	\$7,760.0	\$4,900.0	-	-	-	\$16,360.0	

<b>Capital Improvement Program</b>												
Project ID:		CIP0084		Project Name:		Southern Avenue Bus Garage Replacement						
Department:		MCAP		Project Type:		BUS		Project Manager:			John Thomas	
Project Description:												
<p>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 \$199 million. The FY2011-FY2021 plan includes \$188 million, consistent with current project schedule. The remaining \$11 million is planned beyond FY2021.</p>												
FY2016 Project Deliverables:												
Complete design and start construction of the bus facility.												
6-Year Project Deliverables:												
Complete construction and commissioning of the new facility and begin bus revenue operations out of the new garage.												
Operating Impact:												
Completion of this project will add several facilities to WMATA's current assets, which will require maintenance support and will incur utility costs.												
Total Project Budget ( <i>in thousands</i> ) :												
Previous Approved (FY2011-20):		\$198,583.3										
Approved Budget (FY2011-21):		<u>187,544.1</u>										
Change:		<b>(\$11,039.2)</b>										
Description of Significant Changes:												
Six-year plan decreased to align with current schedule and cost estimate.												
Planned Investments ( <i>in thousands</i> ) :												
	<u>Total</u>	<u>Prior Year</u>	<u>FY2015</u>	<u>FY2016</u>	<u>FY2017</u>	<u>FY2018</u>	<u>FY2019</u>	<u>FY2020</u>	<u>FY2021</u>	<u>FY2016-21</u>		
	<u>Budget</u>	<u>Estimate</u>	<u>Forecast</u>	<u>Budget</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Total</u>		
Total Budget	\$187,544.1	\$24,096.8	\$11,932.8	\$39,200.0	\$66,572.0	\$38,248.0	\$6,597.3	\$105.5	\$791.7	\$151,514.5		

<b>Capital Improvement Program</b>												
Project ID:		CIP0085		Project Name:		Royal Street Bus Garage Replacement (Cinder Bed Road)						
Department:		MCAP		Project Type:		BUS		Project Manager:			John Thomas	
Project Description:												
This project is for the replacement of the existing Royal Street 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 existing facility is over 70 years old.												
FY2016 Project Deliverables:												
Continue construction of bus facility.												
6-Year Project Deliverables:												
Complete construction and commissioning of the new facility in calendar 2016 and begin bus revenue operations out of the new garage.												
Operating Impact:												
Upon opening, the Cinder Bed Road bus garage will increase Metro's inventory of facilities that require maintenance and utilities, albeit minor in the case of a new facility.												
Total Project Budget ( <i>in thousands</i> ) :												
Previous Approved (FY2011-20):		\$84,493.3										
Approved Budget (FY2011-21):		<u>83,635.9</u>										
Change:		(\$857.5)										
Description of Significant Changes:												
Six-year plan decreased to align with current cost estimates.												
Planned Investments ( <i>in thousands</i> ) :												
	<u>Total</u>	<u>Prior Year</u>	<u>FY2015</u>	<u>FY2016</u>	<u>FY2017</u>	<u>FY2018</u>	<u>FY2019</u>	<u>FY2020</u>	<u>FY2021</u>	<u>FY2016-21</u>		
	<u>Budget</u>	<u>Estimate</u>	<u>Forecast</u>	<u>Budget</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Total</u>		
Total Budget	\$83,635.9	\$21,691.3	\$7,000.0	\$30,888.6	\$24,056.0	-	-	-	-	\$54,944.6		

<b>Capital Improvement Program</b>												
Project ID:		CIP0086		Project Name:		Shepherd Parkway Bus Facility						
Department:		MCAP		Project Type:		BUS		Project Manager:			John Thomas	
Project Description:												
This project will install CNG fueling equipment at Shepherd Parkway Bus Garage.												
FY2016 Project Deliverables:												
Complete the task order for the development of a contract package for the CNG equipment. Issue the contract for bid.												
6-Year Project Deliverables:												
Installation and commissioning of CNG equipment.												
Operating Impact:												
Adding another CNG facility will allow Metro to further diversify its bus fleet.												
Total Project Budget ( <i>in thousands</i> ) :												
Previous Approved (FY2011-20):		\$11,882.0										
Approved Budget (FY2011-21):		<u>12,012.2</u>										
Change:		\$130.2										
Description of Significant Changes:												
None.												
Planned Investments ( <i>in thousands</i> ) :												
	<u>Total</u>	<u>Prior Year</u>	<u>FY2015</u>	<u>FY2016</u>	<u>FY2017</u>	<u>FY2018</u>	<u>FY2019</u>	<u>FY2020</u>	<u>FY2021</u>	<u>FY2016-21</u>		
	<u>Budget</u>	<u>Estimate</u>	<u>Forecast</u>	<u>Budget</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Total</u>		
Total Budget	\$12,012.2	\$1,957.2	-	\$740.0	\$6,061.0	\$3,254.0	-	-	-	\$10,055.0		

<b>Capital Improvement Program</b>												
Project ID:		CIP0087		Project Name:		Station Rehabilitation Program						
Department:		PLNT		Project Type:		RAIL		Project Manager:			Sherri Eley	
Project Description:												
<p>This is a major project which restores the appearance of Metrorail stations to like-new conditions. Twenty-four stations are scheduled for rehabilitation every year which results in each station receiving rehabilitation every 4 years. The project consists of a thorough cleaning and power washing of all concrete and architectural features; repairs to doors, railings, paver tiles, granite surfaces, shelters and benches, and signage; and painting of walls, railings, fare machines, ceiling coffer panels, doors, light poles, entrance gates, platform shelters, and other metal surfaces.</p>												
FY2016 Project Deliverables:												
<p>Twelve major and twelve minor station rehabilitations are scheduled for FY2016 to include: Anacostia, Braddock Road, Clarendon, Crystal City, King Street, Largo Town Center, Morgan Blvd., NoMa, Pentagon, Silver Spring, Takoma, Waterfront, Cheverly, Farragut West, Federal Triangle, Foggy Bottom, Greenbelt, Grosvenor-Strathmore, Huntington, Navy Yard, Rhode Island Ave, Ronald Reagan Washington National Airport, Stadium Amory and Van Dorn.</p>												
6-Year Project Deliverables:												
Continue 24 station rehabilitations each year for a total of 144 stations over a 6-year period.												
Operating Impact:												
Station enhancements lower regular maintenance costs.												
Total Project Budget ( <i>in thousands</i> ) :												
Previous Approved (FY2011-20):		\$106,659.2										
Approved Budget (FY2011-21):		<u>115,941.7</u>										
Change:		\$9,282.5										
Description of Significant Changes:												
Addition of FY2021 planned investments to ongoing station rehabilitation project.												
Planned Investments ( <i>in thousands</i> ) :												
	<u>Total</u>	<u>Prior Year</u>	<u>FY2015</u>	<u>FY2016</u>	<u>FY2017</u>	<u>FY2018</u>	<u>FY2019</u>	<u>FY2020</u>	<u>FY2021</u>	<u>FY2016-21</u>		
	<u>Budget</u>	<u>Estimate</u>	<u>Forecast</u>	<u>Budget</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Total</u>		
Total Budget	\$115,941.7	\$37,726.5	\$8,662.9	\$11,650.0	\$10,924.5	\$11,242.8	\$11,570.6	\$11,908.3	\$12,256.1	\$69,552.3		

<b>Capital Improvement Program</b>												
Project ID:		CIP0088		Project Name:		Station Entrance Canopies						
Department:		MCAP		Project Type:		RAIL		Project Manager:			John Thomas	
Project Description:												
This project is to install canopies over 11 station entrances with exposed escalators to protect both riders and escalators from weather.												
FY2016 Project Deliverables:												
Complete design; award contract; commence canopy installation at Metro Center, Shady Grove and Brookland (East) Stations.												
6-Year Project Deliverables:												
Complete installation of 11 canopies.												
Operating Impact:												
Canopies may reduce weather-related maintenance needs of escalators.												
Total Project Budget ( <i>in thousands</i> ) :												
Previous Approved (FY2011-20):		\$37,846.9										
Approved Budget (FY2011-21):		<u>66,084.9</u>										
Change:		\$28,238.0										
Description of Significant Changes:												
Six-year plan increased to align with current design estimate for construction and installation of canopies, labor and soft costs associated with the contract.												
Planned Investments ( <i>in thousands</i> ) :												
	<u>Total</u>	<u>Prior Year</u>	<u>FY2015</u>	<u>FY2016</u>	<u>FY2017</u>	<u>FY2018</u>	<u>FY2019</u>	<u>FY2020</u>	<u>FY2021</u>	<u>FY2016-21</u>		
	<u>Budget</u>	<u>Estimate</u>	<u>Forecast</u>	<u>Budget</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Total</u>		
Total Budget	\$66,084.9	\$850.7	\$1,450.0	\$5,500.0	\$13,947.0	\$13,287.2	\$12,200.0	\$7,500.0	\$11,350.0	\$63,784.2		

<b>Capital Improvement Program</b>											
Project ID:		CIP0093		Project Name:		Integrating Regional NEXTFARE System					
Department:		TRES		Project Type:		BUS/RAIL		Project Manager:			Ramon Abramovich
Project Description:											
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 (CPOS) units, the installation of SmarTrip Card Dispensers throughout the system, labor to support the conversion of the Fare card ERM (Express Reload Machine) Vendors (Paper Farecards) to SmarTrip(R) Sale and Reload Machines (SSRM) that vend reusable SmarTrip(R) cards and the update of Fare collection equipment to meet current requirements.											
FY2016 Project Deliverables:											
Purchase and installation of additional equipment and software for the offsite disaster recovery and back-up central system, installation and support of the CPOS units and support of Regional NextFare System and SmarTrip web store, project management assistance for the NextFare Program, technical support and labor for the implementation of the SSRM project.											
6-Year Project Deliverables:											
Active offsite disaster recovery system, installation and support of the CPOS units, support of Regional NextFare program and SmarTrip web store, conversion of Fare card ERM Vendors to SmarTrip(R) Sale and Reload Machines (SSRM). The budget anticipates that the New Electronic Payment Program (NEPP) will start to rollout by about 2017 and that, consequently, the use of Nextfare will diminish.											
Operating Impact:											
None.											
Total Project Budget (in thousands) :											
Previous Approved (FY2011-20):		\$27,151.1									
Approved Budget (FY2011-21):		<u>25,733.9</u>									
Change:		<b>(\$1,417.2)</b>									
Description of Significant Changes:											
None.											
Planned Investments (in thousands) :											
	<u>Total</u>	<u>Prior Year</u>	<u>FY2015</u>	<u>FY2016</u>	<u>FY2017</u>	<u>FY2018</u>	<u>FY2019</u>	<u>FY2020</u>	<u>FY2021</u>	<u>FY2016-21</u>	
	<u>Budget</u>	<u>Estimate</u>	<u>Forecast</u>	<u>Budget</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Total</u>	
Total Budget	\$25,733.9	\$22,440.1	\$1,087.2	\$1,458.1	\$430.0	\$235.6	\$27.6	\$55.2	-	\$2,206.6	

<b>Capital Improvement Program</b>												
Project ID:		CIP0097		Project Name:		New Electronic Payments Program						
Department:		NEPP		Project Type:		BUS/RAIL		Project Manager:			Tom Randall	
Project Description:												
<p>The new electronic payment program (NEPP) will replace the existing fare collection systems for Metrorail, Metro-operated parking facilities, Metrobus and MetroAccess services. The new system will be designed to provide a state of the art system for Metro customer that enables them to continue to use current generation SmarTrip cards, while expanding fare payment to other chip-enabled credit cards, federal government ID cards, and mobile phones using near field communications. Travel transactions and fare calculations will be performed by a central data system which is easier to maintain and manage. In addition, a sophisticated equipment monitoring system to manage maintenance and repair functions will support higher equipment up-time for customers. When fully deployed, customers will see approximately 1,000 fare gates, including ADA fare gates, 450 fare vending machines, approximately 1,500 bus payment targets, approximately 160 new payment targets at parking exit lanes, and approximately 600 NEPP-compatible smartphones for MetroAccess operators. The new system will not accept paper tickets and Metro will continue the gradual phasing out of paper fare media. The total estimated cost of this project is \$301 million. The</p>												
FY2016 Project Deliverables:												
<p>Completion of the pilot program, technical review and milestone payment for the pilot program. Other planned activities include conditional approval of non-pilot phase deliverable documents; completion of preliminary and final design review; conditional approval of the following: first article testing rail station equipment, first article testing bus equipment, training manuals, and test equipment; establish and expansion of data centers for central data system; completion of 75% of power and communications rail system infrastructure improvements; implementation of bus communication improvements; establish acquiring bank agreement for new system; establish transition plan; and develop functionality and testing of features and systems not included in Pilot phase.</p>												
6-Year Project Deliverables:												
<p>Completion of the pilot phase and submission of the pilot phase report; completion of conceptual, preliminary, and final design review and first article testing; delivery of central data system and final engineering documents; deployment of systems in rail, bus, parking, and access services; submission of as-built drawings; delivery of software licenses; start of regional partner deployments; start of warranty; continued system warranty; and continued integration of regional partners.</p>												
Operating Impact:												
<p>This project will eliminate the need for overhaul of existing equipment and address concerns for component obsolescence, lower annual maintenance costs, implement new equipment warranties, provide better capture of revenue and improve customer convenience. Replacement of the current proprietary, single source systems and devices with a non-proprietary infrastructure and devices for future expansion, enhancements and additional options for operational efficiencies.</p>												
Total Project Budget (in thousands) :												
Previous Approved (FY2011-20):		\$250,378.8										
Approved Budget (FY2011-21):		<u>242,448.6</u>										
Change:		<span style="color: red;">(\$7,930.2)</span>										
Description of Significant Changes:												
<p>Addition of the FY2021 planned investments to the ongoing new electronic payments program project. Six-year plan decreased to align with current schedule which extends beyond FY2021. Future investments beyond FY2021 will be needed.</p>												
Planned Investments (in thousands) :												
	<u>Total</u>	<u>Prior Year</u>	<u>FY2015</u>	<u>FY2016</u>	<u>FY2017</u>	<u>FY2018</u>	<u>FY2019</u>	<u>FY2020</u>	<u>FY2021</u>	<u>FY2016-21</u>		
	<u>Budget</u>	<u>Estimate</u>	<u>Forecast</u>	<u>Budget</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Total</u>		
Total Budget	\$242,448.6	\$11,768.2	\$9,097.6	\$39,977.7	\$48,000.0	\$59,000.0	\$26,825.3	\$38,067.2	\$9,712.5	\$221,582.7		



<b>Capital Improvement Program</b>											
Project ID:		CIP0099		Project Name:		Police Emergency Management Equipment					
Department:		MTPD		Project Type:		RAIL		Project Manager:			Ronald Bodmer
Project Description:											
This project upgrades WMATA facilities to support rescue and recovery; and to purchase, repair or replace damaged or obsolete rescue and recovery support equipment.											
FY2016 Project Deliverables:											
Procure an emergency vehicle simulator and other support equipment for the MTPD training facility at District Two substation.											
6-Year Project Deliverables:											
Continue to upgrade WMATA facilities to support the rescue and recovery; and to purchase, repair or replace damaged or obsolete rescue and recovery support equipment.											
Operating Impact:											
Additional equipment will require increased operational support.											
Total Project Budget ( <i>in thousands</i> ) :											
Previous Approved (FY2011-20):		\$2,811.8									
Approved Budget (FY2011-21):		<u>2,934.9</u>									
Change:		\$123.2									
Description of Significant Changes:											
Addition of FY2021 planned investments to ongoing emergency management equipment replacement and upgrade project.											
Planned Investments ( <i>in thousands</i> ) :											
	<u>Total</u> <u>Budget</u>	<u>Prior Year</u> <u>Estimate</u>	<u>FY2015</u> <u>Forecast</u>	<u>FY2016</u> <u>Budget</u>	<u>FY2017</u> <u>Plan</u>	<u>FY2018</u> <u>Plan</u>	<u>FY2019</u> <u>Plan</u>	<u>FY2020</u> <u>Plan</u>	<u>FY2021</u> <u>Plan</u>	<u>FY2016-21</u> <u>Total</u>	
Total Budget	\$2,934.9	\$1,437.0	\$126.7	\$303.5	\$204.0	\$206.1	\$214.9	\$218.9	\$223.8	\$1,371.2	

<b>Capital Improvement Program</b>											
Project ID:		CIP0101		Project Name:		Police Substation- New District 2/Training Facility					
Department:		MCAP		Project Type:		BUS/RAIL		Project Manager:			John Thomas
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.											
FY2016 Project Deliverables:											
Complete close-out of the contract & project.											
6-Year Project Deliverables:											
None.											
Operating Impact:											
Upon completion, this new facility will require allocation of additional operating resources.											
Total Project Budget ( <i>in thousands</i> ) :											
Previous Approved (FY2011-20):		\$30,850.2									
Approved Budget (FY2011-21):		<u>32,891.7</u>									
Change:		\$2,041.4									
Description of Significant Changes:											
None.											
Planned Investments ( <i>in thousands</i> ) :											
	<u>Total</u>	<u>Prior Year</u>	<u>FY2015</u>	<u>FY2016</u>	<u>FY2017</u>	<u>FY2018</u>	<u>FY2019</u>	<u>FY2020</u>	<u>FY2021</u>	<u>FY2016-21</u>	
	<u>Budget</u>	<u>Estimate</u>	<u>Forecast</u>	<u>Budget</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Total</u>	
Total Budget	\$32,891.7	\$22,763.0	\$8,163.7	\$1,965.0	-	-	-	-	-	\$1,965.0	

<b>Capital Improvement Program</b>											
Project ID:		CIP0103		Project Name:		Police Portable Radio Replacement					
Department:		MTPD		Project Type:		BUS/RAIL		Project Manager:			Ronald Pavlik
Project Description:											
This project purchases lifecycle replacement police radios and new radios for department growth.											
FY2016 Project Deliverables:											
Purchase 150 police radios and police radio support equipment.											
6-Year Project Deliverables:											
Continue purchasing police radios as needed.											
Operating Impact:											
Cyclical replacement of equipment will maintain steady operational costs.											
Total Project Budget ( <i>in thousands</i> ) :											
Previous Approved (FY2011-20):		\$4,782.0									
Approved Budget (FY2011-21):		<u>5,589.4</u>									
Change:		\$807.4									
Description of Significant Changes:											
Addition of FY2021 planned investments to ongoing police radio replacement and upgrade project.											
Planned Investments ( <i>in thousands</i> ) :											
	<u>Total</u>	<u>Prior Year</u>	<u>FY2015</u>	<u>FY2016</u>	<u>FY2017</u>	<u>FY2018</u>	<u>FY2019</u>	<u>FY2020</u>	<u>FY2021</u>	<u>FY2016-21</u>	
	<u>Budget</u>	<u>Estimate</u>	<u>Forecast</u>	<u>Budget</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Total</u>	
Total Budget	\$5,589.4	\$1,957.3	-	\$865.5	\$850.0	\$894.2	\$77.9	\$48.3	\$896.2	\$3,632.1	

<b>Capital Improvement Program</b>												
Project ID:		CIP0106		Project Name:		Special Operations Division Facility						
Department:		MCAP		Project Type:		BUS/RAIL		Project Manager:			John Thomas	
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. This facility includes the Special Response Team, Transit Anti-Crime Team, Auto Theft Unit, K-9 Teams, Explosive Ordinance Disposal Team, and Motorcycle Unit.												
FY2016 Project Deliverables:												
Complete close-out of the contract & project.												
6-Year Project Deliverables:												
None.												
Operating Impact:												
Operating impact of the new facilities will be determined upon completion of the design. Utility consumption, routine maintenance and personnel cost will increase (three new buildings).												
Total Project Budget ( <i>in thousands</i> ) :												
Previous Approved (FY2011-20):		\$28,675.8										
Approved Budget (FY2011-21):		<u>30,145.8</u>										
Change:		\$1,470.0										
Description of Significant Changes:												
None.												
Planned Investments ( <i>in thousands</i> ) :												
	<u>Total</u>	<u>Prior Year</u>	<u>FY2015</u>	<u>FY2016</u>	<u>FY2017</u>	<u>FY2018</u>	<u>FY2019</u>	<u>FY2020</u>	<u>FY2021</u>	<u>FY2016-21</u>		
	<u>Budget</u>	<u>Estimate</u>	<u>Forecast</u>	<u>Budget</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Total</u>		
Total Budget	\$30,145.8	\$20,453.8	\$9,102.0	\$590.0	-	-	-	-	-	\$590.0		

<b>Capital Improvement Program</b>											
Project ID:		CIP0108		Project Name:		Red Line Rehabilitation Stage Two					
Department:		CPDO		Project Type:		RAIL		Project Manager:			Kenneth Spain
Project Description:											
This project is the second stage of a comprehensive rehabilitation of the Red Line and will focus on rebuilding systems and infrastructure to extend useful life and improve reliability. The total estimated cost of this project is approximately \$300 million. The FY2011 - FY2021 project plan includes \$170 million, consistent with the current project schedule. The remaining \$130 million is planned beyond FY2021.											
FY2016 Project Deliverables:											
Continue planning, design, engineering and contract procurement. Procure and award first contract of three contracts of Red Line Stage two. Start preparation work for the waterproofing at Medical Center, Grosvenor Ariel Structure retrofit, Grosvenor Platform and canopy rehab, and other Red Line 2.1 contract activities.											
6-Year Project Deliverables:											
<p>Completion of the first contract of Red Line stage 2 rehabilitation: Waterproofing at Medical Center crossover; Retrofit piers of Grosvenor aerial structure; upgrade station and tunnel lighting; repair concrete leaks and deterioration in tunnel; rehab cable supports in tunnel; repair platform slabs and upgrade/replace tiles; electrical in AC switchboard rooms; upgrade and replacement of emergency trip stations; public address, and CCTV system restoration.</p> <p>Complete design of second and third contract documents for Red Line Stage two and procure construction contracts. Procure, Award and Completion of the Second contract of Red Line stage 2 rehabilitation: Rehabilitations of stations, Service rooms, fan shafts, vent shafts, traction power substations and tie breaker substations for all rehabilitation work which will not required excessive track rights.</p> <p>Due to insufficient funding in FY16, deferred to FY17 the contract for Rehab of Rhode Island Platform to replace existing quarry tiles and setting bed with waterproofing, mortar bed and concrete pavers. This rehab will bring all Red line above ground platforms surface to WMATA new standard of concrete paver surface which is more durable and not slippery.</p> <p>Due to insufficient funding in FY16, Survey and design second contract documents of second contract of Red Line Stage 2 for station rehab work between Woodley Park and Friendship Heights has been deferred to FY18.</p>											
Operating Impact:											
Operating costs will be reduced as a result of facility rehabilitation.											
Total Project Budget (in thousands) :											
Previous Approved (FY2011-20):		\$195,129.1									
Approved Budget (FY2011-21):		<u>177,718.3</u>									
Change:		(\$17,410.8)									
Description of Significant Changes:											
Addition of FY2021 planned investment and a total reduction in the estimated cost of the project between FY2016 and FY2021 due to the extension of the project timeline beyond FY2021. Future investments beyond FY2021 will be required to complete all rehabilitation components.											
Planned Investments (in thousands) :											
	<u>Total Budget</u>	<u>Prior Year Estimate</u>	<u>FY2015 Forecast</u>	<u>FY2016 Budget</u>	<u>FY2017 Plan</u>	<u>FY2018 Plan</u>	<u>FY2019 Plan</u>	<u>FY2020 Plan</u>	<u>FY2021 Plan</u>	<u>FY2016-21 Total</u>	
Total Budget	\$177,718.3	\$3,189.8	\$3,973.4	\$7,800.0	\$26,750.0	\$36,400.0	\$49,863.4	\$36,435.5	\$13,306.2	\$170,555.1	

<b>Capital Improvement Program</b>										
Project ID: CIP0110		Project Name: Orange/Blue Line Rehabilitation Stage One								
Department: CPDO		Project Type: RAIL		Project Manager: Robert LoConte						
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.										
FY2016 Project Deliverables:										
Rehabilitation of station ceilings; replacement of station ADA and quarry tile; rehabilitation of equipment in AC switchgear rooms; rehabilitation and upgrades at traction power substations; replacement of under platform ductwork; replacement of drainage pump stations; replacement of station kiosks; replacement of station entrance gates; upgrade and replace signage; and replacement of tiebreakers. Complete the rehabilitation of the National Airport pocket track.										
6-Year Project Deliverables:										
Rehabilitation of stations to include: upgrades to kiosks; platform slab replacement and at Minnesota Ave and Deanwood Stations; Platform tile replacement at Arlington Cemetery Station; station signage upgrade; traction power system upgrades; electrical upgrades in AC switchboard rooms; upgrade and replacement of emergency trip stations; upgrades to station ventilation; replacement of under platform ductwork; replacement on sewer ejector systems; and replacement of drainage pump stations. The work also includes rehabilitation of the National Airport pocket track. Construction of National Airport platform slab rehabilitation will be performed in FY17.										
Operating Impact:										
Operating costs will be reduced as a result of facility rehabilitation.										
Total Project Budget (in thousands) :										
Previous Approved (FY2011-20):		\$384,565.9								
Approved Budget (FY2011-21):		<u>384,932.0</u>								
Change:		\$366.0								
Description of Significant Changes:										
The design and construction of the vent shaft elevation, drainage rehabilitation and drainage/flood/piping replacement programs will be funded through a new CIP project supported by the Resiliency Grant. The rehabilitation of the National Airport platforms was added to this project and the construction rehabilitation was moved from FY16 to FY17.										
Planned Investments (in thousands) :										
	<u>Total</u> <u>Budget</u>	<u>Prior Year</u> <u>Estimate</u>	<u>FY2015</u> <u>Forecast</u>	<u>FY2016</u> <u>Budget</u>	<u>FY2017</u> <u>Plan</u>	<u>FY2018</u> <u>Plan</u>	<u>FY2019</u> <u>Plan</u>	<u>FY2020</u> <u>Plan</u>	<u>FY2021</u> <u>Plan</u>	<u>FY2016-21</u> <u>Total</u>
Total Budget	\$384,932.0	\$192,890.1	\$52,041.9	\$58,000.0	\$48,000.0	\$34,000.0	-	-	-	\$140,000.0

<b>Capital Improvement Program</b>												
Project ID:		CIP0116		Project Name:		Rail Yard Facility Repairs						
Department:		CPDO		Project Type:		RAIL		Project Manager:			Mark Magnussen	
Project Description:												
This project for the rehabilitation of Alexandria, Brentwood, and New Carrollton Rail Yards that were put into service between 1976 and 1983. The scope of work will depend on the specific facility and rehabilitation 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 by issuing change orders to the Yard 1 contract. Rehabilitation of the rail care lifts at Rail Yards.												
FY2016 Project Deliverables:												
Complete rehabilitation of the Yard Operations Building, Site Systems & Structures, Car Maintenance Building, and all remaining areas at New Carrollton Yard. Complete rehabilitation of the Yard Operations Building at Alexandria Yard. Award Railcar Lift Rehabilitation contract and begin construction at New Carrollton and Alexandria Yards.												
6-Year Project Deliverables:												
Rehabilitate interior and exterior walls, floors, and ceilings. Replace shop/building equipment, lighting, and electrical systems. Rehabilitate offices, locker rooms, and bathrooms. Rehabilitate HVAC and plumbing fixtures. Upgrade security and public address systems. Installation of control tower fire escape, rehabilitation of pavement, fences, street and yard lightening, and overhaul of fire hydrants.												
Operating Impact:												
Operating costs will be reduced as a result of facility rehabilitation.												
Total Project Budget ( <i>in thousands</i> ) :												
Previous Approved (FY2011-20):		\$155,075.8										
Approved Budget (FY2011-21):		149,964.0										
Change:		(\$5,111.8)										
Description of Significant Changes:												
Six-year plan decreased to align with current cost estimates.												
Planned Investments ( <i>in thousands</i> ) :												
	<u>Total</u>	<u>Prior Year</u>	<u>FY2015</u>	<u>FY2016</u>	<u>FY2017</u>	<u>FY2018</u>	<u>FY2019</u>	<u>FY2020</u>	<u>FY2021</u>	<u>FY2016-21</u>		
	<u>Budget</u>	<u>Estimate</u>	<u>Forecast</u>	<u>Budget</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Total</u>		
Total Budget	\$149,964.0	\$57,431.0	\$12,641.8	\$26,500.0	\$39,182.0	\$14,209.2	-	-	-	\$79,891.2		

<b>Capital Improvement Program</b>											
Project ID:		CIP0119		Project Name:		Bus Garage Facility Repairs					
Department:		CPDO		Project Type:		BUS		Project Manager:			Kenneth Spain
Project Description:											
This project is a bus and auxiliary facility rehabilitation of Western, Northern, and Landover bus garages, Metro Supply Facility, Landover Open Storage and other bus and auxiliary facilities. Rehabilitation will include all systems and infrastructure design and construction work to increase overall efficiency, replace worn or obsolete equipment, improve safety, improve employee productivity, repair structures, and add capacity and capabilities to maintain buses. The project also improves security structures, systems, and components at bus and auxiliary facilities.											
FY2016 Project Deliverables:											
Complete punch list work at the Landover bus division (Phase III) and the Metro supply facility and Open Material Storage Facility (Phase IV) rehabilitation. Close out the Bus Rehab Stage-1 contract.											
6-Year Project Deliverables:											
Complete punch list work and close out the contract.											
Operating Impact:											
Operating costs will be reduced as a result of facility rehabilitation. Capacity, personnel safety, and security will be enhanced as a result of the rehabilitation work.											
Total Project Budget ( <i>in thousands</i> ) :											
Previous Approved (FY2011-20):		\$101,694.8									
Approved Budget (FY2011-21):		<u>107,721.8</u>									
Change:		\$6,026.9									
Description of Significant Changes:											
Estimated cost to complete the bus garage facility repairs is higher than previously anticipated due to additions to the scope of the project.											
Planned Investments ( <i>in thousands</i> ) :											
	<u>Total</u>	<u>Prior Year</u>	<u>FY2015</u>	<u>FY2016</u>	<u>FY2017</u>	<u>FY2018</u>	<u>FY2019</u>	<u>FY2020</u>	<u>FY2021</u>	<u>FY2016-21</u>	
	<u>Budget</u>	<u>Estimate</u>	<u>Forecast</u>	<u>Budget</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Total</u>	
Total Budget	\$107,721.8	\$88,821.8	\$9,200.0	\$9,700.0	-	-	-	-	-	\$9,700.0	



<b>Capital Improvement Program</b>										
Project ID:		CIP0126		Project Name: Financial Planning, Project Administration, and System Wide Infrastructure Upgrades						
Department:		OMBS		Project Type:		BUS/RAIL		Project Manager: Lance Flint		
Project Description:										
This project provides support for capital program management and grant administration improvements.										
FY2016 Project Deliverables:										
Continue compliance activities related to capital budgeting and program management, financial system technical support, grant administration support and improvements as well as capital program policy development.										
6-Year Project Deliverables:										
Capital program management, financial system technical support, and grant administration support and improvements.										
Operating Impact:										
None.										
Total Project Budget ( <i>in thousands</i> ) :										
Previous Approved (FY2011-20):		\$15,020.3								
Approved Budget (FY2011-21):		<u>57,166.4</u>								
Change:		\$42,146.0								
Description of Significant Changes:										
In FY2015 capital program costs previously allocated to various projects were consolidated into this project to improve management and better meet compliance requirements. Addition of FY2021 planned investment to ongoing financial planning and program administration.										
Planned Investments ( <i>in thousands</i> ) :										
	<u>Total</u> <u>Budget</u>	<u>Prior Year</u> <u>Estimate</u>	<u>FY2015</u> <u>Forecast</u>	<u>FY2016</u> <u>Budget</u>	<u>FY2017</u> <u>Plan</u>	<u>FY2018</u> <u>Plan</u>	<u>FY2019</u> <u>Plan</u>	<u>FY2020</u> <u>Plan</u>	<u>FY2021</u> <u>Plan</u>	<u>FY2016-21</u> <u>Total</u>
Total Budget	\$57,166.4	\$20,741.6	\$17,416.0	\$8,908.8	\$2,200.0	\$2,200.0	\$2,200.0	\$1,750.0	\$1,750.0	\$19,008.8

<b>Capital Improvement Program</b>											
Project ID:		CIP0127		Project Name:		Support Equipment - MTPD					
Department:		MTPD		Project Type:		BUS/RAIL		Project Manager:			Ronald Pavlik
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.											
FY2016 Project Deliverables:											
Purchase police body mounted or point of view cameras including initial warranties and all support systems required; and purchase bullet resistant safety vest for life cycle replacement.											
6-Year Project Deliverables:											
Continue upgrading storage and training facilities to support the Police and to purchase, repair or replace damaged or obsolete police support equipment.											
Operating Impact:											
Additional equipment will require increased operational support.											
Total Project Budget ( <i>in thousands</i> ) :											
Previous Approved (FY2011-20):		\$13,772.7									
Approved Budget (FY2011-21):		14,454.4									
Change:		\$681.7									
Description of Significant Changes:											
Addition of FY2021 planned investment to ongoing equipment replacement project.											
Planned Investments ( <i>in thousands</i> ) :											
	<u>Total</u> <u>Budget</u>	<u>Prior Year</u> <u>Estimate</u>	<u>FY2015</u> <u>Forecast</u>	<u>FY2016</u> <u>Budget</u>	<u>FY2017</u> <u>Plan</u>	<u>FY2018</u> <u>Plan</u>	<u>FY2019</u> <u>Plan</u>	<u>FY2020</u> <u>Plan</u>	<u>FY2021</u> <u>Plan</u>	<u>FY2016-21</u> <u>Total</u>	
Total Budget	\$14,454.4	\$7,042.3	\$187.3	\$1,679.0	\$1,050.0	\$1,033.2	\$1,084.5	\$1,088.5	\$1,289.6	\$7,224.8	

<b>Capital Improvement Program</b>												
Project ID:		CIP0128		Project Name:		Data Governance and Business Intelligence						
Department:		IT		Project Type:		BUS/RAIL		Project Manager:			Beth Durham	
Project Description:												
This project implements business intelligence reporting and analysis that includes historical trending and graphical capabilities for viewing data and integrating data to permit 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.												
FY2016 Project Deliverables:												
Reporting and analytics for Rail and Bus Availability, Revenue & Ridership, Safety, and MTPD; enhance Overtime & Fatigue and Financial reporting and analysis; produce data integration strategy; and continue data integration efforts.												
6-Year Project Deliverables:												
Execute data integration strategy; and extend business intelligence to include Rail Operations, Trapeze, and other key data sources with ability to support analytics and dashboards for the total range of performance indicators and analytic needs.												
Operating Impact:												
This project may require additional operating budget support.												
Total Project Budget ( <i>in thousands</i> ) :												
Previous Approved (FY2011-20):		\$10,950.2										
Approved Budget (FY2011-21):		9,723.8										
Change:		(\$1,226.4)										
Description of Significant Changes:												
Addition of FY2021 planned investments to ongoing project to support development of comprehensive program for data management, data quality, and data reporting. Six-year plan decreased based on updated project schedule.												
Planned Investments ( <i>in thousands</i> ) :												
	<u>Total</u>	<u>Prior Year</u>	<u>FY2015</u>	<u>FY2016</u>	<u>FY2017</u>	<u>FY2018</u>	<u>FY2019</u>	<u>FY2020</u>	<u>FY2021</u>	<u>FY2016-21</u>		
	<u>Budget</u>	<u>Estimate</u>	<u>Forecast</u>	<u>Budget</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Total</u>		
Total Budget	\$9,723.8	\$3,907.7	\$1,240.0	\$1,187.0	\$855.0	\$758.2	\$676.3	\$652.0	\$447.6	\$4,576.1		

<b>Capital Improvement Program</b>												
Project ID:		CIP0131		Project Name:		Credit Facility						
Department:		TRES		Project Type:		BUS/RAIL		Project Manager:			Melissa Lee	
Project Description:												
This project funds the lines of credit and interim financing costs necessary to finance capital program cash flow needs.												
FY2016 Project Deliverables:												
Not applicable - Line of Credit/Interim Financing												
6-Year Project Deliverables:												
Not applicable - Line of Credit/Interim												
Operating Impact:												
None.												
Total Project Budget ( <i>in thousands</i> ) :												
Previous Approved (FY2011-20):		\$20,117.1										
Approved Budget (FY2011-21):		<u>23,726.8</u>										
Change:		\$3,609.6										
Description of Significant Changes:												
Addition of FY2021 planned investments. Six-year plan increased due to the addition of interim financing costs.												
Planned Investments ( <i>in thousands</i> ) :												
	<u>Total</u>	<u>Prior Year</u>	<u>FY2015</u>	<u>FY2016</u>	<u>FY2017</u>	<u>FY2018</u>	<u>FY2019</u>	<u>FY2020</u>	<u>FY2021</u>	<u>FY2016-21</u>		
	<u>Budget</u>	<u>Estimate</u>	<u>Forecast</u>	<u>Budget</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Total</u>		
Total Budget	\$23,726.8	\$4,616.1	\$3,050.4	\$4,500.0	\$2,309.5	\$2,312.7	\$2,312.7	\$2,312.7	\$2,312.7	\$16,060.2		

<b>Capital Improvement Program</b>											
Project ID:		CIP0132		Project Name:		Elevator/Escalator Repairables					
Department:		ELES		Project Type:		RAIL		Project Manager:			Ron Pittman
Project Description:											
This project provides the capital repairs, upgrades, and replacement components for elevators and escalators beyond repair.											
FY2016 Project Deliverables:											
Refurbish approximately 6,200 steps, 170 speed reducers, and 240 brake boards. Degrease, clean & deodorize approximately 300 escalators/wellways and 150 elevators/hoistways. Purchase approximately 4,804 new escalator steps.											
6-Year Project Deliverables:											
Refurbish approximately 37,000 steps, 1,020 speed reducers, and 1,440 brake boards and purchase 3,600 racks and axles. Degrease, clean & deodorize approximately 3,552 escalator wellways and 1,248 elevator hoistways. Purchase approximately 10,200 new escalator steps.											
Operating Impact:											
Project will enhance warehouse inventory and allow vertical transportation equipment to return to service with less delay due to parts acquisition.											
Total Project Budget ( <i>in thousands</i> ) :											
Previous Approved (FY2011-20):		\$72,326.4									
Approved Budget (FY2011-21):		<u>75,242.9</u>									
Change:		\$2,916.5									
Description of Significant Changes:											
Addition of FY2021 planned investments to ongoing elevator and escalator repair project. Six-year plan decreased to align with current project costs.											
Planned Investments ( <i>in thousands</i> ) :											
	<u>Total</u>	<u>Prior Year</u>	<u>FY2015</u>	<u>FY2016</u>	<u>FY2017</u>	<u>FY2018</u>	<u>FY2019</u>	<u>FY2020</u>	<u>FY2021</u>	<u>FY2016-21</u>	
	<u>Budget</u>	<u>Estimate</u>	<u>Forecast</u>	<u>Budget</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Total</u>	
Total Budget	\$75,242.9	\$24,451.5	\$4,263.0	\$7,678.3	\$7,560.0	\$7,665.0	\$7,770.0	\$7,875.0	\$7,980.0	\$46,528.3	

<b>Capital Improvement Program</b>												
Project ID:		CIP0133		Project Name:		Wayside Work Equipment						
Department:		CPDO		Project Type:		RAIL		Project Manager:			Douglass Simkins	
Project Description:												
This project will install a safety signaling system at rail portals and other locations to alert personnel to approaching trains.												
FY2016 Project Deliverables:												
Installation of 8 portals in 4 Train Control Rooms.												
6-Year Project Deliverables:												
Install Personal Approach Warning Systems at 12 portals.												
Operating Impact:												
Additional system components will require maintenance support.												
Total Project Budget ( <i>in thousands</i> ) :												
Previous Approved (FY2011-20):		\$13,065.7										
Approved Budget (FY2011-21):		<u>15,548.1</u>										
Change:		\$2,482.4										
Description of Significant Changes:												
Six-year plan increased to include the installation of portal warning systems at 12 additional locations.												
Planned Investments ( <i>in thousands</i> ) :												
	<u>Total</u>	<u>Prior Year</u>	<u>FY2015</u>	<u>FY2016</u>	<u>FY2017</u>	<u>FY2018</u>	<u>FY2019</u>	<u>FY2020</u>	<u>FY2021</u>	<u>FY2016-21</u>		
	<u>Budget</u>	<u>Estimate</u>	<u>Forecast</u>	<u>Budget</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Total</u>		
Total Budget	\$15,548.1	\$7,548.8	\$1,934.8	\$2,070.1	\$2,558.0	\$1,436.5	-	-	-	\$6,064.6		

<b>Capital Improvement Program</b>										
Project ID: CIP0135		Project Name: Train Control Signal and Traction Power System Interface								
Department: CENI		Project Type: RAIL		Project Manager: Ashton Robinson						
Project Description:										
This project funds engineering support and modifications as needed for the train control signaling and traction power system interface. To date the following deliverable have been completed: Traction power computer simulation to determine the capacity upgrade for mainline substations; Determine the quantity of cabling necessary to support the upgraded substations; Determine the quantity of high current impedance bonds necessary to support the upgrade substations. Engineering design to replace electro-mechanical relays with microprocessor controlled relays.										
FY2016 Project Deliverables:										
This project is scheduled to be completed in FY2015. There are no deliverables in FY2016. Close out of contracts and final payments to vendors..										
6-Year Project Deliverables:										
None.										
Operating Impact:										
None.										
Total Project Budget (in thousands) :										
Previous Approved (FY2011-20):		\$5,006.0								
Approved Budget (FY2011-21):		<u>\$,714.0</u>								
Change:		\$708.0								
Description of Significant Changes:										
None.										
Planned Investments (in thousands) :										
	<u>Total</u> <u>Budget</u>	<u>Prior Year</u> <u>Estimate</u>	<u>FY2015</u> <u>Forecast</u>	<u>FY2016</u> <u>Budget</u>	<u>FY2017</u> <u>Plan</u>	<u>FY2018</u> <u>Plan</u>	<u>FY2019</u> <u>Plan</u>	<u>FY2020</u> <u>Plan</u>	<u>FY2021</u> <u>Plan</u>	<u>FY2016-21</u> <u>Total</u>
Total Budget	\$5,714.0	\$3,480.4	\$2,073.2	\$160.4	-	-	-	-	-	\$160.4

<b>Capital Improvement Program</b>																																
Project ID: <input type="text" value="CIP0136"/>		Project Name: <input type="text" value="Radio Infrastructure Replacement - T-Band Relocation"/>																														
Department: <input type="text" value="CPDO"/>		Project Type: <input type="text" value="RAIL"/>		Project Manager: <input type="text" value="Allen Wonder"/>																												
<p>Project Description:</p> <p>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 (UHF) radio system. This project will also maintain the current CRCS in working order until the frequencies are secured and the replacement can begin. This project will require coordination with the FCC, DC Office of Unified Command (DC-OUC) and Region 20 to secure 700 MHz frequencies.</p>																																
<p>FY2016 Project Deliverables:</p> <p>Award contracts for the acquisition and implementation of new 700 MHz radio system infrastructure and subscriber radios. Begin replacing WMATA's CRCS. Deliverables in FY2016 include three distinct elements of work: (1) The replacement of the master site zone controller system at Carmen Turner Facility and relocation of the MTPD Dispatch controllers to the new SOCC; (2) installation of 700 MHz Cable the below ground system: In order to complete this project before the Congressionally mandated deadline, we must hire internal resources (Force Account labor), procure equipment and materials to begin installation activities no later than Jan 2nd, 2016. Materials will include hanger hardware and associated support for a six month installation effort. Equipment will include rail vehicles, tooling, and warehousing and logistics to support installation activities. This also includes surveying underground locations for equipment placement and the placement of hanger materials in the tunnel system. Engineering aides such as scanner systems and cameras will be required. (3) Procurement for a new 700 Mhz radio system phase will begin in FY16 and will take a year to award. Sometime will be needed for engineering review, construction site walks, and technical evaluation. We will have additional hiring needs towards the end of FY16 to prepare for the construction phase.</p>																																
<p>6-Year Project Deliverables:</p> <p>In accordance with the federal mandate WMATA will replace the entire existing Comprehensive Radio Communications System (CRCS) system with a new system operating in the 700 MHz frequency range allocated for Public Safety radio communications. This project requires replacement of the above ground radio infrastructure, the replacement of the below ground distributed antenna system and the replacement of all mobile and portable radios used in the current WMATA Comprehensive Radio Communications System. Commissioning of the belowground system. Commissioning of the aboveground system. Integration of new master site zone controller. Procurement and installation of subscriber units for WMATA revenue vehicles, dispatch consoles and personnel.</p>																																
<p>Operating Impact:</p> <p>Lease cost for above ground remote sites as well as T-1 data service fees will increase because of the greater number of above ground antenna sites. Also, maintenance costs may increase due to greater number of above ground antenna sites.</p>																																
<p>Total Project Budget (<i>in thousands</i>) :</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 60%;">Previous Approved (FY2011-20):</td> <td style="width: 40%; text-align: right;">\$158,583.3</td> </tr> <tr> <td>Approved Budget (FY2011-21):</td> <td style="text-align: right;"><u>208,396.8</u></td> </tr> <tr> <td>Change:</td> <td style="text-align: right;">\$49,813.5</td> </tr> </table>											Previous Approved (FY2011-20):	\$158,583.3	Approved Budget (FY2011-21):	<u>208,396.8</u>	Change:	\$49,813.5																
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Approved Budget (FY2011-21):	<u>208,396.8</u>																															
Change:	\$49,813.5																															
<p>Description of Significant Changes:</p> <div style="border: 1px solid black; height: 50px; width: 100%;"></div>																																
<p>Planned Investments (<i>in thousands</i>) :</p> <table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <tr> <th></th> <th>Total Budget</th> <th>Prior Year Estimate</th> <th>FY2015 Forecast</th> <th>FY2016 Budget</th> <th>FY2017 Plan</th> <th>FY2018 Plan</th> <th>FY2019 Plan</th> <th>FY2020 Plan</th> <th>FY2021 Plan</th> <th>FY2016-21 Total</th> </tr> <tr> <td>Total Budget</td> <td>\$208,396.8</td> <td>\$3,139.6</td> <td>\$4,100.0</td> <td>\$10,200.0</td> <td>\$36,549.0</td> <td>\$66,540.0</td> <td>\$54,368.2</td> <td>\$25,300.0</td> <td>\$8,200.0</td> <td>\$201,157.2</td> </tr> </table>												Total Budget	Prior Year Estimate	FY2015 Forecast	FY2016 Budget	FY2017 Plan	FY2018 Plan	FY2019 Plan	FY2020 Plan	FY2021 Plan	FY2016-21 Total	Total Budget	\$208,396.8	\$3,139.6	\$4,100.0	\$10,200.0	\$36,549.0	\$66,540.0	\$54,368.2	\$25,300.0	\$8,200.0	\$201,157.2
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<b>Capital Improvement Program</b>																															
Project ID:	<input type="text" value="CIP0138"/>	Project Name:	<input type="text" value="System-wide Infrastructure Rehabilitation"/>																												
Department:	<input type="text" value="CPDO"/>	Project Type:	<input type="text" value="RAIL"/>	Project Manager:	<input type="text" value="Hitendra Patel"/>																										
<b>Project Description:</b> 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 structural and parking lot repairs, urgent system repairs, correct standpipes as needed to meet pressure and flow requirements, camera installation and replacement at various metro facilities and various engineering studies.																															
<b>FY2016 Project Deliverables:</b> Includes continuation and completion of various system infrastructure rehabilitation contracts currently underway and close-out of those contracts.																															
<b>6-Year Project Deliverables:</b> Includes continuation and completion of various system infrastructure rehabilitation contracts currently underway and close-out of those contracts.																															
<b>Operating Impact:</b> Modest increase of infrastructure maintenance is offset by expected reduction of breakdowns and repair costs.																															
<b>Total Project Budget (in thousands) :</b> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%;">Previous Approved (FY2011-20):</td> <td style="width: 70%; text-align: right;">\$188,162.1</td> </tr> <tr> <td>Approved Budget (FY2011-21):</td> <td style="text-align: right;">161,864.4</td> </tr> <tr> <td>Change:</td> <td style="text-align: right; color: red;">(\$26,297.6)</td> </tr> </table>										Previous Approved (FY2011-20):	\$188,162.1	Approved Budget (FY2011-21):	161,864.4	Change:	(\$26,297.6)																
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Approved Budget (FY2011-21):	161,864.4																														
Change:	(\$26,297.6)																														
<b>Description of Significant Changes:</b> None.																															
<b>Planned Investments(in thousands) :</b> <table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th style="width: 10%;"></th> <th style="width: 10%;"><u>Total</u> Budget</th> <th style="width: 10%;"><u>Prior Year</u> Estimate</th> <th style="width: 10%;"><u>FY2015</u> Forecast</th> <th style="width: 10%;"><u>FY2016</u> Budget</th> <th style="width: 10%;"><u>FY2017</u> Plan</th> <th style="width: 10%;"><u>FY2018</u> Plan</th> <th style="width: 10%;"><u>FY2019</u> Plan</th> <th style="width: 10%;"><u>FY2020</u> Plan</th> <th style="width: 10%;"><u>FY2021</u> Plan</th> <th style="width: 10%;"><u>FY2016-21</u> Total</th> </tr> </thead> <tbody> <tr> <td>Total Budget</td> <td>\$161,864.4</td> <td>\$160,001.8</td> <td>\$1,862.6</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> </tr> </tbody> </table>											<u>Total</u> Budget	<u>Prior Year</u> Estimate	<u>FY2015</u> Forecast	<u>FY2016</u> Budget	<u>FY2017</u> Plan	<u>FY2018</u> Plan	<u>FY2019</u> Plan	<u>FY2020</u> Plan	<u>FY2021</u> Plan	<u>FY2016-21</u> Total	Total Budget	\$161,864.4	\$160,001.8	\$1,862.6	-	-	-	-	-	-	-
	<u>Total</u> Budget	<u>Prior Year</u> Estimate	<u>FY2015</u> Forecast	<u>FY2016</u> Budget	<u>FY2017</u> Plan	<u>FY2018</u> Plan	<u>FY2019</u> Plan	<u>FY2020</u> Plan	<u>FY2021</u> Plan	<u>FY2016-21</u> Total																					
Total Budget	\$161,864.4	\$160,001.8	\$1,862.6	-	-	-	-	-	-	-																					
* Due to a technical error, the project page reflects the Board approved budget amount for each fiscal year. Finance staff will be returning to the Board for an amendment to this budget in Q1 of FY2016.																															

<b>Capital Improvement Program</b>																
Project ID: <input type="text" value="CIP0139"/>		Project Name: <input type="text" value="National Transportation Safety Board Recommendations"/>														
Department: <input type="text" value="CENV"/>		Project Type: <input type="text" value="Rail"/>		Project Manager: <input type="text" value="Tara Soesbee"/>												
Project Description:																
<p>Because of the susceptibility to pulse-type parasitic oscillation that can cause a loss of train detection by the Generation 2 General Railway Signal (GRS) Company audio frequency track circuit modules, this project will establish a program to replace all of these modules within the Metrorail system. This work will involve removing all existing GRS circuits and procuring and installing new track circuits. Metro has completed track circuit replacements on the Red Line from Woodley Park to Shady Grove. In FY2014, track circuit replacements is completed on the Orange/Blue lines from McPherson metro station through National Airport station and from Courthouse through Ballston metro stations. In addition to that, in FY2014 a new track circuit project is released for 23 stations on C, E, F, G and K lines. This project will bring Metro in compliance with NTSB recommendation R-10-8. Procurement and installation of onboard event recorders on the 4000 Series railcars. Additional event recorders that were originally planned to be installed on the 1000 Series cars will be procured but are no longer planned to be installed since that series of vehicles is being to be retired.</p>																
FY2016 Project Deliverables:																
<p>Complete designs for all of the remaining track circuit locations. Complete replacement of 8 track circuits this work will include the replacement of approximately 240 bonds and 240 modules. Procurement of 148 - Event Recorders (without installation), Wiring for Event Recorders, Bench Test Equipment (BTE), Contract documents such as Illustrated parts catalog, Manuals and training material. Update all 2K/3K, 5K and 6K vehicles with functional, fleet compatible VMS systems. Assembly of 75 kits, procurement of communications software, event recorder logs, a data acquisition backup module for information received from train line signals, interfaces between onboard event recorders and vehicle monitoring systems, a portable testing unit and master controller software to monitor the railcars master controller.</p>																
6-Year Project Deliverables:																
Close NTSB recommendations R-10-8, complete the upgrade on 2K/3K, 5K and 6K fleets and complete the warranty period.																
Operating Impact:																
Total Project Budget ( <i>in thousands</i> ) :																
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 80%;">Previous Approved (FY2011-20):</td> <td style="width: 20%; text-align: right;">-</td> </tr> <tr> <td>Approved Budget (FY2011-21):</td> <td style="text-align: right;"><u>202,266.7</u></td> </tr> <tr> <td>Change:</td> <td style="text-align: right;">\$202,266.7</td> </tr> </table>											Previous Approved (FY2011-20):	-	Approved Budget (FY2011-21):	<u>202,266.7</u>	Change:	\$202,266.7
Previous Approved (FY2011-20):	-															
Approved Budget (FY2011-21):	<u>202,266.7</u>															
Change:	\$202,266.7															
Description of Significant Changes:																
Planned Investments ( <i>in thousands</i> ) :																
	<u>Total Budget</u>	<u>Prior Year Estimate</u>	<u>FY2015 Forecast</u>	<u>FY2016 Budget</u>	<u>FY2017 Plan</u>	<u>FY2018 Plan</u>	<u>FY2019 Plan</u>	<u>FY2020 Plan</u>	<u>FY2021 Plan</u>	<u>FY2016-21 Total</u>						
Total Budget	\$202,266.7	\$153,596.6	\$20,537.2	\$22,932.9	\$5,200.0	-	-	-	-	\$28,132.9						

<b>Capital Improvement Program</b>											
Project ID:		CIP0140		Project Name:		Rail Mileage Based Asset Management					
Department:		CENV		Project Type:		RAIL		Project Manager:			Tara Soesbee
Project Description:											
This project is intended to improve rail car fleet reliability through implementation of rail car configuration management, rail car mileage capture, mobile storeroom inventory management and mileage-based preventive maintenance.											
FY2016 Project Deliverables:											
Install and implement Asset Configuration Manager and Mobile Maximo for inventory.											
6-Year Project Deliverables:											
Complete the installation of the Asset Configuration Manager and Mobile Maximo for inventory in Maximo along with various testing and production environments.											
Operating Impact:											
This tool will improve railcar reliability based on the ability of maintenance managers and engineers to adequately manage and analyze railcar component configurations.											
Total Project Budget ( <i>in thousands</i> ) :											
Previous Approved (FY2011-20):		\$10,790.1									
Approved Budget (FY2011-21):		10,697.9									
Change:		(\$92.3)									
Description of Significant Changes:											
Planned Investments ( <i>in thousands</i> ) :											
	<u>Total</u> <u>Budget</u>	<u>Prior Year</u> <u>Estimate</u>	<u>FY2015</u> <u>Forecast</u>	<u>FY2016</u> <u>Budget</u>	<u>FY2017</u> <u>Plan</u>	<u>FY2018</u> <u>Plan</u>	<u>FY2019</u> <u>Plan</u>	<u>FY2020</u> <u>Plan</u>	<u>FY2021</u> <u>Plan</u>	<u>FY2016-21</u> <u>Total</u>	
Total Budget	\$10,697.9	\$10,138.2	\$407.4	\$152.3	-	-	-	-	-	\$152.3	

<b>Capital Improvement Program</b>											
Project ID:		CIP0142		Project Name:		Rail Lifecycle Overhaul					
Department:		CENV		Project Type:		RAIL		Project Manager:			Linda Stoffregen
Project Description:											
This project provides funding to do preventive maintenance to keep the WMATA Rail fleet in a state of good repair. This project funds the labor required to provide upgrades, repairs, and maintenance to capital assets that have a useful life of over one year.											
FY2016 Project Deliverables:											
Installation of the parts required to maintain railcars.											
6-Year Project Deliverables:											
Installation of the parts required to maintain railcars.											
Operating Impact:											
None.											
Total Project Budget ( <i>in thousands</i> ) :											
Previous Approved (FY2011-20):		\$203,226.9									
Approved Budget (FY2011-21):		<u>223,131.7</u>									
Change:		\$19,904.9									
Description of Significant Changes:											
Addition of FY2020 planned investment to ongoing Metrorail car repair project.											
Planned Investments ( <i>in thousands</i> ) :											
	<u>Total</u> <u>Budget</u>	<u>Prior Year</u> <u>Estimate</u>	<u>FY2015</u> <u>Forecast</u>	<u>FY2016</u> <u>Budget</u>	<u>FY2017</u> <u>Plan</u>	<u>FY2018</u> <u>Plan</u>	<u>FY2019</u> <u>Plan</u>	<u>FY2020</u> <u>Plan</u>	<u>FY2021</u> <u>Plan</u>	<u>FY2016-21</u> <u>Total</u>	
Total Budget	\$223,131.7	\$81,009.7	\$20,550.0	\$20,262.0	\$20,262.0	\$20,262.0	\$20,262.0	\$20,262.0	\$20,262.0	\$121,572.0	

<b>Capital Improvement Program</b>												
Project ID:		CIP0143		Project Name:		Bus Lifecycle Overhaul						
Department:		BMNT		Project Type:		BUS		Project Manager:			Darin Welt	
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.												
FY2016 Project Deliverables:												
WMATA labor related to the preventive maintenance activities above.												
6-Year Project Deliverables:												
Ongoing preventive maintenance activities to maintain the WMATA bus fleet in a state of good repair.												
Operating Impact:												
Provides for funding to maintain the fleet. Preventive and corrective maintenance must be performed to reduce road calls, maintain mean distance between failures and reduce repair costs.												
Total Project Budget ( <i>in thousands</i> ) :												
Previous Approved (FY2011-20):		\$104,210.1										
Approved Budget (FY2011-21):		<u>114,642.0</u>										
Change:		\$10,431.9										
Description of Significant Changes:												
Addition of FY2021 planned investment to ongoing Metrobus repair project.												
Planned Investments ( <i>in thousands</i> ) :												
	<u>Total</u>	<u>Prior Year</u>	<u>FY2015</u>	<u>FY2016</u>	<u>FY2017</u>	<u>FY2018</u>	<u>FY2019</u>	<u>FY2020</u>	<u>FY2021</u>	<u>FY2016-21</u>		
	<u>Budget</u>	<u>Estimate</u>	<u>Forecast</u>	<u>Budget</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Total</u>		
Total Budget	\$114,642.0	\$41,576.0	\$10,438.0	\$10,438.0	\$10,438.0	\$10,438.0	\$10,438.0	\$10,438.0	\$10,438.0	\$62,628.0		

<b>Capital Improvement Program</b>											
Project ID:		CIP0148		Project Name:		Repair of Damaged Railcars					
Department:		CENV		Project Type:		RAIL		Project Manager:			Kenneth Morford
Project Description:											
This project performs the repair of damaged railcars involved in collisions and accidents. Non-repairable railcars are to be scrapped.											
FY2016 Project Deliverables:											
Award contract for repair of two damaged 5000 series railcars. Begin the repair of a damaged 6000 series railcar.											
6-Year Project Deliverables:											
Complete repair of 6 damaged railcars.											
Operating Impact:											
None.											
Total Project Budget ( <i>in thousands</i> ) :											
Previous Approved (FY2011-20):		\$6,610.6									
Approved Budget (FY2011-21):		<u>8,614.3</u>									
Change:		\$2,003.7									
Description of Significant Changes:											
Project budget increased to align with updated cost estimate.											
Planned Investments ( <i>in thousands</i> ) :											
	<u>Total</u>	<u>Prior Year</u>	<u>FY2015</u>	<u>FY2016</u>	<u>FY2017</u>	<u>FY2018</u>	<u>FY2019</u>	<u>FY2020</u>	<u>FY2021</u>	<u>FY2016-21</u>	
	<u>Budget</u>	<u>Estimate</u>	<u>Forecast</u>	<u>Budget</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Total</u>	
Total Budget	\$8,614.3	\$684.6	\$1,837.2	\$2,700.0	\$3,392.5	-	-	-	-	\$6,092.5	

<b>Capital Improvement Program</b>											
Project ID:		CIP0150		Project Name:		Fire Systems					
Department:		CPDO		Project Type:		RAIL		Project Manager:			Nicolas Dimitracopoulos
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, repair and replacement of the existing standpipe system including in parking garages.											
FY2016 Project Deliverables:											
Complete task for installation of an upgraded fire alarm system at the Alexandria and West Falls Church Rail Yards, the Telegraph Road facilities and the Franconia-Springfield, Huntington, and New York Avenue Metro stations. Complete task for upgrade of fire suppression system (sprinklers) at Alexandria Yard and West Falls Church. Complete task for upgrade of FireWorks (fire alarm control hardware and software); upgrade of fire alarm systems at the Carment Turner Facility (CTF), Greenbelt and Branch Ave Yards; Relocate fire department connections to provide more accessible locations for firefighting access; replace station dry standpipes and perform hydrostatic and flow tests to ensure proper quality and safety, and replace dampers and actuators.											
6-Year Project Deliverables:											
Installation of an upgraded fire alarm system at the CTF, Greenbelt, Branch Avenue, Shady Grove and Glenmont Yards. Upgrade FireWorks (fire alarm control hardware and software). Continue relocation of fire department connections, replace station dry standpipes and perform hydrostatic and flow tests to ensure proper quality and safety, and replace dampers and actuators.											
Operating Impact:											
Improved Metro system safety and security. Increased maintenance costs.											
Total Project Budget (in thousands) :											
Previous Approved (FY2011-20):		\$37,630.5									
Approved Budget (FY2011-21):		<u>38,289.8</u>									
Change:		\$659.3									
Description of Significant Changes:											
None.											
Planned Investments (in thousands) :											
	<u>Total</u>	<u>Prior Year</u>	<u>FY2015</u>	<u>FY2016</u>	<u>FY2017</u>	<u>FY2018</u>	<u>FY2019</u>	<u>FY2020</u>	<u>FY2021</u>	<u>FY2016-21</u>	
	<u>Budget</u>	<u>Estimate</u>	<u>Forecast</u>	<u>Budget</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Total</u>	
Total Budget	\$38,289.8	\$13,963.1	\$5,348.4	\$7,071.4	\$7,243.0	\$4,664.0	-	-	-	\$18,978.4	

<b>Capital Improvement Program</b>												
Project ID:		CIP0151		Project Name:		Station Cooling Program						
Department:		CPDO		Project Type:		RAIL		Project Manager:			Mark Magnussen	
Project Description:												
This project funds the rehabilitation of station air conditioning systems including, but not limited to rehabilitation/replacement of chiller plants, cooling towers, ventilation systems, air handling units and ductwork. The lifecycle of station cooling system is to overhaul at 7 to 14 years and replace at 20 years.												
FY2016 Project Deliverables:												
Replacement of three chillers and continue surveys and designs for chillers and cooling towers replacement at Congress Heights, Glenmont and Georgia Ave; and fan & ventilation systems throughout the metro-rail system.												
6-Year Project Deliverables:												
Replace various cooling towers, air conditioning units, ventilation systems and chillers throughout the system. Overhauls of chillers that are 7 to 14 years old.												
Operating Impact:												
Project is designed to keep cooling systems functioning properly and improve the customer experience.												
Total Project Budget ( <i>in thousands</i> ) :												
Previous Approved (FY2011-20):		\$61,414.3										
Approved Budget (FY2011-21):		70,306.6										
Change:		\$8,892.3										
Description of Significant Changes:												
Addition of the FY2021 planned investments to the ongoing station cooling systems rehabilitation project. Six-year plan decreased to align with updated project costs.												
Planned Investments ( <i>in thousands</i> ) :												
	<u>Total</u>	<u>Prior Year</u>	<u>FY2015</u>	<u>FY2016</u>	<u>FY2017</u>	<u>FY2018</u>	<u>FY2019</u>	<u>FY2020</u>	<u>FY2021</u>	<u>FY2016-21</u>		
	<u>Budget</u>	<u>Estimate</u>	<u>Forecast</u>	<u>Budget</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Total</u>		
Total Budget	\$70,306.6	\$24,408.1	\$5,555.8	\$5,993.3	\$4,122.8	\$3,645.0	\$4,288.9	\$11,744.2	\$10,548.3	\$40,342.6		



<b>Capital Improvement Program</b>																																
Project ID: CIP0152		Project Name: Parking Garage Rehabilitation																														
Department: CPDO		Project Type: RAIL		Project Manager: Kenneth Spain																												
<b>Project Description:</b> This project will rehabilitate parking structures including repair of horizontal concrete surfaces, slabs, soffits, beams, columns, walls; repair or replacement of post-tensioning 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 on exposed (uncovered) portions of the parking deck. The 21 garages in the system should be rehabilitated at mid-life after 7-10 years and at full-life after 15-18 years to maintain safe operations and prevent future major repair costs.																																
<b>FY2016 Project Deliverables:</b> Complete rehabilitation at Southern and Suitland parking garages and start and complete rehabilitation of the Vienna South parking garage. Award contract for the rehabilitation of the College Park, Grosvenor, Shady Grove and Franconia/Springfield East parking garages and begin construction at Shady Grove garage.																																
<b>6-Year Project Deliverables:</b> Rehabilitation of the Southern, Suitland, Vienna (South) parking garages and nine other garages including: College Park, Grosvenor, Shady Grove, Franconia/Springfield East, West Falls Church, Largo Town Center, White Flint, and New Carrollton. Remaining schedule to be determined. Complete designs for Rehabilitation for Parking Garages at Minnesota Avenue, Huntington (Mid-Garage), Glenmont (West), and Rhode Island. Unfunded needs will result with reduction to amount of rehabilitation work for upcoming parking facilities.																																
<b>Operating Impact:</b> Maintenance costs will be reduced as a result of rehabilitation.																																
<b>Total Project Budget (in thousands) :</b> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 60%;">Previous Approved (FY2011-20):</td> <td style="text-align: right;">\$42,915.1</td> </tr> <tr> <td>Approved Budget (FY2011-21):</td> <td style="text-align: right;"><u>46,359.3</u></td> </tr> <tr> <td>Change:</td> <td style="text-align: right;">\$3,444.2</td> </tr> </table>											Previous Approved (FY2011-20):	\$42,915.1	Approved Budget (FY2011-21):	<u>46,359.3</u>	Change:	\$3,444.2																
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Change:	\$3,444.2																															
<b>Description of Significant Changes:</b> Addition of the FY2021 planned investments to the ongoing parking garage rehabilitation project. Six-year plan decreased to align with update cost estimates.																																
<b>Planned Investments (in thousands) :</b> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th><u>Total</u> <u>Budget</u></th> <th><u>Prior Year</u> <u>Estimate</u></th> <th><u>FY2015</u> <u>Forecast</u></th> <th><u>FY2016</u> <u>Budget</u></th> <th><u>FY2017</u> <u>Plan</u></th> <th><u>FY2018</u> <u>Plan</u></th> <th><u>FY2019</u> <u>Plan</u></th> <th><u>FY2020</u> <u>Plan</u></th> <th><u>FY2021</u> <u>Plan</u></th> <th><u>FY2016-21</u> <u>Total</u></th> </tr> </thead> <tbody> <tr> <td style="text-align: right;">Total Budget</td> <td style="text-align: right;">\$46,359.3</td> <td style="text-align: right;">\$7,687.0</td> <td style="text-align: right;">\$3,750.0</td> <td style="text-align: right;">\$5,288.8</td> <td style="text-align: right;">\$5,797.0</td> <td style="text-align: right;">\$7,876.5</td> <td style="text-align: right;">\$5,918.5</td> <td style="text-align: right;">\$5,122.8</td> <td style="text-align: right;">\$4,918.7</td> <td style="text-align: right;">\$34,922.3</td> </tr> </tbody> </table>												<u>Total</u> <u>Budget</u>	<u>Prior Year</u> <u>Estimate</u>	<u>FY2015</u> <u>Forecast</u>	<u>FY2016</u> <u>Budget</u>	<u>FY2017</u> <u>Plan</u>	<u>FY2018</u> <u>Plan</u>	<u>FY2019</u> <u>Plan</u>	<u>FY2020</u> <u>Plan</u>	<u>FY2021</u> <u>Plan</u>	<u>FY2016-21</u> <u>Total</u>	Total Budget	\$46,359.3	\$7,687.0	\$3,750.0	\$5,288.8	\$5,797.0	\$7,876.5	\$5,918.5	\$5,122.8	\$4,918.7	\$34,922.3
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Total Budget	\$46,359.3	\$7,687.0	\$3,750.0	\$5,288.8	\$5,797.0	\$7,876.5	\$5,918.5	\$5,122.8	\$4,918.7	\$34,922.3																						

Capital Improvement Program																																
Project ID: <input type="text" value="CIP00153"/>		Project Name: <input type="text" value="Accessible Station Signage"/>																														
Department: <input type="text" value="ACCS"/>		Project Type: <input type="text" value="ACCESS"/>		Project Manager: <input type="text" value="Sherrie Collings"/>																												
Project Description: Development of a web-based database that includes an individual record for all 19,000+ bus stops in the Metropolitan Washington region via virtual wayfinding. This application will be enhanced to make it available via mobile devices.																																
FY2016 Project Deliverables: Development and implementation of a web-based database that includes an individual record for all 19,000+ bus stops in the Metropolitan Washington region via virtual wayfinding and development of an application for mobile devices.																																
6-Year Project Deliverables: Implementation of a web-based database that includes an individual record for all 19,000+ bus stops in the Metropolitan Washington region via virtual wayfinding and development of an application for mobile devices.																																
Operating Impact: None																																
Total Project Budget ( <i>in thousands</i> ) : <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 70%;">Previous Approved (FY2011-20):</td> <td style="width: 30%; text-align: right;">\$420.0</td> </tr> <tr> <td>Approved Budget (FY2011-21):</td> <td style="text-align: right;">493.0</td> </tr> <tr> <td>Change:</td> <td style="text-align: right;">\$73.0</td> </tr> </table>											Previous Approved (FY2011-20):	\$420.0	Approved Budget (FY2011-21):	493.0	Change:	\$73.0																
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Total Budget	\$13,465.4	\$112.4	\$6,643.0	\$6,710.0	-	-	-	-	-	\$6,710.0																						
* Due to a technical error, the project page reflects the Board approved budget amount for each fiscal year. Finance staff will be returning to the Board for an amendment to this budget in Q1 of FY2016.																																

<b>Capital Improvement Program</b>												
Project ID:		CIP0155		Project Name:		Rehabilitation of Backlick Road Facility						
Department:		ACCS		Project Type:		ACCESS		Project Manager:			Sherrie Collings	
Project Description:												
The project performs necessary rehabilitation improvements to the Metro-owned property located at Backlick and Industrial Roads in Springfield, VA. The property is divided between ACCS and TRST. ACCS operates approximately 50 MetroAccess vehicles from this site. TRST is using their portion of the property to store track equipment. ACCS is performing facilities assessments for MetroAccess to own paratransit yards/garages with backup Operational Control Center onsite. TRST side of property requires a new sub grade and repaving.												
FY2016 Project Deliverables:												
Complete facilities assessment of owning paratransit yards and garages and complete sub grade and repaving of their side of property.												
6-Year Project Deliverables:												
ACCS will complete facilities assessment of owning paratransit yards/garages and TRST will complete sub grade and repaving of their side of property.												
Operating Impact:												
None.												
Total Project Budget ( <i>in thousands</i> ) :												
Previous Approved (FY2011-20):		\$499.8										
Approved Budget (FY2011-21):		<u>2,637.0</u>										
Change:		\$2,137.2										
Description of Significant Changes:												
Additional scope was added for sub grade paving that is required on the TRST side of the property.												
Planned Investments ( <i>in thousands</i> ) :												
	<u>Total</u>	<u>Prior Year</u>	<u>FY2015</u>	<u>FY2016</u>	<u>FY2017</u>	<u>FY2018</u>	<u>FY2019</u>	<u>FY2020</u>	<u>FY2021</u>	<u>FY2016-21</u>		
	<u>Budget</u>	<u>Estimate</u>	<u>Forecast</u>	<u>Budget</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Total</u>		
Total Budget	\$2,637.0	\$211.5	\$250.5	\$2,175.0	-	-	-	-	-	\$2,175.0		

<b>Capital Improvement Program</b>											
Project ID:		CIP0170		Project Name:		Roof Rehabilitation and Replacement					
Department:		CPDO		Project Type:		BUS/RAIL		Project Manager:			Kenneth Spain
Project Description:											
This project will replace and perform major rehabilitation of roofs on all types of Metro facilities.											
FY2016 Project Deliverables:											
Prioritize a repair or replacement strategy and create cost estimates for work to be done in FY2016 and beyond. Award contract for roof replacement and begin replacement of roofs based on condition assessment.											
6-Year Project Deliverables:											
Complete condition assessment of all facility roofs and develop a roof management program to include a comprehensive database with detailed engineering drawings for each roof. Replacement and rehabilitation of the highest priority roofs based on the condition assessment. Unfunded needs will result with reduction to number of facility roof repairs.											
Operating Impact:											
There is a potential for rail system impacts if repair or replacement of roofs is deferred on key facilities such as Traction Power Substations, Tie Breakers and Automatic Train Control rooms caused by water damage to mission critical equipment.											
Total Project Budget ( <i>in thousands</i> ) :											
Previous Approved (FY2011-20):		\$29,000.0									
Approved Budget (FY2011-21):		26,738.5									
Change:		(\$2,261.5)									
Description of Significant Changes:											
Six-year plan updated to reflect a rehabilitation schedule that extends beyond FY2021.											
Planned Investments ( <i>in thousands</i> ) :											
	<u>Total</u> <u>Budget</u>	<u>Prior Year</u> <u>Estimate</u>	<u>FY2015</u> <u>Forecast</u>	<u>FY2016</u> <u>Budget</u>	<u>FY2017</u> <u>Plan</u>	<u>FY2018</u> <u>Plan</u>	<u>FY2019</u> <u>Plan</u>	<u>FY2020</u> <u>Plan</u>	<u>FY2021</u> <u>Plan</u>	<u>FY2016-21</u> <u>Total</u>	
Total Budget	\$26,738.5	\$398.5	\$1,760.2	\$1,133.8	\$3,500.0	\$5,684.8	\$4,717.6	\$4,771.8	\$4,771.8	\$24,579.8	

<b>Capital Improvement Program</b>											
Project ID:		CIP0185		Project Name:		Escalator Replacement					
Department:		ELES		Project Type:		RAIL		Project Manager:			Cedric Watson
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.											
FY2016 Project Deliverables:											
Replace approximately 21 escalators including but not limited to Georgia Avenue, Bethesda and Glenmont stations.											
6-Year Project Deliverables:											
Replace or rehabilitate approximately 110 escalators.											
Operating Impact:											
Newer equipment will be less maintenance intensive. Project will streamline the system wide inventory of equipment makes and models. Metro will realize benefits from stocking fewer spare parts. New equipment should provide greater energy efficiency.											
Total Project Budget ( <i>in thousands</i> ) :											
Previous Approved (FY2011-20):		\$179,419.4									
Approved Budget (FY2011-21):		<u>208,546.7</u>									
Change:		\$29,127.2									
Description of Significant Changes:											
The estimated cost to replace escalators has increased due to new safety requirements for all deep stations. Addition of FY2021 planned investments to ongoing escalator replacement project.											
Planned Investments ( <i>in thousands</i> ) :											
	<u>Total</u> <u>Budget</u>	<u>Prior Year</u> <u>Estimate</u>	<u>FY2015</u> <u>Forecast</u>	<u>FY2016</u> <u>Budget</u>	<u>FY2017</u> <u>Plan</u>	<u>FY2018</u> <u>Plan</u>	<u>FY2019</u> <u>Plan</u>	<u>FY2020</u> <u>Plan</u>	<u>FY2021</u> <u>Plan</u>	<u>FY2016-21</u> <u>Total</u>	
Total Budget	\$208,546.7	\$22,351.2	\$20,021.9	\$30,984.3	\$27,839.6	\$34,222.0	\$33,752.6	\$23,100.0	\$16,275.0	\$166,173.6	

<b>Capital Improvement Program</b>											
Project ID:		CIP0195		Project Name:		Radio Project - Additional Coverage					
Department:		CPDO		Project Type:		RAIL		Project Manager:			Nicolas Dimitracopoulos
Project Description:											
This project's goal is to enhance the Comprehensive Radio Communication System (CRCS) radio coverage at WMATA below ground stations. The CRCS system must remain operational until the new 700 MHz system is completed and commissioned. When the 700 MHz system is commissioned in approximately 5 to 6 years, the CRCS system will be turned off and removed.											
FY2016 Project Deliverables:											
Complete installation of cables, antennas, and bi-directional amplifier equipment required for radio coverage in 30 below ground stations. The project is scheduled to be closed out in FY2016											
6-Year Project Deliverables:											
Complete installation of cables, antennas, and bi-directional amplifier equipment required for radio coverage in 30 below ground stations. The project is scheduled to be closed out in FY2016											
Operating Impact:											
None.											
Total Project Budget ( <i>in thousands</i> ) :											
Previous Approved (FY2011-20):		\$6,637.6									
Approved Budget (FY2011-21):		<u>6,775.1</u>									
Change:		\$137.4									
Description of Significant Changes:											
None.											
Planned Investments ( <i>in thousands</i> ) :											
	<u>Total</u>	<u>Prior Year</u>	<u>FY2015</u>	<u>FY2016</u>	<u>FY2017</u>	<u>FY2018</u>	<u>FY2019</u>	<u>FY2020</u>	<u>FY2021</u>	<u>FY2016-21</u>	
	<u>Budget</u>	<u>Estimate</u>	<u>Forecast</u>	<u>Budget</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Total</u>	
Total Budget	\$6,775.1	\$5,092.2	\$776.5	\$906.4	-	-	-	-	-	\$906.4	

<b>Capital Improvement Program</b>												
Project ID:		CIP0196		Project Name:		Safety Measurement System						
Department:		SAFE		Project Type:		BUS		Project Manager:			Chad Krukowski	
Project Description:												
This project will develop an automated and centralized safety management system that will capture information from accidents and incidents that occur at Metro, to include Metro facilities and all Metro vehicles, including MetroAccess, Metrobus, and Metrorail vehicles. This system will give Metro a single, repository of safety data and will be capable of generating reports.												
FY2016 Project Deliverables:												
Platform Refresh, Mobile Applications Upgrade, Safety Compliance Upgrades and Safety Dashboards for users.												
6-Year Project Deliverables:												
Fatigue Risk Management Application, Safety Compliance, Mobile Applications, Safety Dashboards.												
Operating Impact:												
None.												
Total Project Budget ( <i>in thousands</i> ) :												
Previous Approved (FY2011-20):		\$9,952.0										
Approved Budget (FY2011-21):		<u>11,636.3</u>										
Change:		\$1,684.3										
Description of Significant Changes:												
Planned Investments ( <i>in thousands</i> ) :												
	<u>Total</u>	<u>Prior Year</u>	<u>FY2015</u>	<u>FY2016</u>	<u>FY2017</u>	<u>FY2018</u>	<u>FY2019</u>	<u>FY2020</u>	<u>FY2021</u>	<u>FY2016-21</u>		
	<u>Budget</u>	<u>Estimate</u>	<u>Forecast</u>	<u>Budget</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Total</u>		
Total Budget	\$11,636.3	\$5,108.7	\$3,727.7	\$2,800.0	-	-	-	-	-	\$2,800.0		

<b>Capital Improvement Program</b>												
Project ID:		CIP0197		Project Name:		Rehabilitation of Non-Revenue Facilities						
Department:		PLNT		Project Type:		BUS/RAIL		Project Manager:			Sherri Eley	
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, and structural components and systems. Facilities include MTPD facilities, Carmen Turner Facilities, and other non-revenue facilities.												
FY2016 Project Deliverables:												
Purchase new equipment to include but not limited to communications devices at Carmen Turner Facility. Enhance sprinkler system, upgrade electrical wiring, rehabilitate flooring and bathroom components, replace old carpet, rehabilitate drain pits, replace HVAC units, minor structural renovations at Carmen Turner Drive and 3421 Pennsy Drive. Migrate HVAC systems into system 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.												
6-Year Project Deliverables:												
Continue the replacement and overhaul of HVAC equipment as well as roof replacement components, replacement of exhaust fans, sprinkler systems, electrical wiring, flooring and bathroom components, old carpet, structural renovations, and sealing concrete pavement joints at non-revenue facilities.												
Operating Impact:												
This project is funded with capital funds through the Capital Improvement Program. Rehabilitated facilities support the Authority's goal of ensuring fiscal stability by maintaining the Authority's assets in a state of good repair.												
Total Project Budget (in thousands) :												
Previous Approved (FY2011-20):		\$7,662.2										
Approved Budget (FY2011-21):		7,584.8										
Change:		(\$77.4)										
Description of Significant Changes:												
Addition of FY2021 planned investments to ongoing Metro facility systems replacement and upgrade project.												
Planned Investments (in thousands) :												
	<u>Total</u>	<u>Prior Year</u>	<u>FY2015</u>	<u>FY2016</u>	<u>FY2017</u>	<u>FY2018</u>	<u>FY2019</u>	<u>FY2020</u>	<u>FY2021</u>	<u>FY2016-21</u>		
	<u>Budget</u>	<u>Estimate</u>	<u>Forecast</u>	<u>Budget</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Total</u>		
Total Budget	\$7,584.8	\$1,241.8	\$810.0	\$978.0	\$924.0	\$875.0	\$765.0	\$987.0	\$1,004.0	\$5,533.0		



<b>Capital Improvement Program</b>											
Project ID:		CIP0204		Project Name:		7000 Series Rail Car HVAC Maintenance Facility					
Department:		CPDO		Project Type:		RAIL		Project Manager:			Kenneth Spain
Project Description:											
This project will construct elevated platforms at rail yard facilities to allow for the maintenance of the new 7000 series rail car HVAC maintenance system. The HVAC system of the new 7000 series rail cars 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.											
FY2016 Project Deliverables:											
Completion of the designs for two rail yards. Start construction of the elevated platforms at the New Carrollton and West Falls Church Rail Yards.											
6-Year Project Deliverables:											
Complete construction of elevated platforms at the New Carrollton and West Falls Church Rail Yards and closeout contract. Unfunded needs will result with not all of the originally planned elevated platforms to be built. This will impact CMNT's ability to maintain the HVAC systems of the new 7000 series rail vehicles.											
Operating Impact:											
The new platforms will allow for the maintenance of the new 7000 series railcar HVAC systems to be more sage and efficient.											
Total Project Budget ( <i>in thousands</i> ) :											
Previous Approved (FY2011-20):		\$8,589.1									
Approved Budget (FY2011-21):		<u>5,548.2</u>									
Change:		(\$3,040.9)									
Description of Significant Changes:											
None.											
Planned Investments ( <i>in thousands</i> ) :											
	<u>Total</u> <u>Budget</u>	<u>Prior Year</u> <u>Estimate</u>	<u>FY2015</u> <u>Forecast</u>	<u>FY2016</u> <u>Budget</u>	<u>FY2017</u> <u>Plan</u>	<u>FY2018</u> <u>Plan</u>	<u>FY2019</u> <u>Plan</u>	<u>FY2020</u> <u>Plan</u>	<u>FY2021</u> <u>Plan</u>	<u>FY2016-21</u> <u>Total</u>	
Total Budget	\$5,548.2	\$432.1	(\$288.7)	\$2,174.8	\$3,230.0	-	-	-	-	\$5,404.8	

<b>Capital Improvement Program</b>											
Project ID:		CIP0205		Project Name:		Bush Hill Aerial Structure Rehabilitation					
Department:		CPDO		Project Type:		RAIL		Project Manager:			Chen Zhou
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.											
FY2016 Project Deliverables:											
Develop and Award Design Build contract package for Bush Hill Aerial Structure Rehabilitation.											
6-Year Project Deliverables:											
Rehabilitation of Bush Hill Aerial Structure.											
Operating Impact:											
None.											
Total Project Budget ( <i>in thousands</i> ) :											
Previous Approved (FY2011-20):		\$2,000.0									
Approved Budget (FY2011-21):		7,542.0									
Change:		\$5,542.0									
Description of Significant Changes:											
Six-year plan increased to align with higher repair costs of the Bush Hill aerial structure.											
Planned Investments ( <i>in thousands</i> ) :											
	<u>Total</u>	<u>Prior Year</u>	<u>FY2015</u>	<u>FY2016</u>	<u>FY2017</u>	<u>FY2018</u>	<u>FY2019</u>	<u>FY2020</u>	<u>FY2021</u>	<u>FY2016-21</u>	
	<u>Budget</u>	<u>Estimate</u>	<u>Forecast</u>	<u>Budget</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Total</u>	
Total Budget	\$7,542.0	-	\$825.0	\$835.5	\$4,585.0	\$1,296.5	-	-	-	\$6,717.0	

<b>Capital Improvement Program</b>											
Project ID:		CIP0206		Project Name:		Carmen Turner Facility Electrical Distribution Upgrade					
Department:		CPDO		Project Type:		BUS/RAIL		Project Manager:			Kenneth Spain
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.											
FY2016 Project Deliverables:											
Installation of the uninterrupted power supply units and battery banks at CTF.											
6-Year Project Deliverables:											
Installation of the uninterrupted power supply units and battery banks at CTF.											
Operating Impact:											
The power system upgrades will improve reliability of WMATA critical functions that operate out of CTF.											
Total Project Budget ( <i>in thousands</i> ) :											
Previous Approved (FY2011-20):		\$3,000.0									
Approved Budget (FY2011-21):		<u>5,896.7</u>									
Change:		\$2,896.7									
Description of Significant Changes:											
Six-year plan increased to align with higher installation costs of the power supply units and battery banks.											
Planned Investments ( <i>in thousands</i> ) :											
	<u>Total</u>	<u>Prior Year</u>	<u>FY2015</u>	<u>FY2016</u>	<u>FY2017</u>	<u>FY2018</u>	<u>FY2019</u>	<u>FY2020</u>	<u>FY2021</u>	<u>FY2016-21</u>	
	<u>Budget</u>	<u>Estimate</u>	<u>Forecast</u>	<u>Budget</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Total</u>	
Total Budget	\$5,896.7	\$118.8	\$1,277.9	\$4,500.0	-	-	-	-	-	\$4,500.0	

<b>Capital Improvement Program</b>											
Project ID:		CIP0210		Project Name:		Pollution Prevention for Track Fueling Areas					
Department:		SAFE		Project Type:		RAIL		Project Manager:			Carla Grano
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.											
FY2016 Project Deliverables:											
Site-specific design packages for the Alexandria and Shady Grove Rail Yards to initiate and award a construction contract to implement pollution prevention at Metrorail Yards.											
6-Year Project Deliverables:											
Begin construction to install pollution prevention modifications at rail yards.											
Operating Impact:											
Modifications for fueling areas will help to ensure compliance with environmental regulations and will reduce environmental pollution, thereby reducing risk for associated penalties, fines and citations and cleanup costs.											
Total Project Budget ( <i>in thousands</i> ) :											
Previous Approved (FY2011-20):		\$3,240.0									
Approved Budget (FY2011-21):		11,367.4									
Change:		\$8,127.4									
Description of Significant Changes:											
Six-year plan increased to include construction at rail yard facilities for pollution prevention.											
Planned Investments ( <i>in thousands</i> ) :											
	<u>Total</u> <u>Budget</u>	<u>Prior Year</u> <u>Estimate</u>	<u>FY2015</u> <u>Forecast</u>	<u>FY2016</u> <u>Budget</u>	<u>FY2017</u> <u>Plan</u>	<u>FY2018</u> <u>Plan</u>	<u>FY2019</u> <u>Plan</u>	<u>FY2020</u> <u>Plan</u>	<u>FY2021</u> <u>Plan</u>	<u>FY2016-21</u> <u>Total</u>	
Total Budget	\$11,367.4	\$236.0	\$77.6	\$698.0	\$2,112.0	\$707.7	\$2,132.1	\$2,702.0	\$2,702.0	\$11,053.8	

<b>Capital Improvement Program</b>																																
Project ID:		CIP0211		Project Name:		Storm Water Facility Assessment																										
Department:		SAFE		Project Type:		BUS, RAIL & SUPPORT		Project Manager:			Carla Grano																					
<p>Project Description:</p> <p>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.</p>																																
<p>FY2016 Project Deliverables:</p> <p>Finalize survey and assessment report. Develop recommendations and determine priority activities. Recommend concept designs, cost estimates and implementation schedule for best management practices resulting in storm water management improvements. Design initial site stormwater management upgrade project based on priority established.</p>																																
<p>6-Year Project Deliverables:</p> <p>Design and construct stormwater management upgrades at various Bus, Rail, and Support Facilities to comply with environmental requirements based on the priority list established during the assessment phase of the program.</p>																																
<p>Operating Impact:</p> <p>Future design and installation of storm water best management practices may reduce operational impact of impervious surface fees currently in place and proposed by local jurisdictions. Implementation of pretreatment systems to comply with more stringent regulatory requirements minimizes stormwater pollution and associated potential cleanup costs and reduces the risk of penalties, fines and citations associated with regulatory non-compliance.</p>																																
<p>Total Project Budget (<i>in thousands</i>) :</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 60%;">Previous Approved (FY2011-20):</td> <td style="width: 40%; text-align: right;">\$1,100.0</td> </tr> <tr> <td>Approved Budget (FY2011-21):</td> <td style="text-align: right;"><u>2,793.5</u></td> </tr> <tr> <td>Change:</td> <td style="text-align: right;">\$1,693.5</td> </tr> </table>											Previous Approved (FY2011-20):	\$1,100.0	Approved Budget (FY2011-21):	<u>2,793.5</u>	Change:	\$1,693.5																
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Approved Budget (FY2011-21):	<u>2,793.5</u>																															
Change:	\$1,693.5																															
<p>Description of Significant Changes:</p> <p>Six-year plan increased to align with updated project costs.</p>																																
<p>Planned Investments (<i>in thousands</i>) :</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th style="text-align: center;"><u>Total Budget</u></th> <th style="text-align: center;"><u>Prior Year Estimate</u></th> <th style="text-align: center;"><u>FY2015 Forecast</u></th> <th style="text-align: center;"><u>FY2016 Budget</u></th> <th style="text-align: center;"><u>FY2017 Plan</u></th> <th style="text-align: center;"><u>FY2018 Plan</u></th> <th style="text-align: center;"><u>FY2019 Plan</u></th> <th style="text-align: center;"><u>FY2020 Plan</u></th> <th style="text-align: center;"><u>FY2021 Plan</u></th> <th style="text-align: center;"><u>FY2016-21 Total</u></th> </tr> </thead> <tbody> <tr> <td style="text-align: right;">Total Budget</td> <td style="text-align: right;">\$2,793.5</td> <td style="text-align: right;">\$38.0</td> <td style="text-align: right;">\$605.5</td> <td style="text-align: right;">\$950.0</td> <td style="text-align: right;">\$1,200.0</td> <td style="text-align: center;">-</td> <td style="text-align: center;">-</td> <td style="text-align: center;">-</td> <td style="text-align: center;">-</td> <td style="text-align: right;">\$2,150.0</td> </tr> </tbody> </table>												<u>Total Budget</u>	<u>Prior Year Estimate</u>	<u>FY2015 Forecast</u>	<u>FY2016 Budget</u>	<u>FY2017 Plan</u>	<u>FY2018 Plan</u>	<u>FY2019 Plan</u>	<u>FY2020 Plan</u>	<u>FY2021 Plan</u>	<u>FY2016-21 Total</u>	Total Budget	\$2,793.5	\$38.0	\$605.5	\$950.0	\$1,200.0	-	-	-	-	\$2,150.0
	<u>Total Budget</u>	<u>Prior Year Estimate</u>	<u>FY2015 Forecast</u>	<u>FY2016 Budget</u>	<u>FY2017 Plan</u>	<u>FY2018 Plan</u>	<u>FY2019 Plan</u>	<u>FY2020 Plan</u>	<u>FY2021 Plan</u>	<u>FY2016-21 Total</u>																						
Total Budget	\$2,793.5	\$38.0	\$605.5	\$950.0	\$1,200.0	-	-	-	-	\$2,150.0																						

<b>Capital Improvement Program</b>												
Project ID:		CIP0212		Project Name:		Sustainability Investments - Pilot Program						
Department:		PLAN		Project Type:		BUS/RAIL		Project Manager:			Rachel Healy	
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.												
FY2016 Project Deliverables:												
Explore new technologies and practices as is financially beneficial to Metro - potentially including utility monitoring and controls across facilities, capture and reuse of regenerative braking power, energy management through building and/or system monitoring and controls, clean renewable energy initiatives, sustainability outreach and education program, and electric vehicle charging stations.												
6-Year Project Deliverables:												
Continue to identify and pilot use of new technologies and practices as is financially beneficial to Metro - potentially including utility monitoring and controls across facilities, capture and reuse of regenerative braking power, energy management through building and/or system monitoring and controls, clean renewable energy initiatives, sustainability outreach and education program, and electric vehicle charging stations.												
Operating Impact:												
This project is intended to provide long term operational savings and efficiencies to Metro. This project will also help Metro achieve sustainability targets in the areas of ridership, connecting communities, climate change, energy use reduction, green house gas emissions, water use reduction, stormwater management, and waste stream management.												
Total Project Budget (in thousands) :												
Previous Approved (FY2011-20):		\$2,000.0										
Approved Budget (FY2011-21):		<u>3,049.9</u>										
Change:		\$1,049.9										
Description of Significant Changes:												
Funding increase developed in response to the launch of the Sustainability Lab in spring of 2014 and the Board's request for expanding sustainability investments at the April 2014 Finance and Administration Committee meeting.												
Planned Investments (in thousands) :												
	<u>Total</u>	<u>Prior Year</u>	<u>FY2015</u>	<u>FY2016</u>	<u>FY2017</u>	<u>FY2018</u>	<u>FY2019</u>	<u>FY2020</u>	<u>FY2021</u>	<u>FY2016-21</u>		
	<u>Budget</u>	<u>Estimate</u>	<u>Forecast</u>	<u>Budget</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Total</u>		
Total Budget	\$3,049.9	\$49.9	\$550.0	\$1,450.0	\$1,000.0	-	-	-	-	\$2,450.0		

<b>Capital Improvement Program</b>												
Project ID:		CIP0215		Project Name:		Rail Scheduling System Upgrade						
Department:		RPLN		Project Type:		RAIL		Project Manager:			Shi Xie	
Project Description:												
This project focuses on business process improvement in rail service planning and scheduling, and daily operations of Metrorail service delivery. The expanding Metrorail system and complex track-maintenance work requires a 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.												
FY2016 Project Deliverables:												
Complete phase 1, the installation of the scheduling component. Continue phase 2, development and the installation of the daily operation system.												
6-Year Project Deliverables:												
Purchase and installation of a comprehensive transit scheduling application through the completion of phase 1, scheduling component and phase 2, daily operation management component.												
Operating Impact:												
Improved operational efficiency.												
Total Project Budget (in thousands) :												
Previous Approved (FY2011-20):		\$7,000.0										
Approved Budget (FY2011-21):		6,723.1										
Change:		(\$276.9)										
Description of Significant Changes:												
Planned Investments (in thousands) :												
	<u>Total</u>	<u>Prior Year</u>	<u>FY2015</u>	<u>FY2016</u>	<u>FY2017</u>	<u>FY2018</u>	<u>FY2019</u>	<u>FY2020</u>	<u>FY2021</u>	<u>FY2016-21</u>		
	<u>Budget</u>	<u>Estimate</u>	<u>Forecast</u>	<u>Budget</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Total</u>		
Total Budget	\$6,723.1	\$83.3	\$514.6	\$2,740.5	\$2,239.0	\$1,145.6	-	-	-	\$6,125.1		

<b>Capital Improvement Program</b>											
Project ID:		CIP0216		Project Name:		Farragut North Beam Rehabilitation					
Department:		CPDO		Project Type:		RAIL		Project Manager:			Chen Zhou
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.											
FY2016 Project Deliverables:											
Procure contract to strengthen the second beam at the North end of Farragut North Station platform and start construction.											
6-Year Project Deliverables:											
Complete restoration of a second beam.											
Operating Impact:											
None.											
Total Project Budget ( <i>in thousands</i> ) :											
Previous Approved (FY2011-20):		\$6,864.0									
Approved Budget (FY2011-21):		<u>15,704.0</u>									
Change:		\$8,840.0									
Description of Significant Changes:											
Six-year plan increased to align with higher estimated cost to complete beam restoration.											
Planned Investments ( <i>in thousands</i> ) :											
	<u>Total</u>	<u>Prior Year</u>	<u>FY2015</u>	<u>FY2016</u>	<u>FY2017</u>	<u>FY2018</u>	<u>FY2019</u>	<u>FY2020</u>	<u>FY2021</u>	<u>FY2016-21</u>	
	<u>Budget</u>	<u>Estimate</u>	<u>Forecast</u>	<u>Budget</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Total</u>	
Total Budget	\$15,704.0	-	\$825.0	\$1,323.5	\$8,896.1	\$4,659.4	-	-	-	\$14,879.0	



**Capital Improvement Program**

Project ID: CIP0219 Project Name: Station Lighting Improvements

Department: CPDO Project Type: RAIL Project Manager: Kelly Reahl

## Project Description:

The program will provide for public area station lighting upgraded at underground stations. The specific lighting types to be replaced/upgrades are mezzanine, parapet and track-bed fixtures.

## FY2016 Project Deliverables:

Mezzanine Lighting: Complete light installation of remaining 6 typical mezzanines to close out Mezzanine Lighting.

## 6-Year Project Deliverables:

Complete lighting upgrades at select Metrorail stations to include: all underground mezzanine locations, 15 of 48 Trackbed and Parapet lighting locations.

## Operating Impact:

The project is designed to improve illumination at various Metrorail stations to enhance the safety and security of passengers, operations, infrastructure and other assets.

Total Project Budget (*in thousands*) :

Current Approved (FY2011-20):	\$40,070.0
Proposed Budget (FY2011-21):	48,725.4
Change:	\$8,655.4

## Description of Significant Changes:

The reduction in funding equates to fewer installations of trackbed and parapet lighting per year in order to align annual work plans with resource availability. This will extend the time frame of this project to 2028.

Planned Investments (*in thousands*) :

	<u>Total</u> <u>Budget</u>	<u>Prior Year</u> <u>Estimate</u>	<u>FY2015</u> <u>Forecast</u>	<u>FY2016</u> <u>Proposed</u>	<u>FY2017</u> <u>Plan</u>	<u>FY2018</u> <u>Plan</u>	<u>FY2019</u> <u>Plan</u>	<u>FY2020</u> <u>Plan</u>	<u>FY2021</u> <u>Plan</u>	<u>FY2016-21</u> <u>Total</u>
Total Budget	\$48,725.4	\$5,474.6	\$166.5	\$3,320.2	\$6,376.0	\$8,045.1	\$8,242.3	\$8,445.4	\$8,655.4	\$43,084.3

<b>Capital Improvement Program</b>												
Project ID:		CIP0220		Project Name:		Bus Planning						
Department:		BPLN		Project Type:		BUS		Project Manager:			Julie Hershorn	
Project Description:												
This program advances a broad range of Metrobus-related planning projects necessary to sustain the Metrobus network of services and facilities such as customer information, bus stop accessibility, transit operations, traffic operations and fare collection. The included projects foster continuous regional customer engagement, service evaluation and market assessment working with area departments of transportation and other transit providers. Work activities result in interagency policy and financial strategies and support service coordination, development and deployment for State of Good Operations (SOGO) investments provided by the WMATA Board. Efforts will also sustain service scheduling processes and implement Business Process Reviews to improve service safety, efficiency and effectiveness through use of support technologies. Studies and reports are prepared to comply with FTA requirements for adoption of fleet and facility plans and Title VI customer data.												
FY2016 Project Deliverables:												
Preparation will be completed for an updated Metrobus Fleet Management Plan and a Metrobus Facility Plan in response to FTA requirements.												
6-Year Project Deliverables:												
Complete Metrobus related planning projects necessary to support a bus network of 177 lines, providing service across 10 operating divisions utilizing 1,526 buses driven by 2,627 bus operators.												
Operating Impact:												
Some operational savings should accrue through more efficient bus service. Expansion service may require additional operating budget.												
Total Project Budget ( <i>in thousands</i> ) :												
Previous Approved (FY2011-20):		\$6,750.0										
Approved Budget (FY2011-21):		4,081.5										
Change:		(\$2,668.5)										
Description of Significant Changes:												
Significant reduction of funding restricts ability to adapt to regional planning requests for bus service.												
Planned Investments ( <i>in thousands</i> ) :												
	<u>Total</u> <u>Budget</u>	<u>Prior Year</u> <u>Estimate</u>	<u>FY2015</u> <u>Forecast</u>	<u>FY2016</u> <u>Budget</u>	<u>FY2017</u> <u>Plan</u>	<u>FY2018</u> <u>Plan</u>	<u>FY2019</u> <u>Plan</u>	<u>FY2020</u> <u>Plan</u>	<u>FY2021</u> <u>Plan</u>	<u>FY2016-21</u> <u>Total</u>		
Total Budget	\$4,081.5	-	\$291.0	\$483.0	\$567.0	\$567.0	\$724.5	\$724.5	\$724.5	\$3,790.5		

<b>Capital Improvement Program</b>											
Project ID:		CIP0221		Project Name:		Bus Customer Facility Improvements					
Department:		BPLN		Project Type:		BUS/RAIL		Project Manager:			Krys Ochia
Project Description:											
Projects 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.											
FY2016 Project Deliverables:											
Update 250 shelter and mezzanine maps, and Regional Bus Maps for each of the four (4) Metrobus Regions - The District of Columbia, Montgomery County, Prince George's County and Northern Virginia. Under the Bus Stop Enhancement Program, install 3,000 bus poles and flags, and 2,500 information cases. Program will also install 2,500 Braille/Tactile Plates at bus stops.											
6-Year Project Deliverables:											
The annual updates of bus stop information panels (8,000 per year) and shelter maps (1,000 per year) will be sustained. Additionally, as project funding is made available additional work will enhance: Customer Information & Maps; provide for Bus Flags, Poles & Info Case Renewal; repair and replacement of Customer Information Electronic Displays; implementation of the Bus Stop Shelter Replacement Program (20 per year); update and upgrade of Facility & Terminal Improvements; provision of Bus Stop Access & Improvements; and, creation of Bus Operator Rest Facility Projects.											
Operating Impact:											
Provision of accurate and enhanced customer information and improved (and safer) bus stop and transit center experiences will generate additional ridership and retain the riders already using Metrobus while reducing injury claims against WMATA and member compact jurisdictions.											
Total Project Budget ( <i>in thousands</i> ) :											
Previous Approved (FY2011-20):		\$14,000.0									
Approved Budget (FY2011-21):		7,909.6									
Change:		(\$6,090.4)									
Description of Significant Changes:											
Aligned project budget with updated project forecast											
Planned Investments ( <i>in thousands</i> ) :											
	<u>Total</u> <u>Budget</u>	<u>Prior Year</u> <u>Estimate</u>	<u>FY2015</u> <u>Forecast</u>	<u>FY2016</u> <u>Budget</u>	<u>FY2017</u> <u>Plan</u>	<u>FY2018</u> <u>Plan</u>	<u>FY2019</u> <u>Plan</u>	<u>FY2020</u> <u>Plan</u>	<u>FY2021</u> <u>Plan</u>	<u>FY2016-21</u> <u>Total</u>	
Total Budget	\$7,909.6	-	\$685.6	\$1,128.8	\$1,191.8	\$1,191.8	\$1,191.8	\$1,207.5	\$1,312.5	\$7,224.0	

<b>Capital Improvement Program</b>												
Project ID:		CIP0225		Project Name:		Railcar Heavy Repair and Overhaul Facility						
Department:		MCAP		Project Type:		RAIL		Project Manager:			John Thomas	
Project Description:												
This project will include the environmental documentation, engineering, design and construction of a new maintenance facility at a yet to be determined location. The facility will be a heavy repair and overhaul facility (HR&O) with 60 bays.												
FY2016 Project Deliverables:												
Complete the environmental review for Heavy Repair and Overhaul facility. When the environmental review is complete the project will be deferred.												
6-Year Project Deliverables:												
Complete environmental evaluation.												
Operating Impact:												
This project may require additional operating budget.												
Total Project Budget ( <i>in thousands</i> ) :												
Previous Approved (FY2011-20):		\$4,324.0										
Approved Budget (FY2011-21):		<u>1,000.0</u>										
Change:		(\$3,324.0)										
Description of Significant Changes:												
Project will not be pursued beyond the on going environmental review												
Planned Investments ( <i>in thousands</i> ) :												
	<u>Total</u> <u>Budget</u>	<u>Prior Year</u> <u>Estimate</u>	<u>FY2015</u> <u>Forecast</u>	<u>FY2016</u> <u>Budget</u>	<u>FY2017</u> <u>Plan</u>	<u>FY2018</u> <u>Plan</u>	<u>FY2019</u> <u>Plan</u>	<u>FY2020</u> <u>Plan</u>	<u>FY2021</u> <u>Plan</u>	<u>FY2016-21</u> <u>Total</u>		
Total Budget	\$1,000.0	-	\$500.0	\$500.0	-	-	-	-	-	\$500.0		

<b>Capital Improvement Program</b>												
Project ID:		CIP0230		Project Name:		Wireless Communication Infrastructure						
Department:		IT		Project Type:		RAIL		Project Manager:			Chuck Wolfe	
Project Description:												
This project includes the engineering, design and construction of a wireless network in all Metro rail stations to support ongoing operational activities and business initiatives. This project will also provide Metro personnel mobile access to internal applications.												
FY2016 Project Deliverables:												
Deploy wireless in 30 Rail stations for WMATA operational activities and business initiatives.												
6-Year Project Deliverables:												
Complete the installation of the wireless network in all Rail stations												
Operating Impact:												
This project may require additional operating budget.												
Total Project Budget (in thousands) :												
Previous Approved (FY2011-20):		\$6,953.2										
Approved Budget (FY2011-21):		<u>6,104.0</u>										
Change:		(\$849.2)										
Description of Significant Changes:												
None.												
Planned Investments (in thousands) :												
	<u>Total</u>	<u>Prior Year</u>	<u>FY2015</u>	<u>FY2016</u>	<u>FY2017</u>	<u>FY2018</u>	<u>FY2019</u>	<u>FY2020</u>	<u>FY2021</u>	<u>FY2016-21</u>		
	<u>Budget</u>	<u>Estimate</u>	<u>Forecast</u>	<u>Budget</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Total</u>		
Total Budget	\$6,104.0	-	\$1,750.0	\$2,200.0	\$2,154.0	-	-	-	-	\$4,354.0		

<b>Capital Improvement Program</b>												
Project ID:		CIP0231		Project Name:		Relocation of Maintenance Departments from Rail Yards						
Department:		MCAP		Project Type:		RAIL		Project Manager:			John Thomas	
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.												
FY2016 Project Deliverables:												
Property acquisition.												
6-Year Project Deliverables:												
Property aquisition and relocation of employees into new facilities												
Operating Impact:												
This acquisition will have a positive retrun on investment in twelve years.												
Total Project Budget ( <i>in thousands</i> ) :												
Previous Approved (FY2011-20):		\$15,000.0										
Approved Budget (FY2011-21):		<u>35,000.0</u>										
Change:		\$20,000.0										
Description of Significant Changes:												
For financial and strategic operating purposes WMATA has decided to pursue a larger and more costly facility than originally planned. As a result, WMATA will be able to relocate more employees to this new strategically valuable location and get out of a series of leases that would have cost the authority \$1.5 million dollars annually. Furthermore, WMATA will be able to divest itself of another parcel of land that would have otherwise required significant capital investment to maintain.												
Planned Investments ( <i>in thousands</i> ) :												
	<u>Total</u>	<u>Prior Year</u>	<u>FY2015</u>	<u>FY2016</u>	<u>FY2017</u>	<u>FY2018</u>	<u>FY2019</u>	<u>FY2020</u>	<u>FY2021</u>	<u>FY2016-21</u>		
	<u>Budget</u>	<u>Estimate</u>	<u>Forecast</u>	<u>Budget</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Total</u>		
Total Budget	\$35,000.0	-	-	\$35,000.0	-	-	-	-	-	\$35,000.0		

<b>Capital Improvement Program</b>										
Project ID: <input type="text" value="CIP0232"/>		Project Name: <input type="text" value="Automatic Train Control System Upgrade"/>								
Department: <input type="text" value="CPDO"/>		Project Type: <input type="text" value="RAIL"/>		Project Manager: <input type="text" value="Steven Yang"/>						
Project Description:										
This project will upgrade Automatic Train Control (ATC) components (impedence bonds) in support of continuous eight car train operations. An increase in system capacity will require upgrades to ATC components that were designed for continuous four car operations. An analysis was done that determined enhancements needed throughout the Metrorail system to support future continuous eight car train operations.										
FY2016 Project Deliverables:										
Design and installation of prototype Power Frequency Track Circuits at two interlockings, B07 and K02, and installation of High Current Impedance Bonds.										
6-Year Project Deliverables:										
None.										
Operating Impact:										
None.										
Total Project Budget ( <i>in thousands</i> ) :										
Current Approved (FY2011-20):		\$3,107.0								
Proposed Budget (FY2011-21):		<u>3,107.0</u>								
Change:		-								
Description of Significant Changes:										
Planned Investments ( <i>in thousands</i> ) :										
	<u>Total</u>	<u>Prior Year</u>	<u>FY2015</u>	<u>FY2016</u>	<u>FY2017</u>	<u>FY2018</u>	<u>FY2019</u>	<u>FY2020</u>	<u>FY2021</u>	<u>FY2016-21</u>
	<u>Budget</u>	<u>Estimate</u>	<u>Forecast</u>	<u>Proposed</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Total</u>
Total Budget	\$3,107.0		\$363.5	\$2,743.5	-	-	-	-	-	\$2,743.5

<b>Capital Improvement Program</b>												
Project ID:		CIP0241		Project Name:		Raising Vent Shafts Vicinity Federal Triangle & Protecting System Core						
Department:		CPDO		Project Type:		RAIL		Project Manager:			James Ashe	
Project Description:												
This project will elevate vent shafts which will protect station from flood waters entering into the rail system. This project is funded the Federal Resiliency grant.												
FY2016 Project Deliverables:												
Design improvements to address flooding at 18 stations. Construction of shafts at the Federal Triangle Metro Station.												
6-Year Project Deliverables:												
Construction of elevating vent shafts at the Federal Triangle, Smithsonian, Archives, and National Mall stations. Construction at 18 stations of improvements to address flooding concerns.												
Operating Impact:												
This improvements will improve flood resiliency and reduce maintenance costs.												
Total Project Budget ( <i>in thousands</i> ) :												
Previous Approved (FY2011-20):		-										
Approved Budget (FY2011-21):		17,916.0										
Change:		\$17,916.0										
Description of Significant Changes:												
This is a new project.												
Planned Investments ( <i>in thousands</i> ) :												
	<u>Total</u>	<u>Prior Year</u>	<u>FY2015</u>	<u>FY2016</u>	<u>FY2017</u>	<u>FY2018</u>	<u>FY2019</u>	<u>FY2020</u>	<u>FY2021</u>	<u>FY2016-21</u>		
	<u>Budget</u>	<u>Estimate</u>	<u>Forecast</u>	<u>Budget</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Total</u>		
Total Budget	\$17,916.0	-	\$260.0	\$3,256.0	\$10,800.0	\$3,600.0	-	-	-	\$17,656.0		



<b>Capital Improvement Program</b>												
Project ID:		CIP0242		Project Name:		Improving Drainage						
Department:		CPDO		Project Type:		RAIL		Project Manager:			Mark Magnussen	
Project Description:												
This project will replace and improve drainage pumping stations to support Drainage/Flood/Piping replacement program for Flood Resiliency improvements. This project will also replace and improve drainage pumping stations and sewage ejectors systems that have exceeded their lifecycle throughout the metro-rail system. This project is funded the Federal Resiliency grant.												
FY2016 Project Deliverables:												
Replace four (4) drainage pumping stations and eight (8) sewage ejectors.												
6-Year Project Deliverables:												
Replace sixteen (16) drainage pumping stations and twenty-two (22) sewage ejectors.												
Operating Impact:												
Replacing the drainage pumping stations will improve flood resiliency and reduce maintenance costs and allow proper drainage in stations.												
Total Project Budget ( <i>in thousands</i> ) :												
Previous Approved (FY2011-20):		-										
Approved Budget (FY2011-21):		<u>10,000.0</u>										
Change:		\$10,000.0										
Description of Significant Changes:												
This is a new project.												
Planned Investments ( <i>in thousands</i> ) :												
	<u>Total</u>	<u>Prior Year</u>	<u>FY2015</u>	<u>FY2016</u>	<u>FY2017</u>	<u>FY2018</u>	<u>FY2019</u>	<u>FY2020</u>	<u>FY2021</u>	<u>FY2016-21</u>		
	<u>Budget</u>	<u>Estimate</u>	<u>Forecast</u>	<u>Budget</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Total</u>		
Total Budget	\$10,000.0	-	-	\$2,000.0	\$6,000.0	\$2,000.0	-	-	-	\$10,000.0		

<b>Capital Improvement Program</b>												
Project ID:		CIP0246		Project Name:		General Engineering						
Department:		CENI		Project Type:		BUS/RAIL		Project Manager:			Louis Viner	
Project Description:												
Operational and maintenance problems arise where capital projects are required to implement solutions. 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, Infrastructure Services.												
FY2016 Project Deliverables:												
Architectural/engineering investigations, reports, and concept designs for operational and maintenance problems that arise during the course of the year and are identified as issues by the Chief, Infrastructure Services.												
6-Year Project Deliverables:												
Architectural/engineering investigations, reports, and concept designs for operational and maintenance problems that arise and are identified as issues by the Chief, Infrastructure Services.												
Operating Impact:												
None.												
Total Project Budget ( <i>in thousands</i> ) :												
Previous Approved (FY2011-20):		-										
Approved Budget (FY2011-21):		10,774.0										
Change:		\$10,774.0										
Description of Significant Changes:												
This is a new project.												
Planned Investments ( <i>in thousands</i> ) :												
	<u>Total</u>	<u>Prior Year</u>	<u>FY2015</u>	<u>FY2016</u>	<u>FY2017</u>	<u>FY2018</u>	<u>FY2019</u>	<u>FY2020</u>	<u>FY2021</u>	<u>FY2016-21</u>		
	<u>Budget</u>	<u>Estimate</u>	<u>Forecast</u>	<u>Budget</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Plan</u>	<u>Total</u>		
Total Budget	\$10,774.0	-	-	\$1,550.0	\$1,455.0	\$1,942.3	\$1,942.3	\$1,942.3	\$1,942.3	\$10,774.0		

Capital Improvement Program																																
Project ID:	CIP0247	Project Name:	Emergency Construction																													
Department:	CPDO	Project Type:	BUS/RAIL	Project Manager:	Ildefonso Burgos																											
Project Description: CPDO miscellaneous and emergency projects. This project will issue procurement contracts including, but not limited to repair structural issues, urgent system repairs, correct safety hazards, and emergency construction at various metro facilities.																																
FY2016 Project Deliverables: Procure services and construct emergency repairs.																																
6-Year Project Deliverables: Complete as needed emergency repairs.																																
Operating Impact: Improved safety and reliability of the Metro system.																																
Total Project Budget ( <i>in thousands</i> ): <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 5px;"> <tr> <td style="width: 70%;">Current Approved (FY2011-20):</td> <td style="width: 30%; text-align: right;">\$6,000.0</td> </tr> <tr> <td>Proposed Budget (FY2011-21):</td> <td style="text-align: right;"><u>7,200.0</u></td> </tr> <tr> <td>Change:</td> <td style="text-align: right;">\$1,200.0</td> </tr> </table>											Current Approved (FY2011-20):	\$6,000.0	Proposed Budget (FY2011-21):	<u>7,200.0</u>	Change:	\$1,200.0																
Current Approved (FY2011-20):	\$6,000.0																															
Proposed Budget (FY2011-21):	<u>7,200.0</u>																															
Change:	\$1,200.0																															
Description of Significant Changes: This is a new project.																																
Planned Investments ( <i>in thousands</i> ): <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 5px;"> <thead> <tr> <th style="width: 15%;"></th> <th style="width: 10%;"><u>Total Budget</u></th> <th style="width: 10%;"><u>Prior Year Estimate</u></th> <th style="width: 10%;"><u>FY2015 Forecast</u></th> <th style="width: 10%;"><u>FY2016 Proposed</u></th> <th style="width: 10%;"><u>FY2017 Plan</u></th> <th style="width: 10%;"><u>FY2018 Plan</u></th> <th style="width: 10%;"><u>FY2019 Plan</u></th> <th style="width: 10%;"><u>FY2020 Plan</u></th> <th style="width: 10%;"><u>FY2021 Plan</u></th> <th style="width: 10%;"><u>FY2016-21 Total</u></th> </tr> </thead> <tbody> <tr> <td style="text-align: right;">Total Budget</td> <td style="text-align: right;">\$7,200.0</td> <td style="text-align: center;">-</td> <td style="text-align: center;">-</td> <td style="text-align: right;">\$1,200.0</td> <td style="text-align: right;">\$1,200.0</td> <td style="text-align: right;">\$1,200.0</td> <td style="text-align: right;">\$1,200.0</td> <td style="text-align: right;">\$1,200.0</td> <td style="text-align: right;">\$1,200.0</td> <td style="text-align: right;">\$7,200.0</td> </tr> </tbody> </table>												<u>Total Budget</u>	<u>Prior Year Estimate</u>	<u>FY2015 Forecast</u>	<u>FY2016 Proposed</u>	<u>FY2017 Plan</u>	<u>FY2018 Plan</u>	<u>FY2019 Plan</u>	<u>FY2020 Plan</u>	<u>FY2021 Plan</u>	<u>FY2016-21 Total</u>	Total Budget	\$7,200.0	-	-	\$1,200.0	\$1,200.0	\$1,200.0	\$1,200.0	\$1,200.0	\$1,200.0	\$7,200.0
	<u>Total Budget</u>	<u>Prior Year Estimate</u>	<u>FY2015 Forecast</u>	<u>FY2016 Proposed</u>	<u>FY2017 Plan</u>	<u>FY2018 Plan</u>	<u>FY2019 Plan</u>	<u>FY2020 Plan</u>	<u>FY2021 Plan</u>	<u>FY2016-21 Total</u>																						
Total Budget	\$7,200.0	-	-	\$1,200.0	\$1,200.0	\$1,200.0	\$1,200.0	\$1,200.0	\$1,200.0	\$7,200.0																						

<b>Capital Improvement Program</b>																																											
Project ID:		CIP0251		Project Name:		Automatic Train Control State of Good Repair																																					
Department:		CPDO		Project Type:		RAIL		Project Manager:			Judy Mewborn																																
Project Description:																																											
<p>The Automatic Train Control (ATC) rooms and associated Train Control Room (TCR) and wayside equipment are aging. In order to maintain a high level readiness and safety, obsolete and/or worn out equipment needs to be replaced on various lifecycles varying from 20 to 40 years. The equipment categories are track circuits (Automatic Train Protection (ATP) modules and impedance bonds), Non Vital Processors (Replace Non Vital Relays and Remote Terminal Units (RTU's)), 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 shall include the mainline stations and the Storage &amp; Inspection (S&amp;I) yards.</p>																																											
FY2016 Project Deliverables:																																											
<p>Replacement of non vital relays and non vital processors at Union Station and Rhode Island Ave. Continue to complete surveys and gather life cycle information concerning ATC equipment to update the life cycle database. The ATC Yard SOGR project will include the replacement of switch machines in the system that are nearing or exceeding their life cycles. Priority work assigned to Alexandria yard. Replace EOL Speed Frater with machines with the approved switch machines. Prototype installation with newly designed interface modules to be included at 4 locations (1 ea. yard). The ATC Mainline SOGR project will include the replacement of obsolete &amp; EOL Non-Vital relays (NVR) Logic with NVR and newly installed NVP to also work as ATC-RTU (2- Interlocking locations &amp; 2 - Inline locations). Examine track circuits by stray current testing &amp; parasitic oscillation. Megger and replace defective ATC cables. The ATC Asset Management project will include the development of an ATC comprehensive asset inventory for program planning.</p>																																											
6-Year Project Deliverables:																																											
<p>Continue to replace non vital relays with non vital processors. During completion of the life cycle database we will determine the order of items to be brought up to a "state of good repair". Up to 32 stations and 3 or more rail yards may be involved for Non-vital Interlocking Processor (NVIP) installations, track circuit replacement, TCR equipment replacement, wayside equipment replacement, and ATC cable replacement. Commencement of Switch machine installation - priority work assigned to Alexandria Yard, Glenmont Yard, Shady Grove Yard, and Franconia-Springfield. Work can be done at other locations after the completion of the first four locations. Commencement of construction and equipment upgrades. Continue future installations of the pilot program. Continue replacing buried EOL and defective ATC cables.</p>																																											
Operating Impact:																																											
<p>The ATC State of Good Repair program replaces ATC equipment and systems which are beyond or nearing the end of its recommended life-cycle. Replacement of these ATC assets ensures safe and reliable operation of WMATA's Automatic Train Control system.</p>																																											
Total Project Budget (in thousands) :																																											
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td>Previous Approved (FY2011-20):</td> <td colspan="10" style="text-align: right;">-</td> </tr> <tr> <td>Approved Budget (FY2011-21):</td> <td colspan="10" style="text-align: right;">123,565.2</td> </tr> <tr> <td>Change:</td> <td colspan="10" style="text-align: right;">\$123,565.2</td> </tr> </table>											Previous Approved (FY2011-20):	-										Approved Budget (FY2011-21):	123,565.2										Change:	\$123,565.2									
Previous Approved (FY2011-20):	-																																										
Approved Budget (FY2011-21):	123,565.2																																										
Change:	\$123,565.2																																										
Description of Significant Changes:																																											
This is a new project.																																											
Planned Investments (in thousands) :																																											
	<u>Total</u> <u>Budget</u>	<u>Prior Year</u> <u>Estimate</u>	<u>FY2015</u> <u>Forecast</u>	<u>FY2016</u> <u>Budget</u>	<u>FY2017</u> <u>Plan</u>	<u>FY2018</u> <u>Plan</u>	<u>FY2019</u> <u>Plan</u>	<u>FY2020</u> <u>Plan</u>	<u>FY2021</u> <u>Plan</u>	<u>FY2016-21</u> <u>Total</u>																																	
Total Budget	\$123,565.2	-	-	\$9,377.0	\$14,500.0	\$20,853.0	\$22,430.0	\$24,500.0	\$31,905.2	\$123,565.2																																	

<b>Capital Improvement Program</b>																																
Project ID: CIP0252		Project Name: AC Power Systems State of Good Repair																														
Department: CPDO		Project Type: RAIL		Project Manager: Kelly Reahl																												
<b>Project Description:</b> 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 metro rail system. The AC rooms and associated power equipment are aging. In order to maintain high level readiness and safety, obsolete and/or worn out equipment need to be replaced on various lifecycles 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.																																
<b>FY2016 Project Deliverables:</b> None.																																
<b>6-Year Project Deliverables:</b> Design of 27 Stations (54 total AC Rooms) and Rehabilitation of 10 AC Rooms. The 27 stations to be designed include: A09 AC, A10 AC, A11 AC, B02 AC, B04 AC, B06 AC, B99 AC, C02 AC, C03 AC, C04 AC, C05 AC, C06 AC, C10 AC, C13 AC, C99 Yard, D03 AC, F01 AC, F02 AC, F03 AC, F04 AC, G02 AC, K01 AC, K04 AC. The 10 locations to be rehabilitated will be dependent upon contemporaneous condition assessment information to ensure the worst performing AC rooms are addressed in priority order. First rehabilitation will not occur until FY19; therefore, we can not currently project which specific rooms will prioritized.																																
<b>Operating Impact:</b> None.																																
<b>Total Project Budget (in thousands) :</b> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td>Current Approved (FY2011-20):</td> <td style="text-align: right;">\$8,714.5</td> </tr> <tr> <td>Proposed Budget (FY2011-21):</td> <td style="text-align: right;">14,091.7</td> </tr> <tr> <td>Change:</td> <td style="text-align: right;">\$5,377.2</td> </tr> </table>											Current Approved (FY2011-20):	\$8,714.5	Proposed Budget (FY2011-21):	14,091.7	Change:	\$5,377.2																
Current Approved (FY2011-20):	\$8,714.5																															
Proposed Budget (FY2011-21):	14,091.7																															
Change:	\$5,377.2																															
<b>Description of Significant Changes:</b> <div style="border: 1px solid black; height: 60px; width: 100%;"></div>																																
<b>Planned Investments (in thousands) :</b> <table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th></th> <th><u>Total</u> <u>Budget</u></th> <th><u>Prior Year</u> <u>Estimate</u></th> <th><u>FY2015</u> <u>Forecast</u></th> <th><u>FY2016</u> <u>Proposed</u></th> <th><u>FY2017</u> <u>Plan</u></th> <th><u>FY2018</u> <u>Plan</u></th> <th><u>FY2019</u> <u>Plan</u></th> <th><u>FY2020</u> <u>Plan</u></th> <th><u>FY2021</u> <u>Plan</u></th> <th><u>FY2016-21</u> <u>Total</u></th> </tr> </thead> <tbody> <tr> <td>Total Budget</td> <td>\$14,091.7</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>\$1,306.3</td> <td>\$3,492.1</td> <td>\$3,916.1</td> <td>\$5,377.2</td> <td>\$14,091.7</td> </tr> </tbody> </table>												<u>Total</u> <u>Budget</u>	<u>Prior Year</u> <u>Estimate</u>	<u>FY2015</u> <u>Forecast</u>	<u>FY2016</u> <u>Proposed</u>	<u>FY2017</u> <u>Plan</u>	<u>FY2018</u> <u>Plan</u>	<u>FY2019</u> <u>Plan</u>	<u>FY2020</u> <u>Plan</u>	<u>FY2021</u> <u>Plan</u>	<u>FY2016-21</u> <u>Total</u>	Total Budget	\$14,091.7	-	-	-	-	\$1,306.3	\$3,492.1	\$3,916.1	\$5,377.2	\$14,091.7
	<u>Total</u> <u>Budget</u>	<u>Prior Year</u> <u>Estimate</u>	<u>FY2015</u> <u>Forecast</u>	<u>FY2016</u> <u>Proposed</u>	<u>FY2017</u> <u>Plan</u>	<u>FY2018</u> <u>Plan</u>	<u>FY2019</u> <u>Plan</u>	<u>FY2020</u> <u>Plan</u>	<u>FY2021</u> <u>Plan</u>	<u>FY2016-21</u> <u>Total</u>																						
Total Budget	\$14,091.7	-	-	-	-	\$1,306.3	\$3,492.1	\$3,916.1	\$5,377.2	\$14,091.7																						

<b>Capital Improvement Program</b>											
Project ID:		CIP0253		Project Name:		Traction Power State of Good Repair					
Department:		CPDO		Project Type:		RAIL		Project Manager:			Kelly Reahl
Project Description:											
<p>The program will provide for power equipment replacements to traction power related components which are beyond or nearing the end of their useful life to maintain a reliable traction power system.</p> <p>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.</p>											
FY2016 Project Deliverables:											
Replace 30,000 LF of traction power cable (including the rail component cable). Cable replacement crew from CIP0139_P6 Replace Power cables will move to CIP0253 TP SOGR.											
6-Year Project Deliverables:											
Design and replacement of equipment of 4 Tie Breaker Stations and 14 Traction Power locations.											
Operating Impact:											
This project will decrease the corrective maintenance and operational down time of these facilities.											
Total Project Budget ( <i>in thousands</i> ) :											
Previous Approved (FY2011-20):		-									
Approved Budget (FY2011-21):		60,771.0									
Change:		\$60,771.0									
Description of Significant Changes:											
This is a new project.											
Planned Investments ( <i>in thousands</i> ) :											
	<u>Total</u> <u>Budget</u>	<u>Prior Year</u> <u>Estimate</u>	<u>FY2015</u> <u>Forecast</u>	<u>FY2016</u> <u>Budget</u>	<u>FY2017</u> <u>Plan</u>	<u>FY2018</u> <u>Plan</u>	<u>FY2019</u> <u>Plan</u>	<u>FY2020</u> <u>Plan</u>	<u>FY2021</u> <u>Plan</u>	<u>FY2016-21</u> <u>Total</u>	
Total Budget	\$60,771.0	-	-	\$5,235.0	\$8,987.1	\$9,500.0	\$10,298.9	\$12,500.0	\$14,250.0	\$60,771.0	

### **Reimbursable Projects**

Reimbursable projects are unique projects for which separate funding is provided by Metro's jurisdictional partners. Reimbursable projects were authorized by prior Board actions and are displayed for informational purposes. An expenditure forecast for active reimbursable projects is provided for informational purposes.

ATTACHMENT B  
OTHER CAPITAL PROJECTS  
Summary of Reimbursable Capital Projects: FY2016  
(dollars in millions)

	Approved Budget	Pre-FY2011 Estimate	FY2011 Estimate	FY2012 Estimate	FY2013 Estimate	FY2014 Estimate	FY2015 Forecast	FY2016 Plan	FY2017 Plan	FY2018 Plan	FY2019 Plan	FY2020 Plan	FY2021 Plan	Projected Total
<b>District of Columbia</b>														
CRB0001 Ana. Lt. Rail Dem. - Vehicles	\$ 18.0	\$ 15.2	\$ 0.7	\$ 0.1	\$ 0.9	\$ 0.5	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 17.3
CRB0002 DC Downtown Circulator Buses	36.5	17.4	0.2	-	-	-	-	-	-	-	-	-	-	17.6
CRB0004 Southeast Bus Garage Replacement	67.5	14.7	1.0	30.4	5.2	0.3	-	-	-	-	-	-	-	51.5
CRB0027 Brentwood Rail Yard Expansion	2.4	2.3	-	-	0.0	-	-	-	-	-	-	-	-	2.4
CRB0047 DC Student SmartTrip Pass	0.4	0.0	-	-	-	-	-	-	-	-	-	-	-	0.0
CRB0049 Union Row: U Str/Cardozo Stn	1.5	1.0	-	-	-	-	-	-	-	-	-	-	-	1.0
CRB0052 U St Stat 14 St Bus Access Imp	0.5	-	-	0.0	-	-	-	-	-	-	-	-	-	0.0
CRB0056 Yellow Line Extension	1.5	0.6	-	-	-	-	-	-	-	-	-	-	-	0.6
CRB0078 Minnesota Avenue Public Hearing	0.1	0.0	-	-	-	-	-	-	-	-	-	-	-	0.0
CRB0100 Georgetown Streetscape	1.5	1.4	-	-	-	-	-	-	-	-	-	-	-	1.4
CRB0107 MCI Arena	18.4	18.1	-	-	-	-	-	-	-	-	-	-	-	18.1
CRB0119 DC Station Trailblazer Signs	0.1	0.1	-	0.0	-	-	-	-	-	-	-	-	-	0.1
CRB0122 Union Station Metrorail Access and Capacity Improvement	2.6	-	-	0.0	-	-	-	-	-	-	-	-	-	0.0
CRB0129 Congress Heights Bus Loop Design	0.3	-	-	-	-	-	0.2	0.2	-	-	-	-	-	0.3
CRB0130 Minnesota Avenue Parking Garage Repairs	0.7	-	-	-	-	-	0.7	-	-	-	-	-	-	0.7
<b>Regional</b>														
CRB0005 Project Development	18.9	6.3	0.7	1.1	1.5	1.6	1.1	1.1	1.1	1.1	1.1	1.1	1.1	18.9
DC Subtotal	\$ 170.8	\$ 77.2	\$ 2.6	\$ 31.6	\$ 7.6	\$ 2.3	\$ 2.0	\$ 1.2	\$ 1.1	\$ 1.1	\$ 1.1	\$ 1.1	\$ 1.1	\$ 130.0
<b>Maryland</b>														
<b>Montgomery County</b>														
CRB0006 Glenmont Parking Facility	\$ 30.1	\$ 5.1	\$ 4.3	\$ 16.9	\$ 0.9	\$ 1.3	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 28.4
CRB0043 Shady Grove Rail Yard Expansion	2.2	2.2	-	-	0.0	-	-	-	-	-	-	-	-	2.2
CRB0046 Silver Spring South Entrance	0.4	0.3	-	-	-	-	-	-	-	-	-	-	-	0.3
CRB0007 Takoma Langley Park Center	6.7	0.8	0.5	-	-	-	-	-	-	-	-	-	-	1.3
CRB0106 Rockville MARC ADA	0.1	0.0	-	-	-	-	-	-	-	-	-	-	-	0.0
CRB0116 Shady Grove Parking II	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Prince George's County</b>														
CRB0034 Greenbelt Rail Yard Expansion	1.8	1.8	-	-	0.0	-	-	-	-	-	-	-	-	1.8
CRB0037 New Carrollton Parking Garage	23.1	22.4	-	-	-	-	-	-	-	-	-	-	-	22.4
<b>Maryland-wide</b>														
CRB0009 Project Development	16.5	5.0	0.6	0.8	1.5	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	16.5
CRB0105 Largo Blue Line Extension - Prelim Engr	10.4	10.2	-	-	-	-	-	-	-	-	-	-	-	10.2
CRB0108 Maryland Station Name Change	0.5	0.3	0.0	-	-	-	-	-	-	-	-	-	-	0.3
CRB0127 MTA Purple Line	4.8	-	-	-	-	-	-	-	4.7	-	-	-	-	4.7
Maryland Subtotal	\$ 96.7	\$ 48.1	\$ 5.4	\$ 17.7	\$ 2.3	\$ 2.4	\$ 1.1	\$ 1.1	\$ 5.8	\$ 1.1	\$ 1.1	\$ 1.1	\$ 1.1	\$ 88.2



ATTACHMENT B  
OTHER CAPITAL PROJECTS  
Summary of Reimbursable Capital Projects: FY2016  
(dollars in millions)

	Approved Budget	Pre-FY2011 Estimate	FY2011 Estimate	FY2012 Estimate	FY2013 Estimate	FY2014 Estimate	FY2015 Forecast	FY2016 Plan	FY2017 Plan	FY2018 Plan	FY2019 Plan	FY2020 Plan	FY2021 Plan	Projected Total
<b>Virginia</b>														
<b>Alexandria, City of</b>														
CRB0023 Alexandria Rail Yard - EA	\$ 0.2	\$ 0.1	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0.1
CRB0032 Crystal City - Potomac (Alex)	0.3	-	0.0	-	-	-	-	-	-	-	-	-	-	0.0
CRB0011 Eisenhower Avenue Station Entrance	1.8	-	0.1	0.1	-	-	-	-	-	-	-	-	-	0.2
CRB0012 King Street Station Bus Loop Reconfiguration	4.2	-	0.0	0.5	0.2	0.7	-	-	-	-	-	-	-	1.4
CRB0013 Potomac Yard Alt. Analysis	5.2	0.2	0.3	1.2	2.1	0.2	0.6	-	-	-	-	-	-	4.6
CRB0075 King Street Station Improvements	16.6	16.3	-	-	-	-	-	-	-	-	-	-	-	16.3
CRB0113 Potomac Yards	0.2	0.2	-	-	-	-	-	-	-	-	-	-	-	0.2
CRB0126 Crystal City-Potomac Yard Transitway - Buses	4.0	-	-	-	3.7	(0.1)	-	-	-	-	-	-	-	3.5
<b>Arlington County</b>														
CRB0064 Arlington County Project Mgmt.	0.9	0.8	-	-	-	-	-	-	-	-	-	-	-	0.8
CRB0068 Clarendon Station Improvements	0.4	0.1	0.2	-	-	-	-	-	-	-	-	-	-	0.4
CRB0015 Columbia Pike Street Car NEPA & PE	4.1	0.3	1.8	1.6	0.3	-	-	-	-	-	-	-	-	3.9
CRB0016 Bus Super Stop Prototype	1.0	0.1	0.2	0.7	0.0	0.0	-	-	-	-	-	-	-	1.0
CRB0042 Rosslyn Station New Entrance	5.1	3.8	0.2	0.2	0.3	0.1	-	-	-	-	-	-	-	4.5
CRB0111 National Airport	5.0	4.5	-	-	-	-	-	-	-	-	-	-	-	4.5
CRB0117 Shirlington Garage Design Study	0.0	0.0	-	-	-	-	-	-	-	-	-	-	-	0.0
CRB0125 Twinbrook Commons JDA	0.2	-	-	-	0.0	-	-	-	-	-	-	-	-	0.0
<b>Fairfax County</b>														
CRB0026 Bus Stop Signs 600 In Fairfax	0.1	-	-	0.0	0.0	0.0	-	-	-	-	-	-	-	0.1
CRB0050 Vienna/Fairfax-GMU Parking Structure	1.0	0.7	-	-	-	-	-	-	-	-	-	-	-	0.7
CRB0051 Vienna Parking Structure	27.1	26.2	-	-	-	-	-	-	-	-	-	-	-	26.2
CRB0053 Vienna Station Improve - Pulte Home	0.4	0.0	-	-	-	-	-	-	-	-	-	-	-	0.0
CRB0017 Vienna Mezzanine Stairs	2.0	-	0.4	1.4	(0.0)	-	-	-	-	-	-	-	-	1.8
CRB0054 West Falls Church Parking Structure	17.0	16.7	0.1	0.1	0.0	-	-	-	-	-	-	-	-	16.8
CRB0084 West Fall Church Bus Bays	2.8	2.3	0.3	0.0	-	-	-	-	-	-	-	-	-	2.6
<b>Virginia-wide</b>														
CRB0018 Project Development	13.9	5.5	0.5	0.6	0.8	0.6	1.0	0.8	0.8	0.8	0.8	0.8	0.8	13.9
CRB0029 Crystal City/Potomac Yard	1.5	1.1	0.2	0.0	0.0	-	-	-	-	-	-	-	-	1.3
CRB0019 Dulles Extension Design/Build*	293.9	12.2	40.1	40.6	62.7	13.9	64.4	51.5	2.3	2.8	-	-	3.2	293.7
CRB0020 Dulles Phase 2*	308.8	-	0.6	0.8	0.7	42.3	9.8	16.7	118.2	81.1	11.9	26.6	-	308.8
Virginia Subtotal	\$ 717.5	\$ 91.1	\$ 45.1	\$ 47.9	\$ 70.8	\$ 57.8	\$ 75.8	\$ 69.0	\$ 121.3	\$ 84.8	\$ 12.7	\$ 27.4	\$ 4.0	\$ 707.6
<b>All Jurisdictional and Other Partners</b>														
CRB0021 6000-Series Rail Cars Base Contract	\$ 120.0	\$ 112.2	\$ 6.8	\$ (0.7)	\$ 1.5	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	119.7
CRB0022 Regional Travel Training ACCS	1.2	0.1	0.5	0.5	0.0	0.2	-	-	-	-	-	-	-	1.3
CRB0038 Precision Stopping	1.0	0.5	0.4	-	-	-	-	-	-	-	-	-	-	0.9
CRB0041 IT Communication Enhancement	1.6	1.4	0.0	-	0.1	-	-	-	-	-	-	-	-	1.6
CRB0060 Regional Fare Int. (MTA)	7.6	6.1	0.0	-	-	-	-	-	-	-	-	-	-	6.1
CRB0130 SmartTrip Express Recharges	8.7	-	-	-	-	-	5.7	2.4	-	-	-	-	-	8.1
MSC0005 Tax Advantage Lease Program	8.4	7.0	0.1	0.1	0.0	0.0	-	-	-	-	-	-	-	7.2
All Jurisdiction Subtotal	\$ 148.5	\$ 127.3	\$ 7.8	\$ (0.2)	\$ 1.7	\$ 0.2	\$ 5.7	\$ 2.4	\$ -	\$ -	\$ -	\$ -	\$ -	144.9
Grand Total	\$ 1,133.5	\$ 343.6	\$ 60.9	\$ 96.9	\$ 82.4	\$ 62.7	\$ 84.6	\$ 73.7	\$ 128.2	\$ 86.9	\$ 14.9	\$ 29.6	\$ 6.2	\$ 1,070.7

\*Staff has been directed by the Metropolitan Washington Airports Authority (MWAA) to revise the Silver Line Phase 1 and Phase 2 project budgets so that expenses associated with the additional 64 railcars (approximately \$205.9 million) are aligned to the Phase 2 reimbursable project rather than Phase 1. This revision has no net impact on the total Silver Line funding commitment by MWAA to WMATA, and the budgets for the Dulles Projects (CRB0019 & CRB0020) shown above assume these changes are approved by the WMATA Board in May 2015. In addition to the budget changes, Phase 2 costs incurred under CRB0019 during FY2014 will need to be reclassified to the Phase 2 project to correctly align costs. In addition to revising the Phase 1 and Phase 2 project budgets and costs as described above, it is also assumed that in May 2015 the WMATA Board will approve a net increase to the Phase 1 project budget of \$21.05 million to cover additional punch-list costs associated with completion of Phase 1. After the WMATA Board's actions, and including the forecasted FY15 expenses, total combined spending is forecasted to be \$288.2M between the two projects, and the total combined budget is \$602.7M for the two projects.



## **Appendix B   Board Resolutions**



SUBJECT: APPROVAL OF FISCAL YEAR (FY) 2016 FEE CHANGES WITH ACCOMPANYING PUBLIC HEARING REPORT AND TITLE VI EQUITY ANALYSIS, AND ADOPTION OF THE FY2016 OPERATING BUDGET

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 FY2016 Operating budget, and in Resolution 2015-11 approved a docket of proposed fare and fee changes for FY2016; and

WHEREAS, The Board of Directors conducted a public hearing on April 7, 2015, preceded by an open forum on the proposed fare and fee changes, the results of which are summarized in a Staff Report (Attachment A); and

WHEREAS, To address feedback from riders expressed at the public hearing, through the online survey and in written responses to the docket, and to foster the Board of Directors' strategic goal of connecting communities, staff is working with Maryland Department of Transportation, Virginia Railway Express, and CommuterDirect to develop an alternative fare payment approach that will allow for continuation of the Transit Link Card (TLC) pass without the use of magnetic-stripe paper farecards; and

WHEREAS, The Board of Directors also sought public comment in the April 7, 2015, public hearing on the Program of Projects, the list of projects to be funded by the federal grants, as expressed in the proposed FY2016 CIP and Federal FY2015 Grant Applications, and the public feedback received on the Program of Projects is also included in the Staff Report; and

WHEREAS, As required by Title VI of the Civil Rights Act of 1964, Washington Metropolitan Area Transit Authority (WMATA) staff conducted additional public outreach to riders regarding the proposed fare and fee changes (Attachment B) 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;

WHEREAS, As required by Title VI of the Civil Rights Act of 1964, WMATA staff evaluated the proposed FY2016 fare and fee changes to determine whether these changes would have a disparate impact on minority populations or impose a

disproportionate burden on low income populations, and has determined there would be no disparate impact on minority populations or disproportionate burden on low-income populations at the system-wide level (Attachment C); and

WHEREAS, It is anticipated that the Montgomery County Council will approve continued funding for the "Kids Ride Free" program to subsidize free Metrobus fares for Montgomery County students between 2:00 p.m. and 7:00 p.m. for the FY2016 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), as well as continued funding for transfer discounts at Anacostia and Congress Heights stations; and

WHEREAS, The Board of Directors, in Resolution 2015-05, authorized the closure of the Transit Infrastructure Investment Fund (TIIF) and identified \$27 million in unexpended approved funds from completed or closed regional projects; now therefore be it

*RESOLVED*, That the Board of Directors approves the Staff Report in Attachment A on the public hearings and outreach concerning proposed fare and fee changes; and be it further

*RESOLVED*, That the Board of Directors approves the changes to the parking fees reflected in Attachment B, as well as the expanded hours of weekday parking fee collection, to begin on or about Sunday, June 28, 2015; and be it further

*RESOLVED*, That the Board of Directors approves the Title VI Equity Analysis in Attachment C demonstrating no disparate impact on minority populations or disproportionate burden on low income populations from the parking fee changes shown in Attachment B; and be it further

*RESOLVED*, That the Board of Directors approves the discontinuation of magnetic-stripe paper farecards as the fare media for the Transit Link Card (TLC) pass, with January 2016 as the final month for which the paper farecard TLC product will be available for use; and be it further

*RESOLVED*, That the alternative fare payment approach for TLC shall include a non-transferable, agency-specific label or sticker affixed to a SmarTrip® card by CommuterDirect or other distributor of the TLC prior to receipt of the product by the customer, as agreed upon by Metro staff and staff of Maryland Department of Transportation, Virginia Railway Express, and CommuterDirect; and be it further

*RESOLVED*, That the Board of Directors directs Metro staff to continue to work with staff from Maryland Department of Transportation, Virginia Railway Express, and

CommuterDirect to implement, for sale starting in January 2016 and for use beginning in February 2016, this alternative TLC fare payment approach; and be it further

*RESOLVED*, That the Board of Directors directs Metro staff to analyze the possibility of route enhancements or discontinuation of the 5A route in the State of Good Operations review currently underway, including bringing these options to the Board of Directors for inclusion in the State of Good Operations public hearing; and be it further

*RESOLVED*, That the Board of Directors approves and adopts the FY2016 Operating budget of \$1.814 billion, with expenses and subsidies detailed in Attachments D-1 and D-2, including the use of \$27 million in unexpended TIIF funding in the Operating budget to fund Metrorail operating expenses; and be it further

*RESOLVED*, That \$21.2 million of debt service expenditures resulting from the issuance of Metro Matters bonds are included in the FY2016 budget and allocated to the jurisdictions as detailed in Attachment D-2; and be it further

*RESOLVED*, That the total budget for Operating Reimbursable Program projects shall be \$47.3 million, as detailed in Attachment E; and be it further

*RESOLVED*, That the budget for Operating Reimbursable Safety & Security grants for FY2016 shall be \$5.7 million or such lesser amount of federal safety and security grants awarded to WMATA as shown in Attachment E; and that the FY2016 budget for Safety and Security grants may not exceed this amount without additional action from the Board of Directors; and be it further

*RESOLVED*, That the Board of Directors remains committed to funding the trust for Other Post-Employment Benefits (OPEB) established as part of the FY2015 budget and has included an \$11 million contribution for this trust in this FY2016 budget, and directs that future budgets be submitted with additional contributions to this trust; and be it finally

*RESOLVED*, That in order for staff to implement the approved parking fee changes prior to the beginning of the new fiscal year, this Resolution shall be effective immediately.

Reviewed as to form and legal sufficiency,

A handwritten signature in blue ink, appearing to read "Mark R. Pohl", is written over a horizontal line.

Mark R. Pohl  
Acting General Counsel

WMATA File Structure Nos.  
4.2.2 Fiscal Year Budgets  
9.12.9 Tariff (WMATA Fare Structure)

PROPOSED



SUBJECT: APPROVAL OF FISCAL YEAR (FY) 2016 CAPITAL BUDGET AND SIX-YEAR CAPITAL IMPROVEMENT PROGRAM

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 FY2016-2021 Capital Improvement Program (CIP); and

WHEREAS, It is anticipated that, as part of the adoption of the FY2016 Operating budget, the Board of Directors will approve the Staff Report on public outreach, which includes public feedback on the Program of Projects, the list of projects to be funded by the federal grants as expressed in the proposed FY2016 Capital budget and Federal FY2015 Grant Applications; and

WHEREAS, It is anticipated that the Board of Directors will authorize the GM/CEO to negotiate and execute a Standard Project Agreement with the Northern Virginia Transportation Authority (NVTA), and to undertake any other appropriate actions as necessary, in order to accept \$5 million in FY2014 NVTA Capital grant funding for Metrorail traction power upgrades; and

WHEREAS, It is anticipated that the Board of Directors will approve an increase of \$21.1 million to the FY2015 Capital Reimbursable budget for WMATA's Dulles Corridor Metrorail Extension (Silver Line) Phase 1 project with the Metropolitan Washington Airports Authority; and

WHEREAS, Staff is required to apply for grants within four weeks of the adoption of the budget; and

WHEREAS, The application deadlines for most discretionary grant programs are shorter than the normal cycle for Board of Directors' action; and

WHEREAS, Board 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 FY2016 Capital budget of \$1.17 billion as detailed in Attachments A-1, A-2, and A-3; and be it further

*RESOLVED*, That the Board of Directors acknowledges that, in accordance with the terms of the Capital Funding Agreement (CFA), if any projects are started during the term of the CFA or any bonds or other financial instruments are issued pursuant to the CFA, the Contributing Jurisdictions have agreed to continue to make their Allocated Contributions for those projects or debt service until the conclusion of the projects or the final maturity of the bonds or other financial instruments; and be it further

*RESOLVED*, That the GM/CEO is authorized to rollover the positive or negative variance between actual FY2015 CIP expenditures and forecasted FY2015 CIP expenditures detailed in Attachment A-2, in accordance with the terms of the CFA; and be it further

*RESOLVED*, That the Board of Directors approves the multi-year CIP for FY2016 through FY2021 with \$6.19 billion of planned funding sources and \$5.56 billion of planned expenditures, plus the positive or negative variance between actual FY2015 expenditures and forecasted FY2015 CIP expenditures as detailed in Attachments A-1 and A-2; and be it further

*RESOLVED*, That the Board of Directors approves use of Federal Transit Administration (FTA) grant and local matching funds in the amount of \$30.7 million for preventive maintenance expenditures; and be it further

*RESOLVED*, That the budget for the Capital Reimbursable Program includes \$73.7 million for both new projects and prior-year reimbursable program project budgets, as detailed in Attachment B; and be it further

*RESOLVED*, That in order to implement the elements of the FY2016 CIP, the GM/CEO, the Chief Financial Officer, 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 FY2016 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, the GM/CEO, the Chief Financial Officer, or their designee are authorized 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 finally

*RESOLVED*, That in order for staff to timely file for federal grants, this Resolution shall be effective immediately.

Reviewed as to form and legal sufficiency,



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Mark R. Pohl  
Acting General Counsel

WMATA File Structure No.  
4.2.2 Fiscal Year Budgets

PROPOSED

SUBJECT: APPROVAL OF TITLE VI EQUITY ANALYSIS AND ELIMINATION OF PAPER  
FARECARDS ON METRORAIL

RESOLUTION  
OF THE  
BOARD OF DIRECTORS  
OF THE  
WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

WHEREAS, The Washington Metropolitan Area Transit Authority (WMATA) Board of Directors has previously directed staff to take several actions to encourage greater usage of SmarTrip® cards by riders, to make fare and pass products available only on the SmarTrip® card, and toward eliminating paper farecards; and

WHEREAS, In Resolution 2010-31, the Board of Directors incentivized Metrorail riders to use SmarTrip® cards rather than paper farecards by establishing a surcharge for using paper farecards on Metrorail and increased that surcharge in Resolution 2012-09; and

WHEREAS, In Resolution 2010-66, the Board of Directors adopted a set of fare policy principles to guide strategic decision-making, one of which is to encourage the use of cost-effective fare media; and

WHEREAS, In Resolution 2014-28, to further the General Manager and Chief Executive Officer's goal of eliminating paper farecards on the Metrorail system, the Board of Directors authorized SmarTrip® reserve funds to be used to retrofit Express Recharge Machines (fare vending machines) to dispense SmarTrip® cards rather than paper farecards; and

WHEREAS, The Transit Link Card (TLC) pass is one of the last remaining paper farecard pass products, and in Resolution 2015-29, as part of the adoption of the FY2016 Operating Budget, the Board of Directors directed staff to work with regional partner agencies to discontinue the paper farecard TLC pass and to transition the TLC pass over to SmarTrip®; and

WHEREAS, As required by Title VI of the Civil Rights Act of 1964, WMATA staff has conducted public outreach regarding the elimination of paper farecards by surveying community-based organizations, and staff will continue with public outreach to ensure a smooth transition for Metrorail riders switching from paper farecards to SmarTrip® cards as shown in the attached Public Involvement report (Attachment A); and

WHEREAS, As required by Title VI of the Civil Rights Act of 1964, WMATA staff has evaluated the proposed elimination of paper farecards on Metrorail and has determined that there is no disparate impact on minority populations or disproportionate burden on low-income populations as shown in the attached Title VI equity analysis memo (Attachment B); now, therefore be it

*RESOLVED*, That the Board of Directors approves the Title VI equity analysis in Attachment A, demonstrating that eliminating paper farecards on the Metrorail system does not result in a disparate impact on minority populations or disproportionate burden on low-income populations, and the associated Public Involvement report in Attachment B describing the Title VI public outreach for the elimination of paper farecards; and be it further

*RESOLVED*, That the Board of Directors authorizes WMATA staff to take further actions necessary to eliminate paper farecards on Metrorail; and be it finally

*RESOLVED*, That this Resolution shall be effective 30 days after its adoption by the Board of Directors in accordance with the Section 8(b) of the Compact.

Reviewed as to form and legal sufficiency,



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Mark R. Pohl  
Acting General Counsel

WMATA File Structure No.:  
9.12.8 SmarTrip®



## Appendix C Human Capital Summary

Human capital management is a way of defining and categorizing employees' skills and abilities and ensuring that those skills and abilities are used to accomplish the goals and objectives of the organization. At Metro, the management of human capital involves workforce planning and investment, and it is aligned with the strategic plan and integrated with the core mission of operating and maintaining a safe, reliable, and effective transit system.

Human capital is measured not only by the number of people employed, but also by the various costs associated with such employment, often referred to as personnel costs. Metro's personnel costs fall into two major categories: labor and fringe benefits.

Labor costs, which include regular wage and overtime pay for operations employees, as well as salary expense for management, professional, and administrative personnel, make up approximately 68 percent of total personnel costs. The approved Authority-wide FY2016 labor budget is \$1.08 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. Metro's fringe benefits are comprised of health insurance and pension plans required by collective bargaining agreements to retain a professional workforce. Fringe benefits also include government mandated costs such as unemployment insurance and payroll taxes. The approved Authority-wide FY2016 fringe benefit budget is \$516 million.

The following tables provide a detailed, three-year comparison of total human capital requirements for Metro. The proposed staffing requirement for FY2016 is 12,995, consisting of 11,613 operating positions, 1,321 capital positions and 61 positions funded by reimbursable projects. The FY2016 proposed budget includes a 0.7 percent increase in headcount (90 positions) over Metro's approved headcount for FY2015, primarily due to hiring to improve financial compliance and controls and fatigue management. The table below shows a breakdown, by department, of the staffing levels for FY2014 - FY2016.





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Table C.1

<b>Summary of Budgeted Positions by Department</b>				
<u>Department</u>	<u>Approved FY2014</u>	<u>Approved FY2015</u>	<u>Approved FY2016</u>	<u>Change</u>
General Manager	4	5	4	(1)
Equal Employment Opportunity <sup>1</sup>		11	11	-
Chief of Staff	32	32	32	-
Inspector General	34	34	34	-
General Counsel	41	48	48	-
Board Secretary	5	5	5	-
Human Resources	138	129	143	14
Office of Performance	7	7	8	1
Information Technology	322	357	351	(6)
Bus Services	4,138	4,177	4,183	6
DGMO				
Deputy General Manager	154	219	224	5
Transit Infrastructure and Engineering Services	4,837	4,868	4,945	77
Rail Services	1,623	1,663	1,661	(2)
Access Services	54	56	56	-
Financial Services	361	353	367	14
Metro Transit Police	749	745	729	(16)
Safety	61	66	67	1
Customer Service, Communications and Marketing	129	130	127	(3)
<b>TOTAL</b>	<b>12,689</b>	<b>12,905</b>	<b>12,995</b>	<b>90</b>

<sup>1</sup> In FY2015, OEEO was moved from under HR and established as an independent department that now reports to the GM.

A detailed, three-year comparison of total human capital requirements and costs for the operating and capital budgets is also presented below.

Table C.2

**HUMAN CAPITAL SUMMARY**

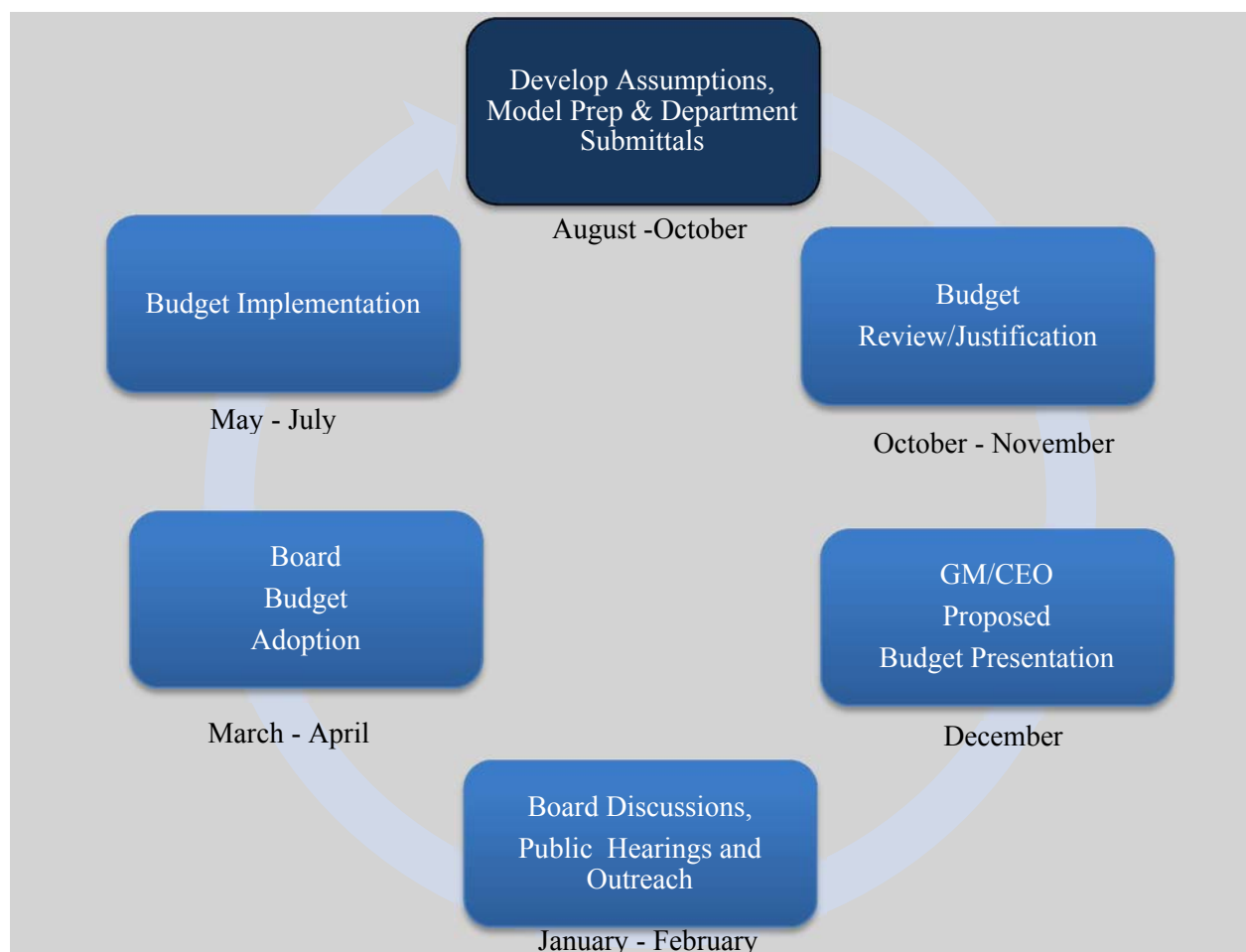
	<b>FY2014 Approved Budget</b>	<b>FY2015 Approved Budget</b>	<b>FY2016 Approved Budget</b>	<b>Change from FY2015 to FY2016</b>
<b>POSITIONS</b>	<b>12,689</b>	<b>12,905</b>	<b>12,995</b>	<b>90</b>
<b>PAYROLL</b>	<b>\$969,206,827</b>	<b>\$1,045,949,681</b>	<b>\$1,084,718,301</b>	<b>\$38,768,621</b>
Health Care	\$189,731,534	\$197,584,852	\$209,985,794	\$12,400,942
Taxes -- FICA	\$74,322,860	\$79,539,103	\$81,918,916	\$2,379,813
Pension -- Defined Benefit	\$162,300,000	\$163,161,750	\$163,042,250	(\$119,500)
Pension -- Defined Contribution	\$7,350,000	\$14,955,800	\$16,103,500	\$1,147,700
OPEB Trust Contribution	\$0	\$4,000,000	\$11,000,000	\$7,000,000
Life Insurance	\$1,700,000	\$1,741,999	\$1,650,000	(\$91,999)
Long Term Disability	\$700,000	\$649,999	\$1,125,000	\$475,001
Taxes -- Unemployment	\$700,000	\$600,000	\$1,150,000	\$550,000
Workers Comp Assessment	\$802,995	\$2,552,600	\$2,552,600	\$0
<b>Benefits</b>	<b>\$437,607,389</b>	<b>\$464,786,104</b>	<b>\$488,528,060</b>	<b>\$23,741,957</b>
Unallocated Fringe Benefits and Workers' Compensation	\$27,354,892	\$27,186,223	\$27,757,813	\$571,590
<b>TOTAL FRINGE BENEFITS</b>	<b>\$464,962,281</b>	<b>\$491,972,326</b>	<b>\$516,285,873</b>	<b>\$24,313,547</b>
<b>Fringe Benefits Annual Budgeting Rates</b>	<b>FY2014 Approved Budget</b>	<b>FY2015 Approved Budget</b>	<b>FY2016 Proposed Budget</b>	<b>Change from FY2015 to FY2016</b>
Average Annual Pay	\$76,382	\$81,050	\$83,472	\$2,422
Average Full Fringe Cost	\$34,487	\$36,016	\$37,594	\$1,578
Full Fringe Rate	48.0%	47.0%	47.6%	0.6%



## Appendix D - Budget Process

Metro's annual budget serves as the foundation for its financial planning and control. The General Manager and staff prepare and submit the budget to the Board of Directors for 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.

Metro's budget planning begins in August of the preceding fiscal year with the development of budget priorities and assumptions for the plan year. The fiscal year begins on July 1, so the budget is adopted and implemented by June 30. The Budget Process is consist of six major phases: 1) model preparation and development of key assumptions and drivers; 2) budget formulation (which includes department submissions); 3) budget review/justification; 4) presentation of the proposed budget to the Board of Directors (Board), 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***

Metro began the process of developing the FY2016 budget shortly after the adoption of the FY2015 budget. As part of the budget development process, FY2015 budget variances were analyzed and certain identified assumptions were modified. Some of those assumptions were fuel prices, negotiated union wages and benefits, and fare revenues. Upon analysis of the FY2015 forecast data, Metro assigned targets to each department and held the department managers responsible for meeting the target. Simultaneously, Metro pursued additional Federal, state and local revenue and grants.

The FY2016 budget was balanced through a combination of expense efficiencies, increases in subsidy contributions, and revenues from fare changes and other sources. Below are additional assumptions that were incorporated into the development of FY2016 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 Metro, provides the foundation for department-specific work plans and keeps the agency focused on the long term goals as outlined in the Strategic Plan.
- The CEO’s Business Plan outlines necessary actions to achieve priorities; provides measures to monitor our success, and provides the Board and public with a transparent and accountable framework.
- The General Manager’s priorities are reflected in the approved FY2016 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 created in August.
- The annual budget kickoff meeting is held in September with all department leaders. New budget initiative requests are developed at this time.
- The department operating and capital budget requests are developed, reviewed, and approved (at the department level) and submitted to OMBS by late October.

### ***Budget Review and Proposal***

- The proposed capital program was developed concurrently with the proposed operating budget. OMBS and the AGM-TIES meet with every project manager in October to review the capital forecasts and requests. Recommendations for the update to the Capital Program were reviewed with executive management in November 2014.
- 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 will deliberate through the winter and early spring.
- Metro 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, Metro holds at least one public hearing to review proposed service changes, as well as the proposed use of federal funding in the Capital Improvement Program (CIP). The comments and feedback received from residents throughout the region is presented later to the Board.
  - *Public participation:* Metro's Public Participation Plan guides substantial additional outreach efforts beyond the public hearings; including open houses, station pop-ups, and community events. The outreach will provide specific and convenient opportunities for riders and local organizations to provide input and discuss their views. It will ensure full and fair participation for all potentially affected communities, including minority, low-income, and limited English proficient populations.
  - *Rider survey:* Metro also conducts an online survey to solicit rider input on key questions regarding the budget and fare policy.
- Metro staff summarizes data collected from these efforts, as well as all public comments/feedback received during the outreach process in a Staff Report that is delivered to the Board for review.
- Collectively, Metro's outreach efforts meet or exceed the requirements of both the WMATA Compact and the Federal Transit Administration's newly expanded Title VI guidelines.

### ***Amendments***

- Amendments to the budget are presented to the Finance and Administration Committee between March and May.
- The Finance and Administration Committee will present acceptable amendments to the Board for review, approval and adoption.

### ***Budget Implementation***

- Implementation of the adopted budget occurs between May and June.
- The FY2016 budget becomes effective on July 1, 2015.
- Monthly budget variance reports are prepared by OMBS to enable management to monitor and control expenses and revenues.
- Monthly fiscal reports are also prepared by OMBS and presented by the General Manager 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 Metro’s Enterprise Fund. These businesses-type activities include transit operating and capital costs, infrastructure construction and debt activities.

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

The annual budget is developed on the basis of two budget methodologies – Continuation-level and Incremental-cost. 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 uses Incremental-cost budgeting to determine resources for on-going general and administrative expenses, new programs and capital projects. In accordance with the Financial Standards, the Office of Management and Budget Services (OMBS) monitors revenues and budget expenditures throughout the fiscal year.

**Metro’s Enterprise Fund**

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

**Balanced Operating Budget**

Metro is required to 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 Metro’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 Metro'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 funding source.

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

### **Capital Expenditures**

Capital expenditures are those that will derive some 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 assist the agency's leadership in making decisions regarding the assets and infrastructure required to support and/or grow the bus, rail, and paratransit operations. Metro's assets and infrastructure include, but are not limited to:

- Buses
- Railcars
- Stations
- Track
- Maintenance facilities
- Power systems

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## FY2016 BUDGET CALENDAR

<b>August</b>	Initial planning, development of assumptions, preparation of instructions and training materials the Operation and Capital Budgets begin in August.
<b>September</b>	The FY2016 budget kickoff meeting and system training classes are held with all departments. A review of FY2014 year-end results were presented to the Board for information.
<b>October</b>	Capital program expense and labor requests are submitted by departments to the assigned project manager for approval prior to being included in the department's budget request to the appropriate Executive Officer.
<b>November/December</b>	Departments submitted their budget requests to the Office of Management and Budget. The Capital Program budget was developed concurrently with the annual Operating budget. The Capital Program recommendations were reviewed with executive management. Release of the Annual Work Plan (AWP) to jurisdictional partners. Presentation of proposed budget to the Finance and Administration Committee.
<b>January/February</b>	Board Discussions. Arrangement and publication of dates in the media for six public meetings held in participating jurisdictions – Maryland, Virginia, and Washington, DC.
<b>March - April</b>	Findings from public meetings are summarized and presented to the board. Updated Operating and Capital budgets are prepared for Board approval.
<b>May</b>	Approval of the FY2016 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 Metro 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 Metro by the financial marketplace. Actual debt covenants may differ from these standards, and in accordance with the debt policy, the actual covenants will be disclosed in any Board report supporting a debt issuance.

### *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. Metro distinguishes between operating and non-operating revenues and expenses in its financial statements.
- The principal source of operating revenues (not including state or local operating subsidy contributions) is passenger fares and parking fees, which make up approximately 90 to 95 percent of such revenues.

#### **Fiscal Year**

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

#### **Audited Comprehensive Annual Financial Report (CAFR)**

- An independent certified public accounting firm performs an examination of Metro's consolidated financial statements, including Single Audit requirements. The goal is to receive an unqualified opinion on the financial statements and an opinion that Metro 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 Metro's Compact.

- In accordance with Board Resolution No. 81-36, designated Metro officials are empowered to open, close or authorize changes to accounts and authorized to appoint individuals as official signatories for financial accounts.
- An annual actuarial analysis is performed on all Metro-administered pension plans. Based on the results of such analysis, Metro makes contributions as required in agreement with the terms of each plan.
- Appropriate insurance coverage is maintained to mitigate the risk of material loss. For self-insured retentions, Metro records the liabilities, including losses incurred but not reported, at 100 percent of the net present value.
- The budget includes 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.
- Metro 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.
- Metro 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 prior to the adoption of the annual budget. 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. If 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 Metro's assets, including major transportation projects, and is included in each annual budget.
- From time to time, Metro applies for and receives discretionary Federal and state funding. Discretionary funding is requested for major system expansion projects or extraordinary transit capital needs. Discretionary funding levels are estimated by project, based on appropriate state and Federal criteria and the likelihood of obtaining approvals.
- The Board approves all discretionary state and Federal funding requests by project or program each year.

### ***Financial Standards – Debt Policy***

- Metro may not enter into a debt or financing arrangement unless the transaction is in full compliance with all applicable provisions of Metro's Compact.
- Pursuant to Metro's Compact, Article IX paragraph 27, Metro 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 properties of revenues of Metro. The bonds and other debt obligations of Metro, except as may be otherwise provided in the indenture under which they are issued, are direct and general obligations of Metro and the full faith and credit of Metro are pledged for the prompt payment of the debt service.
- There is no borrowing limit set in Metro'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 Metro's annual operating and capital budgets according to the approved subsidy calculations, described below.

### ***Operating Budget***

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

1. Regional bus subsidy allocation
2. Non-regional bus subsidy allocation

3. Rail maximum fare subsidy allocation
4. Rail base subsidy allocation
5. Paratransit subsidy allocation
6. Debt service allocation

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

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

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

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

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

- **Regional Bus Subsidy Allocation.** The distribution of regional bus subsidy to the jurisdictions is based on a weighted, four-factor formula in the following proportions:
  1. Density weighted population                      25%
  2. Revenue hours    25%



- |                              |     |
|------------------------------|-----|
| 3. Revenue miles             | 35% |
| 4. Average weekday ridership | 15% |

Density weighted population 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%
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. 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/Metro's Borrowing Powers*

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

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

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

### *Existing Gross Revenue Transit Bonds*

In October 2003, Metro issued \$163.5 million of Gross Revenue Transit Refunding Bonds, Series 2003, to refund the callable portion of Metro'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, Metro issued \$243 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 million in funding to bring total proceeds related to the bond issuance to \$425 million.

Table F.1

<b>Gross Revenue Transit Bonds</b> (FY2016 Jurisdiction Funding)			
	<u>Principal</u>	<u>Interest</u>	<u>Total Due</u>
<b>Gross Revenue Transit Bonds:</b>			
<b>Series 2009A</b>			
Due to Bondholders 1/1/2016	\$ -	\$ 5,193,503	\$ 5,193,503
Due to Bondholders 7/1/2016	8,285,000	5,193,503	13,478,503
<b>Total</b>	<b>\$ 8,285,000</b>	<b>\$ 10,387,006</b>	<b>\$ 18,672,006</b>
<b>Gross Revenue Transit Bonds:</b>			
<b>Series 2009B<sup>1</sup></b>			
Due to Bondholders 1/1/2016	\$ -	\$ 1,251,250	\$ 1,251,250
Due to Bondholders 7/1/2016	-	1,251,250	1,251,250
<b>Total</b>	<b>\$ -</b>	<b>\$ 2,502,500</b>	<b>\$ 2,502,500</b>
<sup>1</sup> Net of Build America Bond (BAB) credit			

Metro previously maintained a \$330 million commercial paper program to provide funds for the Metro Matters Program. Payment of all maturing commercial paper was guaranteed by an irrevocable letter of credit. In June 2009, Metro retired the \$330 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 Metro Matters capital program. (See Table E-2 for schedule of debt service)

During FY2014 Metro increased the availability on its lines of credit from \$150 million to \$302.5 million. During the second quarter of FY2015 Metro issued a one-year Grant Anticipation Note (GAN) for \$200 million. During the fourth quarter of FY2015 Metro exercised an optional prepayment right and repaid \$100 million of the outstanding GAN balance. The remaining amount due on the GAN is \$100 million. The lines of credit and note support Metro's capital program. The lines of credit are also available to support operating cash flow needs.

### ***New Capital Bonds***

The Capital Improvement Program (CIP) is a six-year program (FY2016-FY2021) for \$7.0 billion. To support the CIP, long-term borrowing may be required, and this borrowing is anticipated to commence in FY2016.

Tables F.3 through F.5 provide detail of Metro's planned debt issuances and jurisdictional allocations.

Table F.2

Series 2009 A & B Debt Service Schedule								
Year Ending	Series 2009A Bonds			Series 2009B BABs			Aggregate	
	Principal	Interest	Debt Service	Principal	Interest	BAB Credit	Debt Service	Debt Service
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		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		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		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		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		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		2,500,547	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		1,925,000	(673,750)	1,251,250	17,421,797
1/1/2027		2,141,709	2,141,709		1,925,000	(673,750)	1,251,250	3,392,959
7/1/2027	14,390,000	2,141,709	16,531,709		1,925,000	(673,750)	1,251,250	17,782,959
1/1/2028		1,763,972	1,763,972		1,925,000	(673,750)	1,251,250	3,015,222
7/1/2028	15,145,000	1,763,972	16,908,972		1,925,000	(673,750)	1,251,250	18,160,222
1/1/2029		1,366,416	1,366,416		1,925,000	(673,750)	1,251,250	2,617,666
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		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		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					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	\$55,000,000	\$92,977,228	\$(32,542,030)	\$115,435,198	\$529,395,007

\* FY2016 Jurisdiction subsidy requirements include funds for debt service payments due on 1/1/2016 and 7/1/2016.

Table F.3

<b>Jurisdictional Share of FY2016 to FY2021 Debt Issuances</b>									
<i>All Dollars in Thousands</i>									
<i>Lin</i>	Projected Debt Issuances	Annual Work Plan Year							
		FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2016-21	
	<b>Debt Issuance</b>								
1	Par Value	\$ -	\$ 355,000	\$ 235,900	\$ 165,900	\$ 140,300	\$ 87,300	\$ 984,400	
2	Issuance Cost	\$ -	\$ 3,163	\$ 2,269	\$ 1,744	\$ 1,552	\$ 1,155	\$ 9,883	
3	<b>Total Debt Issuance</b>	\$ -	\$ 358,163	\$ 238,169	\$ 167,644	\$ 141,852	\$ 88,455	\$ 994,283	
	<b>Projected Jurisdictional Share of Debt*</b>	<b>FY2016</b>	<b>FY2017</b>	<b>FY2018</b>	<b>FY2019</b>	<b>FY2020</b>	<b>FY2021</b>	<b>FY2016-21</b>	
	<b>District of Columbia</b>								
4	District of Columbia	\$ -	\$ 133,118	\$ 88,520	\$ 62,308	\$ 52,722	\$ 32,876	\$ 369,544	
5	<b>Total District of Columbia</b>	\$ -	\$ 133,118	\$ 88,520	\$ 62,308	\$ 52,722	\$ 32,876	\$ 369,544	
	<b>Maryland</b>								
6	Montgomery County	\$ -	\$ 61,069	\$ 40,609	\$ 28,584	\$ 24,187	\$ 15,082	\$ 169,531	
7	Prince Georges County	\$ -	\$ 63,434	\$ 42,182	\$ 29,691	\$ 25,123	\$ 15,666	\$ 176,096	
8	<b>Total Maryland</b>	\$ -	\$ 124,503	\$ 82,791	\$ 58,276	\$ 49,310	\$ 30,748	\$ 345,628	
	<b>Virginia</b>								
9	Alexandria	\$ -	\$ 16,065	\$ 10,683	\$ 7,520	\$ 6,363	\$ 3,968	\$ 44,599	
10	Arlington County	\$ -	\$ 29,897	\$ 19,881	\$ 13,994	\$ 11,841	\$ 7,384	\$ 82,996	
11	City of Fairfax	\$ -	\$ 922	\$ 613	\$ 431	\$ 365	\$ 228	\$ 2,558	
12	Fairfax County	\$ -	\$ 52,525	\$ 34,928	\$ 24,585	\$ 20,803	\$ 12,972	\$ 145,812	
13	Falls Church	\$ -	\$ 1,134	\$ 754	\$ 531	\$ 449	\$ 280	\$ 3,147	
14	<b>Total Virginia</b>	\$ -	\$ 100,542	\$ 66,858	\$ 47,060	\$ 39,820	\$ 24,831	\$ 279,111	
15	<b>Total Debt:</b>	\$ -	\$ 358,163	\$ 238,169	\$ 167,644	\$ 141,852	\$ 88,455	\$ 994,283	

Table F.4

FY2016 Annual Work Plan - Capital Improvement Program															
Debt Service for FY2016 to FY2021 Debt Issuances															
All Dollars in Thousands															
Line	Annual Work Plan Year	FY2016 Issuance		FY2017 Issuance		FY2018 Issuance		FY2019 Issuance		FY2020 Issuance		FY2021 Issuance		FY2016-21	
		Prin.	Int.	Prin.	Int.	Prin.	Int.	Prin.	Int.	Prin.	Int.	Prin.	Int.	Prin.	Int.
1	FY2016 Debt Service	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2	FY2017 Debt Service	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
3	FY2018 Debt Service	\$ -	\$ -	\$ 9,885	\$ 13,753	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 9,885	\$ 13,753
4	FY2019 Debt Service	\$ -	\$ -	\$ 10,177	\$ 13,374	\$ 6,573	\$ 9,741	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 16,751	\$ 23,115
5	FY2020 Debt Service	\$ -	\$ -	\$ 10,478	\$ 12,983	\$ 6,768	\$ 9,472	\$ 4,627	\$ 7,276	\$ -	\$ -	\$ -	\$ -	\$ 21,872	\$ 29,731
6	FY2021 Debt Service	\$ -	\$ -	\$ 10,787	\$ 12,581	\$ 6,967	\$ 9,195	\$ 4,764	\$ 7,075	\$ 3,915	\$ 6,511	\$ -	\$ -	\$ 26,433	\$ 35,362
7	Total FY2016-21 Debt Service	\$ -	\$ -	\$ 41,327	\$ 52,691	\$ 20,308	\$ 28,409	\$ 9,391	\$ 14,351	\$ 3,915	\$ 6,511	\$ -	\$ -	\$ 74,941	\$ 101,962
8	FY2022 Debt Service	\$ -	\$ -	\$ 11,105	\$ 12,166	\$ 7,173	\$ 8,911	\$ 4,904	\$ 6,868	\$ 4,031	\$ 6,331	\$ 2,441	\$ 4,281	\$ 29,655	\$ 38,558
9	FY2023 Debt Service	\$ -	\$ -	\$ 11,433	\$ 11,740	\$ 7,385	\$ 8,617	\$ 5,049	\$ 6,655	\$ 4,150	\$ 6,146	\$ 2,513	\$ 4,163	\$ 30,530	\$ 37,322
10	FY2024 Debt Service	\$ -	\$ -	\$ 11,771	\$ 11,301	\$ 7,603	\$ 8,315	\$ 5,198	\$ 6,436	\$ 4,272	\$ 5,956	\$ 2,588	\$ 4,041	\$ 31,432	\$ 36,050
11	FY2025 Debt Service	\$ -	\$ -	\$ 12,118	\$ 10,849	\$ 7,827	\$ 8,004	\$ 5,352	\$ 6,211	\$ 4,398	\$ 5,760	\$ 2,664	\$ 3,916	\$ 32,360	\$ 33,740
12	FY2026 Debt Service	\$ -	\$ -	\$ 12,476	\$ 10,384	\$ 8,058	\$ 7,684	\$ 5,510	\$ 5,978	\$ 4,528	\$ 5,558	\$ 2,743	\$ 3,787	\$ 33,315	\$ 34,391
13	FY2027 Debt Service	\$ -	\$ -	\$ 12,844	\$ 9,905	\$ 8,296	\$ 7,354	\$ 5,672	\$ 5,739	\$ 4,662	\$ 5,350	\$ 2,824	\$ 3,654	\$ 34,298	\$ 32,003
14	FY2028 Debt Service	\$ -	\$ -	\$ 13,224	\$ 9,411	\$ 8,541	\$ 7,015	\$ 5,840	\$ 5,493	\$ 4,800	\$ 5,136	\$ 2,907	\$ 3,518	\$ 35,311	\$ 30,573
15	FY2029 Debt Service	\$ -	\$ -	\$ 13,614	\$ 8,904	\$ 8,793	\$ 6,666	\$ 6,012	\$ 5,240	\$ 4,941	\$ 4,916	\$ 2,993	\$ 3,377	\$ 36,354	\$ 29,102
16	FY2030 Debt Service	\$ -	\$ -	\$ 14,016	\$ 8,381	\$ 9,053	\$ 6,306	\$ 6,190	\$ 4,979	\$ 5,087	\$ 4,689	\$ 3,081	\$ 3,232	\$ 37,427	\$ 27,587
17	FY2031 Debt Service	\$ -	\$ -	\$ 14,430	\$ 7,843	\$ 9,320	\$ 5,936	\$ 6,372	\$ 4,710	\$ 5,237	\$ 4,455	\$ 3,172	\$ 3,083	\$ 38,532	\$ 26,027
18	FY2032 Debt Service	\$ -	\$ -	\$ 14,856	\$ 7,288	\$ 9,595	\$ 5,555	\$ 6,560	\$ 4,434	\$ 5,392	\$ 4,215	\$ 3,266	\$ 2,930	\$ 39,669	\$ 24,421
19	FY2033 Debt Service	\$ -	\$ -	\$ 15,294	\$ 6,718	\$ 9,879	\$ 5,162	\$ 6,754	\$ 4,149	\$ 5,551	\$ 3,968	\$ 3,362	\$ 2,772	\$ 40,841	\$ 22,768
20	FY2034 Debt Service	\$ -	\$ -	\$ 15,746	\$ 6,131	\$ 10,170	\$ 4,758	\$ 6,954	\$ 3,856	\$ 5,715	\$ 3,713	\$ 3,461	\$ 2,609	\$ 42,046	\$ 21,066
21	FY2035 Debt Service	\$ -	\$ -	\$ 16,211	\$ 5,526	\$ 10,471	\$ 4,342	\$ 7,159	\$ 3,554	\$ 5,884	\$ 3,450	\$ 3,564	\$ 2,441	\$ 43,288	\$ 19,314
22	FY2036 Debt Service	\$ -	\$ -	\$ 16,689	\$ 4,904	\$ 10,780	\$ 3,914	\$ 7,370	\$ 3,243	\$ 6,057	\$ 3,180	\$ 3,669	\$ 2,269	\$ 44,566	\$ 17,510
23	FY2037 Debt Service	\$ -	\$ -	\$ 17,182	\$ 4,263	\$ 11,098	\$ 3,473	\$ 7,588	\$ 2,923	\$ 6,236	\$ 2,902	\$ 3,777	\$ 2,091	\$ 45,881	\$ 15,653
24	FY2038 Debt Service	\$ -	\$ -	\$ 17,689	\$ 3,603	\$ 11,426	\$ 3,019	\$ 7,812	\$ 2,594	\$ 6,420	\$ 2,616	\$ 3,889	\$ 1,908	\$ 47,236	\$ 13,741
25	FY2039 Debt Service	\$ -	\$ -	\$ 18,212	\$ 2,924	\$ 11,763	\$ 2,552	\$ 8,042	\$ 2,255	\$ 6,610	\$ 2,321	\$ 4,004	\$ 1,720	\$ 48,630	\$ 11,772
26	FY2040 Debt Service	\$ -	\$ -	\$ 18,749	\$ 2,224	\$ 12,110	\$ 2,071	\$ 8,280	\$ 1,906	\$ 6,805	\$ 2,018	\$ 4,122	\$ 1,526	\$ 50,066	\$ 9,745
27	FY2041 Debt Service	\$ -	\$ -	\$ 19,303	\$ 1,504	\$ 12,468	\$ 1,575	\$ 8,524	\$ 1,547	\$ 7,006	\$ 1,706	\$ 4,243	\$ 1,327	\$ 51,544	\$ 7,659
28	FY2042 Debt Service	\$ -	\$ -	\$ 19,873	\$ 763	\$ 12,836	\$ 1,065	\$ 8,776	\$ 1,177	\$ 7,213	\$ 1,384	\$ 4,369	\$ 1,122	\$ 53,066	\$ 5,511
29	FY2043 Debt Service	\$ -	\$ -	\$ -	\$ -	\$ 13,215	\$ 540	\$ 9,035	\$ 796	\$ 7,426	\$ 1,053	\$ 4,498	\$ 910	\$ 34,173	\$ 3,299
30	FY2044 Debt Service	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 9,302	\$ 404	\$ 7,645	\$ 712	\$ 4,630	\$ 692	\$ 21,577	\$ 1,808
31	FY2045 Debt Service	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 7,871	\$ 361	\$ 4,767	\$ 468	\$ 12,638	\$ 830
32	FY2046 Debt Service	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,908	\$ 238
33	FY2047 Debt Service	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
34	Total Debt Service	\$ -	\$ -	\$ 358,163	\$ 199,422	\$ 238,169	\$ 141,244	\$ 167,644	\$ 105,497	\$ 141,852	\$ 94,408	\$ 88,455	\$ 62,077	\$ 994,283	\$ 602,648

Debt Assumptions

1. Debt maturity is assumed to be 25 years.

2. Principal repayment structure is based on 14.5 year average age of debt.

3. Issuance costs are assumed to equal a fixed \$500,000 payment plus 0.75% of the par value of the issuance.

4. Debt issuances projected for second half of each fiscal year.

Table F.5

FY2016 Annual Work Plan - Capital Improvement Program																			
Debt Service for FY2016 to FY2021 Debt Issuances - Jurisdictional Breakout																			
All Dollars in Thousands																			
Line	Forecast		District of Columbia		Montgomery County		Prince Georges County		Alexandria		Arlington County		City of Fairfax		Fairfax County		Falls Church		
	Prin.	Int.	Prin.	Int.	Prin.	Int.	Prin.	Int.	Prin.	Int.	Prin.	Int.	Prin.	Int.	Prin.	Int.	Prin.	Int.	
1	FY2016 Debt Service	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
2	FY2017 Debt Service	\$ 9,885	\$ 13,753	\$ 3,674	\$ 5,112	\$ 1,686	\$ 2,345	\$ 1,751	\$ 2,436	\$ 443	\$ 617	\$ 825	\$ 1,148	\$ 25	\$ 35	\$ 1,450	\$ 2,017	\$ 31	\$ 44
3	FY2018 Debt Service	\$ 16,751	\$ 23,115	\$ 6,226	\$ 8,591	\$ 2,856	\$ 3,941	\$ 2,967	\$ 4,094	\$ 751	\$ 1,037	\$ 1,398	\$ 1,929	\$ 43	\$ 59	\$ 2,456	\$ 3,390	\$ 53	\$ 73
4	FY2019 Debt Service	\$ 21,872	\$ 29,731	\$ 8,129	\$ 11,050	\$ 3,729	\$ 5,069	\$ 3,874	\$ 5,266	\$ 981	\$ 1,334	\$ 1,826	\$ 2,482	\$ 56	\$ 76	\$ 3,208	\$ 4,360	\$ 69	\$ 94
5	FY2020 Debt Service	\$ 26,433	\$ 35,362	\$ 9,824	\$ 13,143	\$ 4,507	\$ 6,029	\$ 4,682	\$ 6,263	\$ 1,186	\$ 1,586	\$ 2,206	\$ 2,952	\$ 68	\$ 91	\$ 3,876	\$ 5,186	\$ 84	\$ 112
6	FY2021 Debt Service	\$ 74,941	\$ 101,962	\$ 27,853	\$ 37,896	\$ 12,778	\$ 17,385	\$ 13,273	\$ 18,058	\$ 3,361	\$ 4,573	\$ 6,256	\$ 8,511	\$ 193	\$ 262	\$ 10,990	\$ 14,953	\$ 237	\$ 323
7	Total FY2016-21 Debt Service	\$ 29,655	\$ 38,558	\$ 11,022	\$ 14,331	\$ 5,056	\$ 6,574	\$ 5,252	\$ 6,829	\$ 1,330	\$ 1,730	\$ 2,475	\$ 3,219	\$ 76	\$ 99	\$ 4,349	\$ 5,654	\$ 94	\$ 122
8	FY2022 Debt Service	\$ 30,530	\$ 37,322	\$ 11,347	\$ 13,871	\$ 5,206	\$ 6,364	\$ 5,407	\$ 6,610	\$ 1,369	\$ 1,674	\$ 2,548	\$ 3,115	\$ 79	\$ 96	\$ 4,477	\$ 5,673	\$ 97	\$ 118
9	FY2023 Debt Service	\$ 31,432	\$ 36,050	\$ 11,682	\$ 13,399	\$ 5,359	\$ 6,147	\$ 5,567	\$ 6,385	\$ 1,410	\$ 1,617	\$ 2,624	\$ 3,009	\$ 83	\$ 93	\$ 4,609	\$ 5,287	\$ 99	\$ 114
10	FY2024 Debt Service	\$ 32,360	\$ 34,740	\$ 12,027	\$ 12,912	\$ 5,517	\$ 5,923	\$ 5,731	\$ 6,153	\$ 1,451	\$ 1,558	\$ 2,701	\$ 2,900	\$ 81	\$ 89	\$ 4,746	\$ 5,095	\$ 102	\$ 110
11	FY2025 Debt Service	\$ 33,315	\$ 33,391	\$ 12,382	\$ 12,410	\$ 5,680	\$ 5,693	\$ 5,900	\$ 5,914	\$ 1,494	\$ 1,498	\$ 2,781	\$ 2,787	\$ 86	\$ 86	\$ 4,886	\$ 4,897	\$ 105	\$ 106
12	FY2026 Debt Service	\$ 34,298	\$ 32,003	\$ 12,748	\$ 11,894	\$ 5,848	\$ 5,457	\$ 6,075	\$ 5,668	\$ 1,538	\$ 1,435	\$ 2,863	\$ 2,671	\$ 88	\$ 82	\$ 5,030	\$ 4,693	\$ 109	\$ 101
13	FY2027 Debt Service	\$ 35,311	\$ 30,573	\$ 13,124	\$ 11,363	\$ 6,021	\$ 5,213	\$ 6,254	\$ 5,415	\$ 1,584	\$ 1,371	\$ 2,948	\$ 2,552	\$ 91	\$ 79	\$ 5,178	\$ 4,484	\$ 112	\$ 97
14	FY2028 Debt Service	\$ 36,354	\$ 29,102	\$ 13,511	\$ 10,816	\$ 6,198	\$ 4,962	\$ 6,439	\$ 5,154	\$ 1,631	\$ 1,305	\$ 3,035	\$ 2,429	\$ 94	\$ 75	\$ 5,331	\$ 4,268	\$ 115	\$ 92
15	FY2029 Debt Service	\$ 37,427	\$ 27,587	\$ 13,910	\$ 10,253	\$ 6,381	\$ 4,704	\$ 6,629	\$ 4,886	\$ 1,679	\$ 1,237	\$ 3,124	\$ 2,303	\$ 96	\$ 71	\$ 5,489	\$ 4,046	\$ 118	\$ 87
16	FY2030 Debt Service	\$ 38,532	\$ 26,027	\$ 14,321	\$ 9,673	\$ 6,570	\$ 4,438	\$ 6,824	\$ 4,610	\$ 1,728	\$ 1,167	\$ 3,216	\$ 2,173	\$ 99	\$ 67	\$ 5,651	\$ 3,817	\$ 122	\$ 82
17	FY2031 Debt Service	\$ 39,661	\$ 24,421	\$ 14,774	\$ 9,077	\$ 6,764	\$ 4,164	\$ 7,026	\$ 4,325	\$ 1,779	\$ 1,095	\$ 3,311	\$ 2,039	\$ 102	\$ 63	\$ 5,818	\$ 3,581	\$ 126	\$ 77
18	FY2032 Debt Service	\$ 40,841	\$ 22,768	\$ 15,179	\$ 8,462	\$ 6,964	\$ 3,882	\$ 7,233	\$ 4,032	\$ 1,832	\$ 1,021	\$ 3,409	\$ 1,901	\$ 105	\$ 59	\$ 5,989	\$ 3,339	\$ 129	\$ 72
19	FY2033 Debt Service	\$ 42,046	\$ 21,066	\$ 15,627	\$ 7,830	\$ 7,169	\$ 3,592	\$ 7,447	\$ 3,731	\$ 1,886	\$ 945	\$ 3,510	\$ 1,758	\$ 108	\$ 54	\$ 6,166	\$ 3,089	\$ 133	\$ 67
20	FY2034 Debt Service	\$ 43,288	\$ 19,314	\$ 16,089	\$ 7,178	\$ 7,381	\$ 3,293	\$ 7,667	\$ 3,421	\$ 1,942	\$ 866	\$ 3,613	\$ 1,612	\$ 111	\$ 50	\$ 6,348	\$ 2,832	\$ 137	\$ 61
21	FY2035 Debt Service	\$ 44,566	\$ 17,510	\$ 16,564	\$ 6,508	\$ 7,599	\$ 2,986	\$ 7,893	\$ 3,101	\$ 1,999	\$ 785	\$ 3,720	\$ 1,462	\$ 115	\$ 45	\$ 6,536	\$ 2,568	\$ 141	\$ 55
22	FY2036 Debt Service	\$ 45,881	\$ 15,653	\$ 17,053	\$ 5,818	\$ 7,823	\$ 2,669	\$ 8,126	\$ 2,772	\$ 2,058	\$ 702	\$ 3,850	\$ 1,307	\$ 118	\$ 40	\$ 6,728	\$ 2,295	\$ 145	\$ 50
23	FY2037 Debt Service	\$ 47,236	\$ 13,741	\$ 17,556	\$ 5,107	\$ 8,054	\$ 2,343	\$ 8,366	\$ 2,434	\$ 2,119	\$ 616	\$ 3,943	\$ 1,147	\$ 122	\$ 35	\$ 6,927	\$ 2,015	\$ 150	\$ 43
24	FY2038 Debt Service	\$ 48,630	\$ 11,772	\$ 18,074	\$ 4,375	\$ 8,292	\$ 2,007	\$ 8,613	\$ 2,085	\$ 2,181	\$ 528	\$ 4,059	\$ 983	\$ 125	\$ 30	\$ 7,132	\$ 1,726	\$ 154	\$ 37
25	FY2039 Debt Service	\$ 50,066	\$ 9,745	\$ 18,608	\$ 3,622	\$ 8,537	\$ 1,662	\$ 8,867	\$ 1,726	\$ 2,246	\$ 437	\$ 4,179	\$ 813	\$ 129	\$ 25	\$ 7,342	\$ 1,429	\$ 158	\$ 31
26	FY2040 Debt Service	\$ 51,544	\$ 7,659	\$ 19,157	\$ 2,847	\$ 8,789	\$ 1,306	\$ 9,129	\$ 1,356	\$ 2,312	\$ 344	\$ 4,303	\$ 639	\$ 133	\$ 20	\$ 7,559	\$ 1,123	\$ 163	\$ 24
27	FY2041 Debt Service	\$ 53,066	\$ 5,511	\$ 19,723	\$ 2,048	\$ 9,048	\$ 940	\$ 9,398	\$ 976	\$ 2,380	\$ 247	\$ 4,430	\$ 460	\$ 137	\$ 14	\$ 7,782	\$ 808	\$ 168	\$ 17
28	FY2042 Debt Service	\$ 54,673	\$ 3,299	\$ 20,301	\$ 1,226	\$ 9,587	\$ 563	\$ 10,052	\$ 584	\$ 2,533	\$ 148	\$ 4,563	\$ 275	\$ 138	\$ 8	\$ 8,012	\$ 484	\$ 170	\$ 10
29	FY2043 Debt Service	\$ 56,363	\$ 1,808	\$ 20,900	\$ 672	\$ 10,179	\$ 308	\$ 10,682	\$ 320	\$ 2,681	\$ 87	\$ 4,706	\$ 151	\$ 142	\$ 5	\$ 8,244	\$ 265	\$ 173	\$ 6
30	FY2044 Debt Service	\$ 58,143	\$ 830	\$ 21,527	\$ 308	\$ 10,730	\$ 141	\$ 11,243	\$ 147	\$ 2,796	\$ 37	\$ 4,841	\$ 69	\$ 145	\$ 2	\$ 8,483	\$ 122	\$ 176	\$ 3
31	FY2045 Debt Service	\$ 60,018	\$ 238	\$ 22,194	\$ 88	\$ 11,284	\$ 41	\$ 11,829	\$ 42	\$ 2,901	\$ 11	\$ 4,986	\$ 20	\$ 148	\$ 1	\$ 8,726	\$ 35	\$ 179	\$ 1
32	FY2046 Debt Service	\$ 62,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
33	FY2047 Debt Service	\$ 64,100	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
34	Total Debt Service	\$ 994,283	\$ 602,648	\$ 369,544	\$ 223,986	\$ 169,531	\$ 102,755	\$ 176,096	\$ 106,734	\$ 44,599	\$ 27,032	\$ 82,996	\$ 50,305	\$ 2,558	\$ 1,551	\$ 145,812	\$ 88,378	\$ 3,147	\$ 1,907
<b>Debt Assumptions</b>																			
1. Debt maturity is assumed to be 25 years.																			
2. Principal payments are assumed to be on a 14.5 year average age of debt.																			
3. Issuance costs are assumed to be equal to a fixed \$500,000 payment plus 0.75% of the par value of the issuance.																			
4. Debt issuances are projected for June of each fiscal year.																			



## Appendix G Vital Signs Report

### Introduction to this report

As a regional transportation system, Metro's system-wide performance is captured in the Vital Signs Report. The Vital Signs Report provides analysis of a small number of key performance indicators (KPI's) that monitor long term progress in the strategic areas of safety, security, service reliability and customer satisfaction.

The report is not designed to measure the experience of individual customers using Metro's services. Instead, the Vital Signs Report communicates if the Metro system's performance is improving, worsening or remaining steady.

Detailed performance analysis is presented in the Vital Signs Report through answers to two prime questions: Why did performance change? What actions are being taken to improve performance? Metro is focused on these two questions to continually drive improvement.

The Vital Signs Report demonstrates Metro's commitment to be transparent and accountable to our Board of Directors, jurisdictional stakeholders and the public. This report documents performance results and strives to hold WMATA's management accountable for what is working, what is not working, and why.



## Strategic Plan Overview

Strategies flow from Metro's Board-adopted Vision, Mission, and Goal statements, and provide the overarching framework for executing the General Manager's business plan.

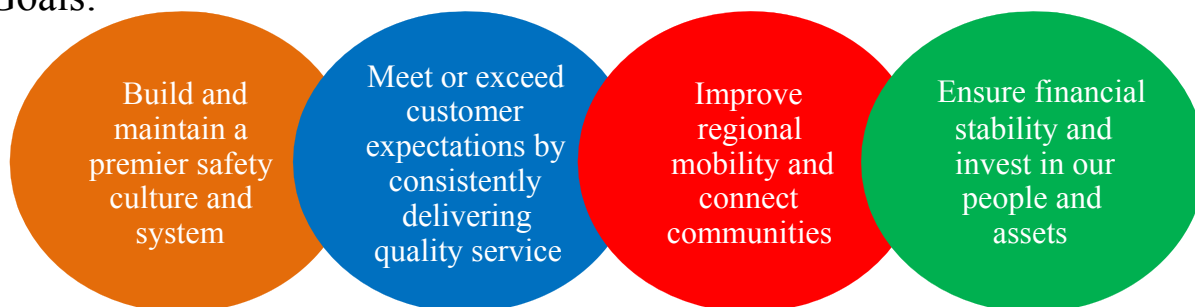
**Vision:**

Metro moves the region forward by connecting communities and improving mobility for our customers

**Mission:**

Metro provides safe, equitable, reliable and cost-effective public transit

**Goals:**



**KPI: Bus On Time Performance**

**Goal: Meet or exceed customer expectations by consistently delivering quality service**

**Reason to Track:** This indicator illustrates how closely Metrobus adheres to published route schedules on a system-wide basis. Factors which effect on-time performance are traffic congestion, inclement weather, scheduling, vehicle reliability, and operational behavior. Bus on-time performance is essential to delivering quality service to the customer. For this measure higher is better.

**Why Did Performance Change?**

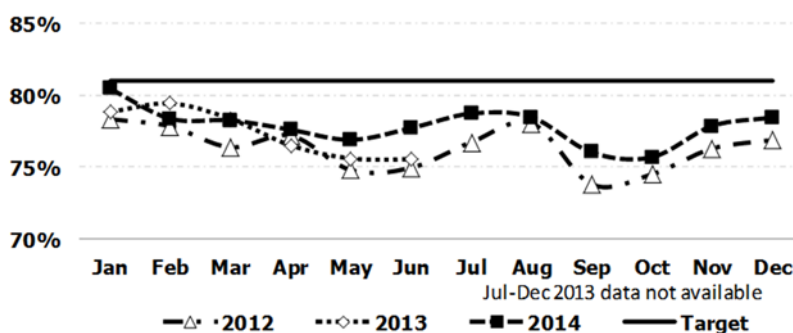
- Bus On-Time Performance (OTP) continued to improve this year largely because of Better Bus initiatives and improved work force planning. This is the fourth year in a row of improved OTP.

**What changed?**

- Late buses decreased 7% compared to 2012, but the rate at which buses ran early did not improve.
- OTP improved for four of the six daily service periods by 4% primarily as a result of active street management and schedule optimization. However, these improvements had minimal impact on the 4-9AM time period; the percentages of time buses arrived early and late were worse compared to 2012.

**What does all this mean?**

- On an average weekday, nearly 406,000 bus customers experienced a 2% improvement in OTP.
- Schedule optimization of Priority Corridor routes, the implementation of Metro Extra Service (a limited stop service) and MetroWay (the region's first dedicated bus-only lane) contributed to the improvement of OTP.
- MetroWay is the only service type which outperformed the OTP target.
- Active Service Management, modification of the street operation guidelines and the implementation of a workforce projection tool were all designed to link workforce strategies to overall performance improvement (e.g., service operation managers were realigned to terminals to increase street visibility and bus ride-alongs in lieu of roving in service vehicles).

**Bus On-Time Performance**

**Actions to Improve Performance**

- Conduct weekly roll-call meetings to communicate problematic routes to service operation managers.
- Assign managers to monitor OTP during bus departures from each bus garage.
- Continue Active Service Management and collaborative monthly meetings between planning and street operation groups.
- Develop and launch the “Serious about Service” campaign designed to deliver better transit service through an improved customer-oriented process.

**Conclusion**

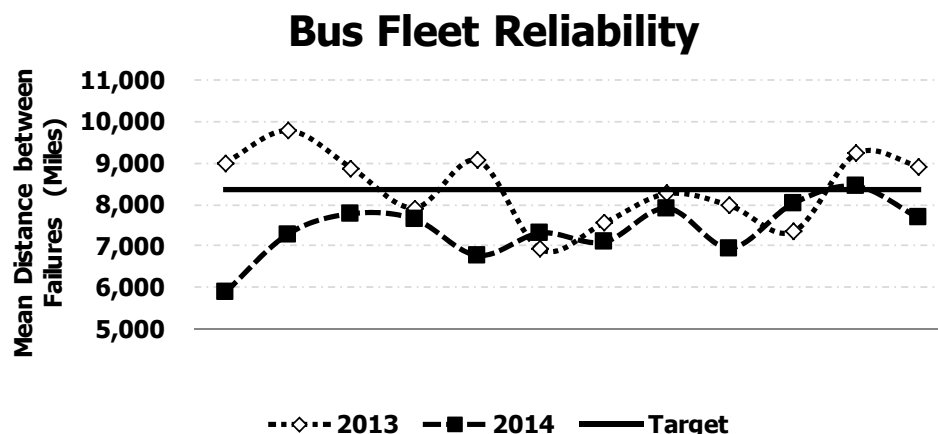
Bus customers experienced a 2% improvement this year, continuing the trend of year-over-year improvement for four consecutive years. In continuing efforts to improve performance, staff will focus on reducing the occurrence of buses arriving ahead of schedule and the implementation of Better Bus initiatives.

**KPI: Bus Fleet Reliability****Goal: Meet or exceed customer expectations by consistently delivering quality service**

**Reason to Track:** Mean Distance Between Failures (MDBF) is used to monitor trends in vehicle breakdowns that cause buses to go out of service and to plan corrective actions. Factors that influence bus fleet reliability are the vehicle age, quality of a maintenance program, original vehicle quality, and road conditions affected by inclement weather and road construction. For this measure higher is better.

**Why Did Performance Change?**

- Although 2014 was a challenging year for bus fleet reliability, performance began to improve during the last quarter. Fleet reliability ended the year 13% lower than 2013 as a result of mechanical failures causing buses to go out of service more frequently.
- Prior to 2014 bus fleet reliability improved an average of 4.3% per year since 2003.
- The top five service interruptions in the order of frequency this year were: engine, warning light, body, transmission, and hydraulic system failures. As electrical components on buses became more advanced, electrical faults also became more common.
- Mechanical failures indiscriminately affected each sub-fleet with the exception of Clean Diesel. Clean Diesel fleet reliability outperformed 2013, an added benefit to having undergone midlife rehab in 2014.
- Q1 was largely affected by severe weather conditions; Q2 was affected by water intrusion; while failure prone manufactured parts (e.g., Absorbed Glass Mat (AGM) batteries, exhaust gas recirculation valves and cooling components) caused breakdowns all year.
- Bus Maintenance completed several initiatives in 2014 to include the opening of a new paint body center; placing nearly all 105 new Hybrid buses into service; and equipping all buses with the latest technology allowing for better monitoring of key bus components.



#### Actions to Improve Performance

- Continue to work with BAE Systems to replace three high failure components and install new software on 77 buses with this equipment.
- Continue to work with the engine manufacturer to eliminate crystallization of dosing valves which affect the flow of gas; nearly all 207 buses affected by this have been repaired.
- Retrofit high failure parts on 22 articulated buses.

Continue to work towards resolving industry-imposed constraints such as the scarcity of FTA-qualified bus engine manufacturers.

#### Conclusion

Calendar year 2014 was a challenging year for bus fleet reliability, finishing 13% lower than 2013. However as a result of the completion or near completion of several initiatives, there was a strong comeback in the last quarter.

#### **KPI: Rail On-Time Performance**

**Goal: Meet or exceed customer expectations by consistently delivering quality service**

**Reason to Track:** On-time performance measures the adherence to weekday headways, the time between trains. Factors that can effect on-time performance include: infrastructure conditions, speed restrictions, single-tracking around scheduled track work, railcar delays (e.g., doors), or delays caused by sick passengers. For this measure higher is better.

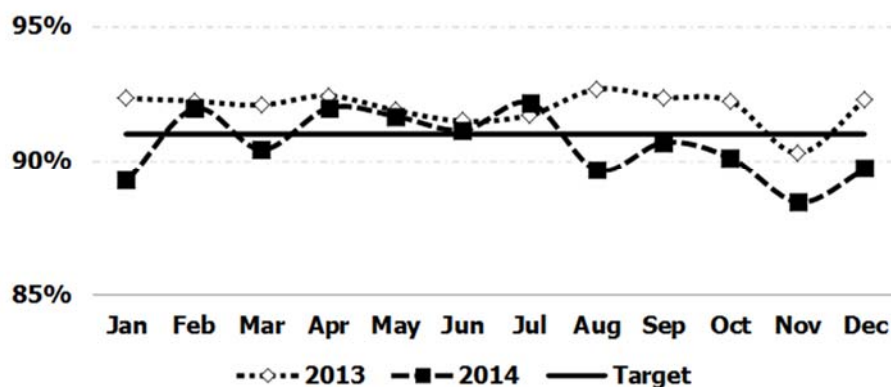
#### Why Did Performance Change?

- Rail On-Time Performance (OTP) fluctuated in 2014, recovering in the spring after extreme cold temperatures led to more mechanical failures and delays in Q1/2014 then declining after Silver Line service began in late July. Overall for 2014, OTP was down to 90.6%, which was 1.4 percentage points below 2013.
- OTP in Q1/2014 was 2 percentage points below Q1/2013 as cold temperatures led to an increase in delays and fewer railcars available for service. Significant snow accumulations triggered management's decision to purposefully widen headways due to low ridership and/or deteriorating weather, further reducing OTP. Headway widening provides Metro the option to

operate snow and ice clearing equipment between regularly scheduled passenger trains, which can cause longer waits between trains.

- In July, Silver Line introduced 5 new stations and increased service to a total of 28 stations. The Silver Line now represents 19% of all train stops and therefore carries a heavy weight in the overall measure of system-wide OTP. Staff managed OTP for the new line through monitoring on-time departures from Wiehle-Reston East and having controllers focus on the dance of smoothly merging Silver, Orange and Blue trains at Rosslyn.
- As Silver Line trains service stations also served by Orange and Blue Lines, a delay occurring on one of the three lines has ripple effects on customers of the other two, dragging down OTP. For example, a disabled train at Virginia Square on 10/28 (served by Orange and Silver) led to the lowest daily Blue Line OTP in October.

### Rail On-Time Performance



#### Actions to Improve Performance

- Return to Automatic Train Operations on the Red Line following reactivation process certification and operator/technician familiarization training.
- Monitor impact of recent schedule adjustment to support on-time departure of Silver Line trains from Wiehle-Reston East and proper sequencing of Silver and Orange Line trains from East Falls Church.
- Increase the number of gap trains that are used to minimize headway gaps in the event of an incident (temporarily reduced from 5 to 3 in order to meet Silver Line car requirement).

#### Conclusion

Rail OTP declined from 2013 as extreme cold temperatures led to more delays in Q1/2014 and the introduction of new Silver Line service at stations also served by Orange and Blue Line trains led to ripple effects when delays occurred, lowering OTP.

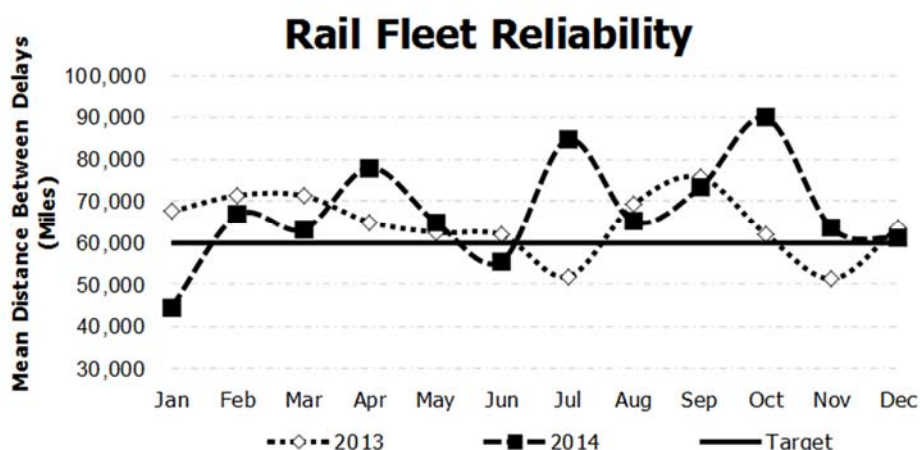
**KPI: Rail Fleet Reliability**

**Goal: Meet or exceed customer expectations by consistently delivering quality service**

**Reason to Track:** Mean Distance Between Delays (MDBD) communicates the effectiveness of Metro's railcar maintenance program. This measure reports the number of miles between railcar failures resulting in delays of service greater than three minutes. Factors that influence railcar reliability are the age of the railcars, the amount the railcars are used and the interaction between railcars and the track. For this measure higher is better.

**Why Did Performance Change?**

- Rail Fleet Reliability reached a 10-year high in 2014 as maintenance efforts enabled the deployment of 5% more railcars for Silver Line service.
- Despite a 20% increase in railcar miles with the opening of Silver Line service in July, railcar delays in the 2<sup>nd</sup> half of 2014 increased only slightly (1% more than July-December 2013).
- Reliability was 3% better than 2013 as particularly strong performance in July and October (fewer door delays on the 1000 and 6000 series) offset dips in January (extreme cold affected railcar equipment) and June (door delays on the 4000 series).
- Overall, railcar delay incidents in 2014 were primarily caused by door and brake problems (29% and 27%, respectively). To address this, maintenance staff replaced door relays that were failing prematurely on the 4000 series railcars and completed a number of campaigns to improve 1000 series brake performance (replaced brake lines to prevent leaks, installed new brake control valves to apply instant brake pressure and replaced rusting air compressor control boxes).



- The first 7000 series cars are expected to enter passenger service following successful completion of testing and safety certification in early 2015.
- Attempt to secure sufficient funding to exercise an option on the 7000 series railcar procurement for purchase of 220 more 7000 series cars (option expires June 2015).

**Actions to Improve Performance**

- Continue reliability improvements for every fleet (e.g., replace air compressors on 4000 series railcars to improve brake performance and perform door overhauls on 2000, 3000 and 6000 series railcars once materials are received).



**Conclusion**

- Rail Fleet Reliability reached a 10-year high in 2014. Maintenance efforts resulted in railcars reliably traveling 20% more to service Silver Line stops while railcar delays increased only slightly.

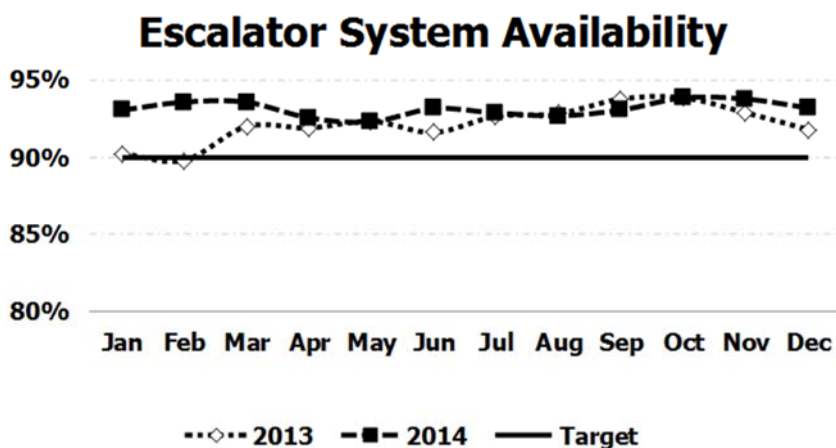
**KPI: Escalator System Availability**

**Goal: Meet or exceed customer expectations by consistently delivering quality service**

**Reason to Track:** Customers access Metrorail stations via escalators to the train platform. An out-of-service escalator requires walking up or down a stopped escalator, which can add to total travel time and may make stations inaccessible to some customers. Escalator availability is a key component of customer satisfaction with Metrorail service. This measure communicates system-wide escalator performance (at all stations over the course of the day) and will vary from an individual customer's experience. For this measure higher is better.

**Why Did Performance Change?**

- Escalator availability for 2014 was 93.1%, a 1 percentage point improvement over the prior year. This reflects a 30% decrease in the amount of time that escalators were out of service for unexpected breakdowns.
- In particular, technicians repaired unexpected breakdowns more quickly than in prior years. The mean time to repair broken escalators was just over 5 hours in 2014, compared to over 7.5 hours in 2013. The reorganization of staff into five service regions improved response times, and training improved the ability of technicians to troubleshoot problems and make the necessary repairs.
- The modernization program continued in 2014. Thirty-seven units were rehabilitated or replaced; many of these units required adjacent escalators be turned off and used as “walkers”, which also decreased availability.

**Actions to Improve Performance**

- Enhance remote monitoring capability through a dedicated staff and control room enabling a more accurate reporting of availability, and reducing the duration of outages through real-time fault monitoring and reporting.

- Further improve response times to outages by using GIS data to assign available mechanics located closest to the escalator needing repair.
- Metro will continue the escalator modernization program throughout 2015 as part of its program to replace 114 of the system's 613 escalators by 2020. Modernization reduces the frequency of breakdowns, improving availability, as aging, unreliable units are replaced and rehabilitated. The new and rehabilitated units include energy-efficient and more-reliable LED lighting, high efficiency motors, and regenerative drives that have significantly reduced energy consumption. In fact, recent testing has concluded that some of the modernized escalators with new drives have been generating electricity to put back in the system.

**Conclusion:**

Escalator availability for 2014 was 93.1%, the best delivered since 2010.

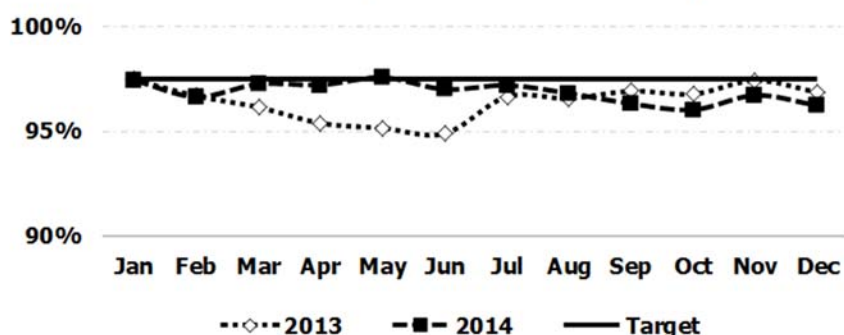
**KPI: Elevator System Availability****Goal: Meet or exceed customer expectations by consistently delivering quality service**

**Reason to Track:** Metrorail elevators provide an accessible path of travel for persons with disabilities, seniors, customers with strollers, travelers carrying luggage and other riders. When an elevator is out of service, Metro is required to provide alternative services, which may include a shuttle bus service to another station. For this measure higher is better.

**Why Did Performance Change?**

- Elevator availability for 2014 was 96.9%, about half a percentage point increase from 2013 (96.4%).
- Unscheduled maintenance hours increased by 64% relative to the prior year as technicians conducted in-depth troubleshooting to identify and address the root cause of service disruptions. They also spent a significantly larger amount of time conducting major repairs, such as repairing concrete shafts and hydraulic oil pumps. Such repairs improve safety and long-term reliability for customers.
- A renewed focus on preventive maintenance also increased hours out of service for inspections and related repairs. The number of staff conducting preventive maintenance inspections doubled as every asset was inspected.
- During the first six months of 2014, there was a large increase in water intrusion events that took units out of service. To prevent damage to mechanical equipment, technicians installed elevator pit water abatement systems at Huntington and Wheaton garages.
- The modernization program continued in 2014, with 12 units rehabilitated throughout the year. All critical components were replaced including the cabs, motors and control systems.

## Elevator System Availability



### **Actions to Improve Performance**

- Meeting the target for availability will be challenging in 2015 as scheduled outages will increase with the ramping up of the modernization program. Eighteen of the 275 elevators are scheduled to undergo modernizations throughout the year, meaning that 4-5 elevators will be out of service in a given month. While the rehabilitations are necessary to provide customers with a safe and reliable transit system, availability will decrease in the short run.
- Units that show persistent problems will be prioritized for major repairs and rehabilitations because just 19 of the 275 total units in 2014 accounted for 50% of all unscheduled outages.
- Metro will continue its emphasis on improving mechanics' technical skills, taking advantage of an expanded training staff to provide a rotation of courses designed to ensure that elevator technicians can efficiently and effectively conduct corrective and preventive maintenance across the multiple elevator types and manufacturers within the Metro system.

### **Conclusion:**

Elevator availability for 2014 was below target by half a percentage point, but was an improvement over 2013.

**KPI: Customer Injury Rate**

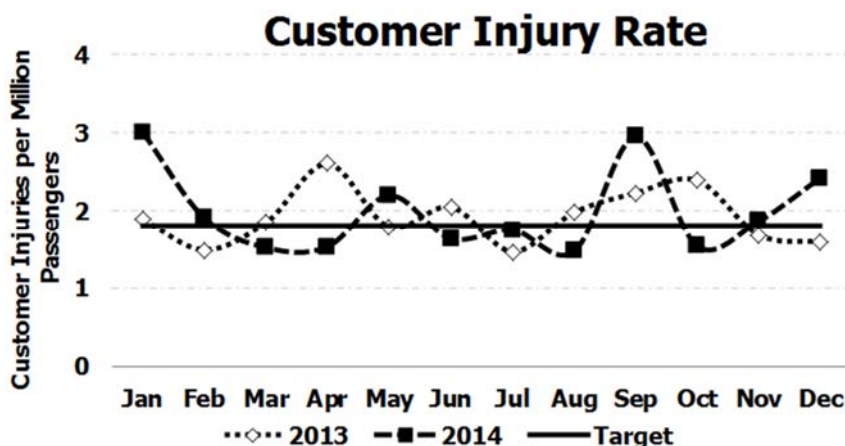
**Goal: Build and maintain a premier safety culture and system**

**Reason to Track:** Customer safety is the highest priority for Metro and a key measure of quality service. Customers expect a safe and reliable ride each day. The customer injury rate is an indicator of how well the service is meeting this safety objective. For this measure lower is better.

### **Why Did Performance Change?**

- The 2014 customer injury rate did not meet its target and was slightly worse than 2013 (1.96 injuries per million passengers compared to 1.92).
- On Metrobus, the rate remained at 2.48 injuries per 1 million trips. Collisions continued to be the leading cause with a slight increase in the collision rate (preventable up 4%, non-preventable up 7%) with 60% of collisions ruled as non-preventable. Slips/trips/falls remained the second leading cause but were seven fewer in 2014. Operators were trained to avoid sudden stops and bus stop improvements made it easier for customers to get on and off.

- On Metrorail, the rate decreased slightly to 1.39 injuries per 1 million trips from 1.40 in 2013 due to a large decrease (-19%) in escalator injuries as a result of improved escalator availability. Injuries at rail stations and on trains increased in 2014 by 12% and 57% respectively. Most injuries at stations occur when customers slip or fall due to ice/snow or intoxication and when escalators are out of service and used as stairs. On board injuries occur when trains start or stop suddenly, leading to falls, or when customers get caught in doors.
- The injury rate for MetroAccess customers increased by 36% relative to 2013. While the rate of collisions decreased slightly, more passengers sustained injuries when collisions occurred.



### **Actions to Improve Performance**

- Enhance MetroAccess operator defensive driver training and focus safety campaigns on collision avoidance, operating in adverse weather and sideswipe prevention.
- Analyze videos of Metrobus operator behavior to provide tailored training and coaching. Use the “Bus Accident Rating and Corrective Action Tracker” management tool to improve Metro’s ability to analyze and address the root cause of collisions, and ensure that training is conducted in a timely manner.
- Conduct safety blitzes at bus stops that have been the site of multiple incidents or customer complaints. During the blitz, which lasts for 3-4 hours during rush periods, Metro staff and police provide constructive feedback to operators on ergonomics and driving habits, and educate customers about safe riding.
- Conduct a targeted outreach/education campaign aimed at reducing the most frequent type of injuries.
- Reduce on board customer injuries by introducing automatic train control, reducing sudden starts/stops.
- Continue to proactively treat station entrances and platforms for snow and ice during inclement weather.

### **Conclusion:**

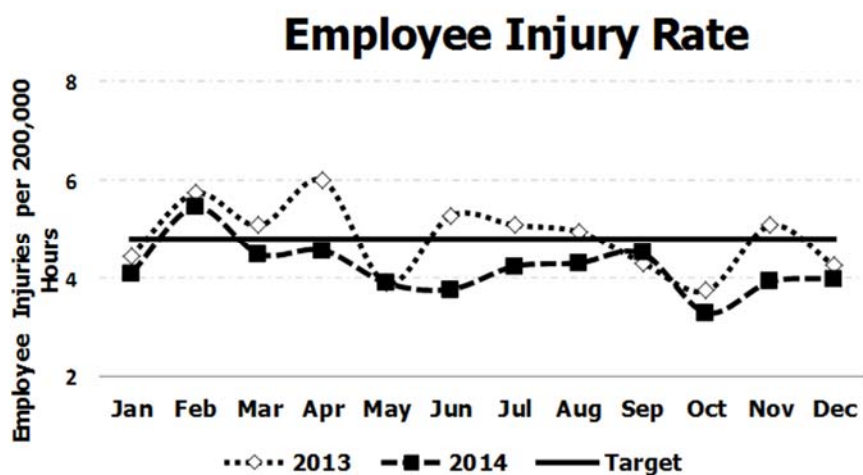
The 2014 customer injury rate did not meet its target and was slightly worse than 2013. Employee safety training and customer communication continues to be the leading focus on how to improve.

**KPI: Employee Injury Rate****Goal: Build and maintain a premier safety culture and system**

**Reason to Track:** OSHA recordable injuries are a key indicator of how safe employees are in the workplace. For this measure lower is better.

**Why Did Performance Change?**

- The employee injury rate fell to 4.2 in 2014, better than target (4.80) and 2013 (4.81).
- There were 62 fewer employee injuries in 2014, with decreases across almost all Metro Departments, reflecting the efforts of Local and Departmental Safety Committees and Supervisors to identify and address the root causes of injuries and near misses. For rail employees, the Confidential Close Call program was increasingly used to report events that have the potential for serious consequences, and ten preventive safety actions were implemented in 2014.
- Mechanics and bus operators remain the two job groups that report the highest number of injuries, although both reported fewer injuries in 2014 than the prior year.
- Slips, trips, and falls (25%) were the most frequent type of injuries. The number of slips, trips and falls fell from 145 in 2013 to 127 in 2014 as Metro took steps to proactively identify and remove hazards through facility and ground inspections and to monitor and pre-treat slippery surfaces.
- Collisions are the second most-frequent type of injury (21%); these are predominately non-preventable. Bus operators experienced the highest rate of collision-related injuries and are receiving training tailored to address the root causes of incidents based on Drive Cam video analysis.

**Actions to Improve Performance**

- Conduct thorough, non-punitive investigations of incidents and near misses to identify root causes and mitigate them at the department-level. Additionally, train personnel on OSHA-mandated programs.
- Provide tailored trending and analysis of safety data to front-line staff to help them address the leading causes of injuries and conduct training to improve the quality of data collection.

- Strengthen Local Safety Committees (LSCs). Departments that have successfully reduced injuries have well-attended and fully-engaged LSCs that regularly interview injured staff to discuss causes and opportunities where safety improvements may occur.
- Implement the Safety Peer Counselors Committee for bus operators to actively seek comments and suggestions for how to improve the health and safety of employees and riders.
- Continue to implement the Fatigue Risk Management System including Hours of Service rules, incident investigation protocol, a recuperative break program, and secondary employment policy.

**Conclusion:**

The employee injury rate was better than target in 2014, with only 4.2 injuries for every 200,000 hours worked.

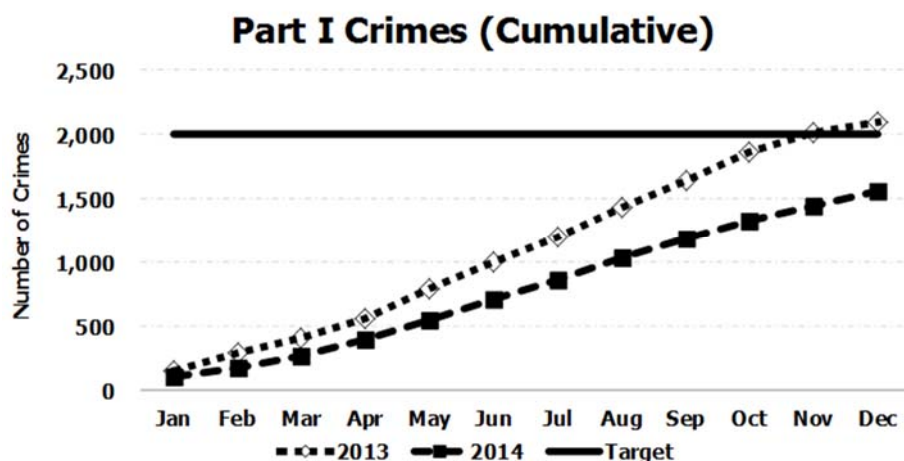
**KPI: Crime Rate**

**Goal: Build and maintain a premier safety culture and system**

**Reason to Track:** This measure provides an indication of the perception of safety and security customers experience when traveling the Metro system. Increases or decreases in crime statistics can have a direct effect on whether customers feel safe in the system. For this measure lower is better.

**Why Did Performance Change?**

- The Metro Transit Police Department (MTPD) utilized multiple strategies to drive down crime throughout 2014. The overall crime rate declined by ~ 20% when compared to 2013 (Metrobus, Metrorail and Parking crime rates declined 20%, 29% and 13%, respectively).
- Sixty-seven percent of the crimes occurred in the rail system, 19% in parking lots or other Metro facilities and 15% on buses.
- The crime rate reduction was primarily attributed to the reduction of larcenies, snatches and robberies; these categories represent nearly 90% of the crimes.
- Major crimes hit a five year low this year. MTPD used solid investigative techniques and increased use of CCTV to broadcast pictures of suspects; proven techniques in closing cases; a 5% improvement compared to 2013.
- Other strategies used to protect and serve were: customer outreach and education, jurisdictional collaboration and the use of crime data to optimize the deployment timing and location of crime suppression teams.



### **Actions to Improve Performance**

- Bus operator assaults are not classified by the FBI as a Part-1 crime and are therefore excluded from the crime data tracked in this KPI; however, MTPD will continue to engage in tactics to help reduce operator assaults. Bus operator assaults increased nearly 37% in 2014.
- Continue outreach campaign “Respect Your Ride” especially to warn women against photo intrusions to promote the overall sense of security.
- Enhance MetroStat program by meeting with patrol supervisors to further analyze data in each patrol area to identify specific tactics.
- Continue advising the public to be cautious when using cell phones in crowded areas.
- Continue to deploy crime suppression teams, including casual clothes officers and collaborate with local jurisdictions to increase visibility.

### **Conclusion:**

The Metro Transit Police Department (MTPD) utilized multiple strategies to drive down the crime rate by 20%. Proven investigative techniques, increased use of technology and analysis of crime data were key strategies used to reduce crime.

### **KPI: Customer Satisfaction**

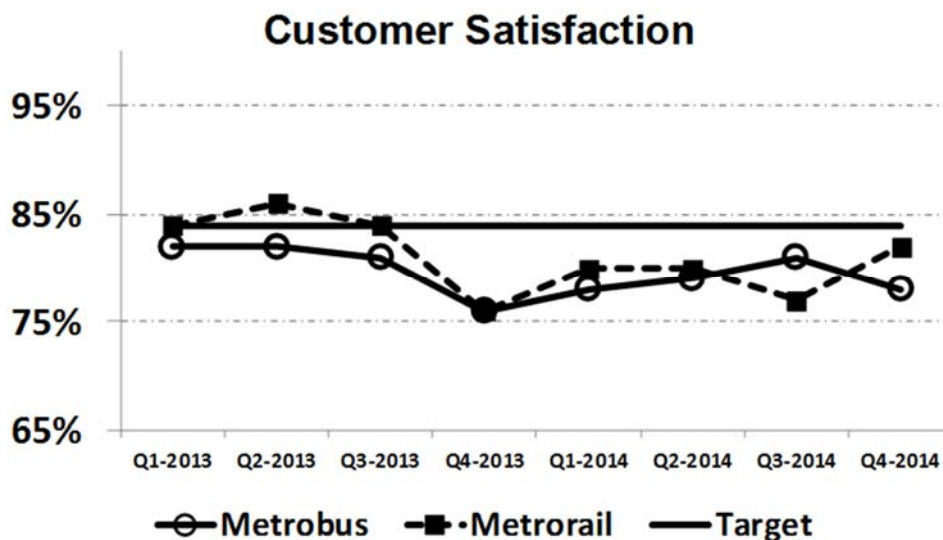
**Goal: Meet or exceed customer expectations by consistently delivering quality service**

**Reason to Track:** Surveying customers about the quality of Metro’s service delivery provides a mechanism to continually identify those areas of the operation where actions to improve the service can maximize rider satisfaction. The higher the Customer Satisfaction score, the better.

### **Why Did Performance Change?**

- Metrobus and Metrorail satisfaction ratings were higher than last year at this time.
- Improvements in Metrobus satisfaction are related to improved perceptions of reliability (+7%) and on-time performance (+6%) when compared to this same quarter last year. Reliability and on-time performance are the strongest drivers of bus customer satisfaction.

- Other Metrobus improvements this last quarter also helped to improve satisfaction ratings. Ratings in both bus climate control and utility of bus signage improved. During colder months, bus climate control is particularly important.
- Metrorail's satisfaction rating improvement is also related to reliability. Compared to Q4 in CY13, rail reliability scores are up 6 percentage points.
- Though we have seen improvement in reliability, the cumulative improvements in security at station, smoothness of ride, and personnel availability for assistance have moved the needle the rest of the way.



#### **Actions to Improve Performance**

- In this first quarter of 2015, sustained effort in the areas mentioned above will sustain current levels of satisfaction. Most importantly in the areas of reliability and on-time performance.
- Quarter one is always a difficult time to deliver high quality service due to inclement weather. During this period area such as cleanliness and climate control in stations and on our vehicles becomes especially important.

#### **Conclusion:**

The past year ended with an overall satisfaction ratings slightly below our target of 84%. Going in to 2015, sustained delivery in core customer areas will keep us at 2014 levels. Moving the needle beyond 2014 will require additional efforts in other service delivery areas.



## **Board Standards**

Resolution 2012-29: Rail Service Standards

Resolution 2013-20: Rail Service Standards

Resolution 2000-10: Guidelines for Regional Metrobus Service

**Board Standard: Metrorail Service (Resolutions 2012-29 and 2013-20)****Board Standard: Hours of Service** - Hours that the Metrorail system is open to serve customers.

**Target:** Opens at 5 AM weekdays, 7 AM weekends. Closes at 12 AM Sunday – Thursday, 3 AM Friday and Saturday.

**Time Period:** Sep-Nov 2014

**Results:** Metro was paid to open early on two days (Army Ten Miler on 10/12 and Marine Corp Marathon on 10/26) and stay open an additional hour for Monday Night Football (10/6).

**Board Standards: Headway** – Scheduled time interval between trains during normal weekday service.

**Target:** During rush - 3 min on core interlined segments, 12 min at Arlington Cemetery and 6 min on all other segments; during weekday mid-day - up to 6 min on core interlined segments and 12 min on all other segments; and during weekday evenings - up to 15 min on core interlined segments and up to 20 min on all other segments.

**Time Period Tracked:** Sep-Nov 2014

**Results:**

- On Veteran's Day Nov 11, service adjustments were made to accommodate the Concert for Valor including more frequent headways on most lines and replacing Blue Line trains with Yellow Line trains.
- To accommodate system rebuilding, weekday evening headways were changed on 51 days. On 14 of these days, mid-day headways were also changed to accommodate track work.

For details on Metro's adherence to scheduled headways, see Rail On-Time Performance on page 9.

**Board Standard: Passengers-per-car (PPC)** - Average number of passengers in a Metrorail car during a weekday hour at maximum load stations.

**Target:** Optimal PPC of 100, with minimum of 80 and maximum of 120 PPC.

**Time Period Tracked:** Sep-Nov 2014

**Rush Results:**

Max Load Points			Sep-14	Oct-14	Nov-14
AM Rush	Red	Gallery Place	91	91	83
		Dupont Circle	83	87	83
	Blue	Pentagon	106	97	107
		Rosslyn	103	83	93
		L'Enfant Plaza	66	56	50
	Orange	Court House	86	93	105
		L'Enfant Plaza	62	77	69
	Yellow	Pentagon	75	74	77
	Green	Waterfront	78	85	84
		Shaw-Howard	70	76	78
Silver	Rosslyn	80	83	92	
	L'Enfant Plaza	63	76	68	
PM Rush	Red	Metro Center	90	88	90
		Farragut North	73	80	88
		Rosslyn	103	111	100
	Blue	Foggy Bottom-GWU	97	91	106
		Smithsonian	39	54	50
		Foggy Bottom-GWU	75	81	89
	Orange	Smithsonian	53	65	59
		L'Enfant Plaza	69	72	70
	Green	L'Enfant Plaza	77	78	81
		Mt. Vernon Sq.	71	66	63
Silver	Foggy Bottom-GWU	78	77	85	
	Smithsonian	63	62	63	

**Board Guidelines: Regional Metrobus Service Guidelines (Resolution 2000-10)****Background:**

- May 1999 the Board of Directors adopted a set of guidelines for adding service to existing regional Metrobus routes. The Board augmented those guidelines to include the reduction of service on existing regional routes in February 2000.
  - Regional Metrobus routes are defined as bus routes that provide transportation between jurisdictions; serve major activity centers that operate on major arterial streets and carry high volumes of ridership either in one jurisdiction or multiple jurisdictions.
- The Board has not established service guidelines for non-regional bus routes. Non-regional bus service performance is evaluated by the sponsoring jurisdiction.

**Board Service Guidelines**

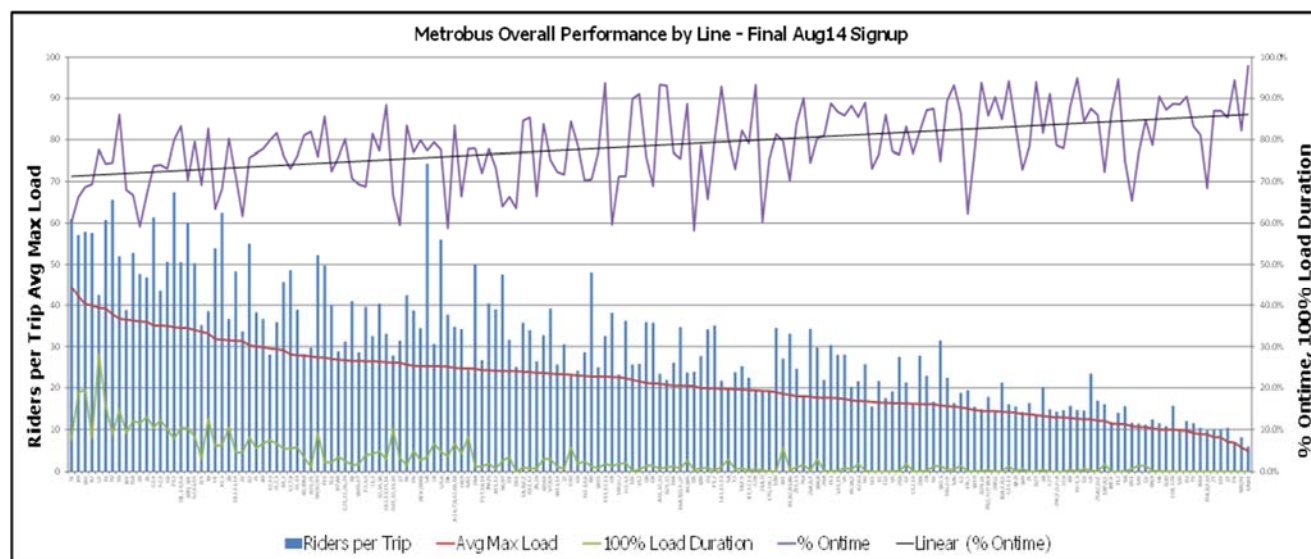
<b>Guideline Thresholds</b>		
<b>1</b> <u>Peak Hour Load Factor</u> (ratio to passengers to seats):	<b>Add Service</b>	<b>Reduce Service</b>
Radial Routes	1.20	0.60
Crosstown Routes	1.10	0.55
Express Routes	1.00	0.50
<u>Off-peak Load Factor (radial, crosstown and express routes)</u>	1.00	N/A
<b>2</b> If <u>Running Time</u> is insufficient such that more than X% of trips start late:	33%	N/A
<b>3</b> If <u>Non-peak Ridership</u> averages	> 30 passengers per revenue hour	< 18 passengers per revenue hour
<b>4</b> If Regional Equity changes (subsidy contributions) for any of the above	Board's discretion	

**Results:****REGIONAL METROBUS****Load Factors - Number of Trips Exceeding Standard**

Time Period	CROSSTOWN	EXPRESS	RADIAL
AM Early	72	8	172
AM Peak	470	30	1,109
Midday	579	21	1,326
PM Peak	606	48	1,463
Early Night	224	2	547
Late Night	29	0	107

**Metrobus Annual Productivity Measures (CY14)****Performance Factors (based on CY14 Productivity Report)**

Threshold Criteria	Definition	System Avg	Threshold	Met Threshold	Did Not Meet Threshold
Weekday Daily Passengers	1/8 of System Avg	3,646	456	140	21
Cost Recovery	50% of System Avg	31.76%	15.88%	148	13
Subsidy per Rider	2 Times System Avg	\$2.40	\$4.80	124	37
Riders per Revenue Trip	1/3 of System Avg	33.7	11.2	144	17
Riders per Revenue Mile	1/3 of System Avg	4.0	1.3	143	18



- To better measure a lines performance, staff evaluates service and cost effectiveness utilizing supplemental measures (e.g. *Productivity Measures: Weekday Daily Passengers, Cost Recovery, Subsidy per Rider, Riders per Revenue Trip and Riders per Revenue Mile*) in addition to the service guideline standards. Staff is working on proposing new guidelines that will better link practice and policy in 2016.
- The Metrobus weekday performance graph by line illustrates the relationship between ridership / max load/ load duration and on-time performance. As the intensity of ridership (riders per trip and % of trip exceeding a seated load) increases so does boarding time, decreasing on-time performance.
  - 40 or more have recurring crowding on most trips
  - 35 or more have frequent instances exceeding standard
  - 30 or more regularly exceed the standards during peak ridership periods
  - 25 or more have incidental cases of loads exceeding standard often associated with specific trips, traffic delays or other non-frequent incidents affecting service
- With increasing ridership, adjustments for running time and provision of appropriate capacity is needed to avoid diminishing Metrobus' ability to deliver quality service.
- As ridership increases, boarding/alighting time also increases thereby reducing on-time performance.

## Vital Signs Report

### Definitions

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**Bus On-Time Performance** – Metrobus adherence to scheduled service.

**Calculation:** For delivered trips, difference between scheduled time and actual time arriving at a time point based on a window of no more than 2 minutes early or 7 minutes late. Sample size of observed time points varies by route.

**Bus Fleet Reliability (Bus Mean Distance between Failures)** – The number of total miles traveled before a mechanical breakdown. A failure is an event that requires the bus to be removed from service or deviate from the schedule.

**Calculation:** Total Bus Miles / Number of failures.

**Rail On-Time Performance** – Metrorail adherence to scheduled weekday headways.

**Calculation:** During rush (AM/PM) service, number of station stops delivered within the scheduled headway plus 2 minutes, divided by total station stops delivered. During non-rush (mid-day and evening), number of station stops delivered up to 150% of the scheduled headway divided by total station stops delivered. Station stops are tracked system-wide, with the exception of terminal and turn-back stations.

**Rail Fleet Reliability (Railcar Mean Distance between Delays)** – The number of revenue miles traveled before a railcar failure results in a delay of service of more than three minutes. Some car failures result in inconvenience or discomfort, but do not always result in a delay of service (such as hot cars).

**Calculation:** Total railcar revenue miles / number of failures resulting in delays greater than three minutes.

**Rail Passengers Per Car** - Average number of passengers in a Metrorail car during a rush hour at maximum load stations.

**Calculation:** Total passengers observed on-board trains passing through a station during a rush hour divided by actual number of cars passing through the same station during the rush hour. Counts are taken at select stations where passenger loads are the highest and in the predominant flow direction of travel on one to two dates each month (from 6:00 AM to 10:00 AM and from 3:00 PM to 7:00 PM). In order to represent an average day, counts are normalized with rush ridership.

**Elevator and Escalator System Availability** – Percentage of time that Metrorail escalators or elevators in stations and parking garages are in service during operating hours.

**Calculation:** Hours in service / operating hours. Hours in service = operating hours – hours out of service. Operating hours = operating hours per unit \* number of units.

**Customer Injury Rate (per million passengers)<sup>1</sup>** – Injury to any customer caused by some aspect of Metro's operation that requires immediate medical attention away from the scene of the injury.

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<sup>1</sup> Passengers are defined as follows:

- Metrobus reports unlinked passenger trips. An unlinked trip is counted every time a customer boards a Metrobus. In an example where a customer transfers between two Metrobuses to complete their travel two trips are counted.

**Ecrewvklqp**<'Number of injuries / (number of passengers / 1,000,000).

"

**Go r m{ gg'kplwt { 'Tcvg'\*r gt '422.222'j qwtu**— An employee injury is recorded when the injury is (a) work related; and, (b) one or more of the following happens to the employee: 1) receives medical treatment above first aid, 2) loses consciousness, 3) takes off days away from work, 4) is restricted in their ability to do their job, 5) is transferred to another job, 6) death.

**Ecrewvklqp**< Number of injuries / (total work hours / 200,000).

"

**Etlo g''Tcvg''\*r gt ''o kklqp''rcugpi gt u<sup>+</sup>**— Part I crimes reported to Metro Transit Police Department for Metrobus (on buses), Metrorail (on trains and in rail stations), or at Metro parking lots in relation to Metro's monthly passenger trips. Reported by Metrobus, Metrorail, and Metro parking lots.

**Ecrewvklqp**<Number of crimes / (number of passengers / 1,000,000).

**Ewvqo gt 'Eqo o gpv'Tcvg'\*r gt 'b kklqp't cuugpi gt u<sup>+</sup>**— A complaint is defined as any phone call, e-mail or letter resulting in investigation and response to a customer. This measure includes the subject of fare policy but excludes specific Smarttrip matters handled through the regional customer service center. A commendation is any form of complimentary information received regarding the delivery of Metro service.

**Ecrewvklqp**<Number of complaints or commendations / (number of passengers / 1,000,000).

**Ewvqo gt 'Ucvklcevkqp** – Customer satisfaction is defined as the percent of survey respondents who rated their last trip on Metrobus or Metrorail as “very satisfactory” or “satisfactory.” The survey is conducted via phone with approximately 400 bus and 400 rail customers who have ridden metro in the past 30 days. Results are summarized by quarter (e.g., January – March).

**Ecrewvklqp**< Number of survey respondents with high satisfaction / total number of survey respondents.

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## Vital Signs Report

### Performance Data

#### KPI: Bus On-Time Performance [Target 81%]

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
<b>CY 2012</b>	78.3%	77.8%	76.4%	77.2%	74.8%	74.9%	76.7%	78.0%	73.8%	74.5%	76.3%	76.9%	76.4%
<b>CY 2013</b>	78.8%	79.4%	78.4%	76.5%	75.6%	75.5%	n/a	n/a	n/a	n/a	n/a	n/a	77.4%
<b>CY 2014</b>	80.4%	78.4%	78.2%	77.6%	76.9%	77.7%	78.7%	78.5%	76.0%	75.7%	77.9%	78.4%	78.0%

#### KPI: Bus Fleet Reliability (Bus Mean Distance Between Failures) [Target 8,343 Miles]

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
<b>CY 2013</b>	9,008	9,783	8,883	7,918	9,060	6,917	7,553	8,260	7,972	7,342	9,226	8,923	8,309
<b>CY 2014</b>	5,879	7,291	7,778	7,648	6,773	7,313	7,095	7,911	6,954	8,027	8,440	7,670	7,337

#### Bus Fleet Reliability (Bus Mean Distance Between Failure by Fleet Type)

Type ( % of Fleet )	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
<b>CNG (30%)</b>	6,350	6,373	6,897	7,369	6,489	5,938	5,911	6,064	6,839	7,217	7,486	6,092	6,541
<b>Hybrid (27%)</b>	5,575	8,049	8,791	8,578	8,147	9,448	9,224	10,958	8,761	9,269	9,801	8,897	9,192
<b>Clean Diesel (8%)</b>	10,277	12,117	9,567	9,148	7,723	8,136	7,272	9,186	7,400	8,861	9,339	9,638	8,825
<b>All Other (35%)</b>	4,528	5,269	5,701	4,885	3,733	4,662	4,484	4,842	3,279	4,941	4,728	5,298	4,566

#### KPI: Rail On-Time Performance [Target 91%]

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
<b>CY 2013</b>	92.3%	92.2%	92.1%	92.4%	91.9%	91.5%	91.7%	92.7%	92.4%	92.2%	90.3%	92.3%	92.0%
<b>CY 2014</b>	89.2%	92.0%	90.4%	92.0%	91.7%	91.2%	92.2%	89.7%	90.7%	90.1%	88.4%	89.7%	90.6%

#### Rail On-Time Performance by Line

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
<b>CY2014</b>													
<b>Red Line</b>	87.0%	90.8%	89.1%	91.6%	91.1%	89.4%	92.2%	92.3%	92.2%	91.3%	89.3%	91.6%	90.7%
<b>Blue Line</b>	89.2%	91.2%	89.7%	90.5%	90.7%	90.5%	92.2%	87.9%	89.6%	89.0%	87.1%	87.9%	90.1%
<b>Orange Line</b>	90.8%	93.2%	91.5%	92.4%	92.5%	92.5%	93.2%	86.4%	88.3%	87.8%	86.4%	87.7%	90.8%
<b>Green Line</b>	91.2%	93.5%	92.9%	93.6%	92.9%	93.2%	92.2%	87.9%	89.7%	88.7%	87.1%	87.3%	91.3%
<b>Yellow Line</b>	90.3%	92.6%	94.2%	93.5%	91.5%	91.6%	92.3%	95.7%	95.9%	95.6%	94.5%	95.0%	93.6%
<b>Silver Line</b>	n/a	n/a	n/a	n/a	n/a	n/a	88.5%	86.7%	88.4%	88.3%	86.9%	87.7%	87.7%



## Vital Signs Report

### Performance Data (cont.)

**KPI: Rail Fleet Reliability (Rail Mean Distance Between Delays by Railcar Series) [Target 60,000 miles]**

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
<b>CY 2013</b>	67,500	71,323	71,225	64,890	62,418	61,745	51,757	69,230	75,697	61,959	51,248	63,468	63,624
<b>CY 2014</b>	44,530	66,600	63,127	77,957	64,848	55,522	84,627	65,042	73,150	89,891	63,436	61,000	65,958

**KPI: Rail Fleet Reliability (Rail Mean Distance Between Delays by Railcar Series)**

<b>CY2014</b>	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
<b>1000 series</b>	31,151	48,027	47,860	48,748	44,507	55,558	86,726	62,966	59,758	124,561	102,863	51,956	57,228
<b>2000/3000 series</b>	60,796	102,450	116,661	106,927	131,518	90,600	145,570	108,009	87,816	121,583	66,299	91,627	96,937
<b>4000 series</b>	17,282	39,542	27,254	30,727	19,707	14,825	25,775	25,027	24,951	37,946	28,231	28,106	24,949
<b>5000 series</b>	41,012	53,807	50,481	132,119	67,049	46,668	55,787	35,918	92,871	54,448	42,982	54,284	53,637
<b>6000 series</b>	127,765	98,260	83,886	173,233	134,846	127,240	221,333	171,859	189,617	128,897	97,768	76,201	123,502

**KPI: MetroAccess On-time Performance [Target 92%]**

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
<b>CY 2013</b>	93.3%	92.3%	92.6%	91.6%	91.9%	89.9%	91.3%	92.9%	90.6%	91.2%	91.1%	92.5%	91.8%
<b>CY 2014</b>	93.3%	90.2%	92.5%	91.1%	92.3%	92.4%	92.6%	92.8%	91.8%	91.9%	91.5%	92.2%	92.1%

**KPI: Escalator System Availability [Target 90%]**

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
<b>CY 2013</b>	90.2%	89.8%	92.0%	91.9%	92.3%	91.6%	92.6%	92.8%	93.8%	93.9%	92.9%	91.8%	92.1%
<b>CY 2014</b>	93.0%	93.6%	93.6%	92.6%	92.3%	93.1%	92.9%	92.7%	93.0%	93.8%	93.8%	93.2%	93.1%

**KPI: Elevator System Availability [Target 97.5%]**

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
<b>CY 2013</b>	97.5%	96.7%	96.1%	95.4%	95.1%	94.9%	96.7%	96.6%	96.9%	96.8%	97.4%	96.9%	96.9%
<b>CY 2014</b>	97.4%	96.6%	97.3%	97.2%	97.6%	97.0%	97.2%	96.8%	96.3%	96.0%	96.7%	96.2%	97.5%

**Vital Signs Report  
Performance Data (cont.)****KPI: Customer Injury Rate (per million passengers) [Target 1.8]**

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
<b>CY 2013</b>	1.88	1.49	1.84	2.60	1.78	2.05	1.46	1.98	2.23	2.39	1.68	1.59	1.92
<b>CY 2014</b>	3.01	1.90	1.51	1.53	2.19	1.63	1.74	1.47	2.95	1.53	1.86	2.42	1.96

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

**Bus Customer Injury Rate (per million passengers)**

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
<b>CY 2013</b>	1.40	2.03	2.30	4.48	2.06	3.03	1.61	2.73	3.51	3.48	1.55	1.25	2.52
<b>CY 2014</b>	3.16	2.31	1.30	2.07	2.96	2.01	2.27	1.90	4.91	1.48	2.46	3.04	2.49

**Rail Customer Injury Rate (per million passengers)**

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
<b>CY 2013</b>	0.87	0.51	0.56	0.61	0.65	0.56	0.46	0.33	0.47	0.58	0.89	0.55	0.58
<b>CY 2014</b>	1.44	0.90	0.84	0.56	0.61	0.38	0.67	0.40	0.23	0.48	0.85	0.70	0.59

**Rail Transit Facilities\* Injury Rate (per million passengers)**

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
<b>CY 2013</b>	0.12	0.06	0.06	0.05	0.16	0.00	0.10	0.28	0.06	0.06	0.13	0.07	0.10
<b>CY 2014</b>	0.13	0.07	0.06	0.05	0.17	0.00	0.10	0.28	0.06	0.05	0.13	0.06	0.15

\*Includes stations, escalators, elevators and parking facilities.

**KPI: MetroAccess Customer Injury Rate (per million passengers)**

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
<b>CY 2013</b>	5.95	24.53	11.67	16.55	21.81	23.63	33.57	5.47	16.92	21.10	5.78	30.18	18.06
<b>CY 2014</b>	37.17	12.76	11.72	10.33	20.97	58.95	26.00	10.73	47.35	24.53	17.24	21.39	25.08

**KPI: Employee Injury Rate (per 200,000 hours) -- Target = < 4.8 injuries per 200,000 hours**

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
<b>CY 2013</b>	4.45	5.74	5.09	6.00	3.89	5.28	5.09	4.95	4.31	3.74	5.09	4.26	4.81
<b>CY 2014</b>	4.09	5.45	4.49	4.57	3.89	3.77	4.24	4.31	4.50	3.29	3.92	3.99	4.20

## Vital Signs Report Performance Data (cont.)

### KPI: Crime Rate (per million passengers) [Target 2,000]

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
<b>CY 2013 Metrobus</b>	1.8	1.5	1.0	1.4	1.4	0.8	1.4	2.0	1.2	1.3	1.7	0.6	1.34
<b>CY 2014 Metrobus</b>	1.3	1.6	0.6	1.5	1.3	0.9	0.5	0.6	1.3	1.4	1.5	0.6	1.08
<b>CY 2013 Metrorail</b>	5.9	7.0	4.8	5.0	9.4	9.3	7.8	9.1	8.5	8.1	5.9	4.3	7.12
<b>CY 2014 Metrorail</b>	3.2	3.2	3.8	3.9	6.0	6.1	5.9	8.2	6.0	4.6	4.7	3.8	5.02
<b>CY 2013 Parking</b>	0.8	0.5	0.9	1.4	1.6	1.0	1.4	1.7	2.9	2.1	1.7	0.7	1.41
<b>CY 2014 Parking</b>	2.1	0.5	0.8	1.0	1.4	1.6	0.6	0.6	1.4	1.5	1.2	2.0	1.23

### Crimes by Type

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
<b>CY 2014</b>													
<b>Robbery</b>	17	19	22	27	28	18	21	21	19	34	25	29	280
<b>Larceny</b> (Snatch/Pickpocket)	25	29	35	32	43	28	23	24	28	37	32	22	358
<b>Larceny (Other)</b>	41	17	23	44	60	97	84	117	83	54	36	41	697
<b>Motor Vehicle Theft</b>	4	1	4	5	13	7	4	4	8	10	8	3	71
<b>Attempted MVT</b>	10	1	2	0	2	4	2	0	2	5	1	6	35
<b>Aggravated Assault</b>	6	8	8	12	10	11	12	5	10	7	10	8	107
<b>Rape</b>	0	0	0	0	1	0	1	0	0	0	0	0	2
<b>Burglary</b>	0	0	1	1	0	0	0	0	1	1	0	0	4
<b>Homicide</b>	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Arson</b>	1	0	0	0	0	0	0	0	0	0	0	2	3
<b>Total</b>	104	75	95	121	157	165	147	171	151	148	112	111	1,557

### KPI: Customer Commendation Rate (per million passengers)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
<b>CY 2013</b>	6.6	6.4	5.9	7.0	6.2	6.4	7.3	6.1	5.0	6.7	5.9	4.6	6.2
<b>CY 2014</b>	7.0	6.0	6.6	5.2	7.2	7.3	6.7	7.0	6.6	5.4	5.6	5.7	6.4

### KPI: Customer Complaint Rate (per million passengers)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
<b>CY 2013</b>	84	73	74	74	76	79	90	81	82	81	113	74	82
<b>CY 2014</b>	92	88	74	81	79	83	90	84	96	89	71	69	83

## Vital Signs Report

### Performance Data (cont.)

**KPI: Crime Rate (per million passengers) [Target 2,000]**

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
<b>CY 2013 Metrobus</b>	1.8	1.5	1.0	1.4	1.4	0.8	1.4	2.0	1.2	1.3	1.7	0.6	1.34
<b>CY 2014 Metrobus</b>	1.3	1.6	0.6	1.5	1.3	0.9	0.5	0.6	1.3	1.4	1.5	0.6	1.08
<b>CY 2013 Metrorail</b>	5.9	7.0	4.8	5.0	9.4	9.3	7.8	9.1	8.5	8.1	5.9	4.3	7.12
<b>CY 2014 Metrorail</b>	3.2	3.2	3.8	3.9	6.0	6.1	5.9	8.2	6.0	4.6	4.7	3.8	5.02
<b>CY 2013 Parking</b>	0.8	0.5	0.9	1.4	1.6	1.0	1.4	1.7	2.9	2.1	1.7	0.7	1.41
<b>CY 2014 Parking</b>	2.1	0.5	0.8	1.0	1.4	1.6	0.6	0.6	1.4	1.5	1.2	2.0	1.23

**Crimes by Type**

<b>CY 2014</b>	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
<b>Robbery</b>	17	19	22	27	28	18	21	21	19	34	25	29	280
<b>Larceny</b> (Snatch/Pickpocket)	25	29	35	32	43	28	23	24	28	37	32	22	358
<b>Larceny (Other)</b>	41	17	23	44	60	97	84	117	83	54	36	41	697
<b>Motor Vehicle Theft</b>	4	1	4	5	13	7	4	4	8	10	8	3	71
<b>Attempted MVT</b>	10	1	2	0	2	4	2	0	2	5	1	6	35
<b>Aggravated Assault</b>	6	8	8	12	10	11	12	5	10	7	10	8	107
<b>Rape</b>	0	0	0	0	1	0	1	0	0	0	0	0	2
<b>Burglary</b>	0	0	1	1	0	0	0	0	1	1	0	0	4
<b>Homicide</b>	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Arson</b>	1	0	0	0	0	0	0	0	0	0	0	2	3
<b>Total</b>	104	75	95	121	157	165	147	171	151	148	112	111	1,557

**KPI: Customer Commendation Rate (per million passengers)**

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
<b>CY 2013</b>	6.6	6.4	5.9	7.0	6.2	6.4	7.3	6.1	5.0	6.7	5.9	4.6	6.2
<b>CY 2014</b>	7.0	6.0	6.6	5.2	7.2	7.3	6.7	7.0	6.6	5.4	5.6	5.7	6.4

**KPI: Customer Complaint Rate (per million passengers)**

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
<b>CY 2013</b>	84	73	74	74	76	79	90	81	82	81	113	74	82
<b>CY 2014</b>	92	88	74	81	79	83	90	84	96	89	71	69	83

## Vital Signs Report Performance Data (cont.)

### Customer Satisfaction Rating

	Q1-2013	Q2-2013	Q3-2013	Q4-2013	Q1-2014	Q2-2014	Q3-2014	Q4-2014
<b>Metrobus</b>	82%	82%	81%	76%	78%	79%	81%	78%
<b>Metrorail</b>	84%	86%	84%	76%	80%	80%	77%	82%

### Metrobus Ridership (millions of unlinked trips)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
<b>CY 2013</b>	10.7	10.4	11.3	11.6	12.1	11.2	11.8	11.7	11.7	12.3	11.0	10.4	136.2
<b>CY 2014</b>	10.5	10.1	10.8	11.8	11.8	11.6	11.9	11.6	11.9	12.3	10.2	10.5	134.9

### Metrorail Ridership (millions of linked trips)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
<b>CY 2013</b>	17.3	15.7	17.9	19.7	18.5	17.9	19.4	18.0	16.9	17.2	15.7	14.7	208.9
<b>CY 2014</b>	15.2	14.4	16.8	19.5	18.1	18.3	19.4	17.6	17.5	18.8	15.4	15.7	206.6

### MetroAccess Ridership (millions of completed trips)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
<b>CY 2013</b>	0.168	0.163	0.171	0.181	0.183	0.169	0.179	0.183	0.177	0.190	0.173	0.166	2.104
<b>CY 2014</b>	0.161	0.157	0.171	0.194	0.191	0.187	0.192	0.186	0.190	0.204	0.174	0.187	2.193

## Vital Signs Report

### Performance Data (cont.)

#### Board Standard: Passengers-per-car

AM Rush Max Load Points		Sep-13	Oct-13	Nov-13	Sep-14	Oct-14	Nov-14
Gallery Place	Red	87	78	82	91	91	83
Dupont Circle		99	85	77	83	87	83
Pentagon	Blue				106	97	107
Rosslyn		80	80	85	103	83	93
L'Enfant Plaza		81	76	70	66	56	50
Court House	Orange	102	94	105	86	93	105
L'Enfant Plaza		81	77	78	62	77	69
Pentagon	Yellow	72	62	73	75	74	77
Waterfront	Green	92	83	77	78	85	84
Shaw-Howard		72	80	103	70	76	78
Rosslyn	Silver				80	83	92
L'Enfant Plaza					63	76	68

PM Rush Max Load Points		Sep-13	Oct-13	Nov-13	Sep-14	Oct-14	Nov-14
Gallery Place	Red	84	74	83	90	88	90
Dupont Circle		91	80	73	73	80	88
Pentagon	Blue				103	111	100
Rosslyn		91	90	83	97	91	106
L'Enfant Plaza		88	93	59	39	54	50
Court House	Orange	92	104	98	75	81	89
L'Enfant Plaza		68	70	63	53	65	59
Pentagon	Yellow	72	62	69	69	72	70
Waterfront	Green	88	68	74	77	78	81
Shaw-Howard		68	55	70	71	66	63
Rosslyn	Silver				78	77	85
L'Enfant Plaza					63	62	63

**Metro Facts at a Glance****Metro Service Area**

Size	1,500 sq. miles
Population	5 million

**Ridership**

Mode	CY 2013	Average Weekday
Bus	136 million	458,662 (June 2014)
Rail	209 million	751,538 (June 2014)
MetroAccess	2.1 million	7,698 (June 2014)
Total	347 million	

**Fiscal Year 2014 Budget**

Operating	\$1.7 billion
Capital	\$0.9 billion
Total	\$2.6 billion

**Metrobus General Information**

Size	11,275 bus stops and 2,543 shelters
Routes*	309 Routes on 176 Lines
Fiscal Year 2014 Operating Budget	\$579.3 million
Highest Ridership Route in 2014	14th St. Line-Rts 52, 53, 54 (15,807 avg. wkdy ridership)
Metrobus Fare	\$1.75, Bus-to-bus Transfers Free
Express Bus Fare	\$4.00, Airport Fare \$6.00
Bus Fleet*	1,525
Buses in Peak Service	1,290
Bus Fleet by Type*	Compressed Natural Gas (459), Electric Hybrid (742), Clean Diesel (144) and All Other (180)
Average Fleet Age*	7.00 years
Bus Garages	9 – 4 in DC, 3 in MD and 2 in VA

\*As of July 31, 2014.

**Metrorail General Information**

Fiscal Year 2014 Operating Budget	\$961.8 million
Highest Ridership Day	Obama Inauguration on Jan. 20, 2009 (1.1 million)
Busiest Station in 2013	Union Station (657,000 entries in December 2013)
Regular Fare (peak)	Minimum - \$3.15 paper fare card, \$2.15 SmarTrip® Maximum - \$6.90 paper fare card, \$5.90 SmarTrip®
Reduced Fare (non-peak)	Minimum - \$2.75 paper fare card, \$1.75 SmarTrip® Maximum - \$4.60 paper fare card, \$3.60 SmarTrip®
Paper Farecard Surcharge	\$1.00 per trip 50¢ fare surcharge for seniors/people with disabilities
1 <sup>st</sup> Segment Opening/Year	Farragut North-Rhode Island Avenue (1976)
Newest Stations/Year	McLean, Tysons Corner, Greensboro, Spring Hill and Wiehle-Reston East (2014)
Rail Cars in Revenue Service	1,104
Rail Cars in Peak Service	954
Rail Cars by Series	1000 Series (278), 2000/3000 (358), 4000 (100), 5000 (184) and 6000 (184)
Lines	6 – Red, Blue, Orange, Green, Yellow and Silver
Station Escalators	613
Station and Parking Gar. Elevators	275
Longest Escalator	Wheaton station (230 feet)
Deepest Station	Forest Glen (21 stories / 196 feet)
Rail Yards	9 – 1 in DC, 6 in MD and 2 in VA



**MetroAccess General Information**

Fiscal Year 2014 Operating Budget	\$114.1 million
MetroAccess Fare	Twice the fastest rail or bus equivalent SmarTrip-based fare up to a \$6.50 maximum
Paratransit Vehicle Fleet	600
Average Fleet Age	1.5 years
Paratransit Garages	6 (1 in DC, 3 in MD and 2 in VA)
Service Delivery Providers	Diamond Transportation, First Transit, and Veolia Transportation
Quality Assurance Provider	Medical Transportation Management
Operations Control Center Provider	MV Transportation



## Appendix H Operating Statistics

### Metrobus Revenue Vehicle Fleet Management Plan

The Metrobus Revenue Vehicle Fleet Management Plan is a statement of the processes and practices by which Metro establishes its current and projected Metrobus revenue vehicle fleet 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. The information that follows reflects the most current data from the Federal Transit Administration Approved Plan.

Table H.1

Metrobus Statistics: FY2013 - FY2016				
	FY2013 Actual	FY2014 Actual	FY2015 Approved	FY2016 Approved
<b>STATISTICS:</b>				
Total Bus Miles (000s)	48,081	50,019	51,075	51,424
Revenue (budget) Bus Miles (000s)	38,080	39,159	40,451	38,877
Total Passengers (000s)	129,756	134,408	139,124	140,794
Bus Fleet Size (Year End)	1,481	1,481	1,507	1,507
Total Passenger Revenue (\$000s)	\$141,996	\$141,421	\$155,675	\$156,835
Total Operating Revenue (000s)	\$156,799	\$165,022	\$179,619	\$181,335
Total Operating Expenses (000s)	\$535,678	\$569,006	\$618,461	\$634,314
Gross Subsidy (000s)	\$411,009	\$403,984	\$438,842	\$452,979
<b>RATIOS:</b>				
Cost Per Total Bus Mile	11.75	11.38	12.11	12.33
Passengers Per Bus	87.61	90.75	92.32	93.43
Passengers Per Scheduled Bus Mile	3.41	3.43	3.44	3.62
Cost Per Passenger	\$4.35	\$4.23	\$4.45	\$4.51
Subsidy Per Passenger	\$3.17	\$3.01	\$3.15	\$3.22
Average Passenger Fare *	\$1.09	\$1.05	\$1.12	\$1.11
Percentage of Operating Cost Recovered from Passenger Revenues	25.1%	24.9%	25.2%	24.7%
Percentage of Operating Cost Recovered from all Operating Revenues	27.8%	29.0%	29.0%	28.6%
* Average is lower than base fare due to transfers and 7-day pass impact.				

Table H.2

Active Bus Fleet: FY2016		
	MAXIMUM SCHEDULED FLEET	TOTAL ACTIVE FLEET
Fiscal 2013 End of Year	1,284	1,506
Fiscal 2014 End of Year *	1,290	1,514
Fiscal 2015 End of Year **	1,294	1,526
Fiscal 2016 End of Year **	1,305	1,538
* Includes 27 strategic buses in accordance with fleet plan.		
** Includes 35 strategic buses in accordance with fleet plan.		

Table H.3

Average Age of Bus Fleet at End of FY2016			
MANUFACTURER	YEAR ENTERED SERVICE	NUMBER OF BUSES	AVERAGE AGE
ORION VII - CNG	2005	250	11
HYBRID ELECTRIC	2006	50	10
CLEAN DIESEL	2006	116	10
NEW FLYER - CNG	2007	25	9
NABI	2008	22	8
NEW FLYER - HYBRID	2008	99	8
NEW FLYER - HYBRID	2009	99	7
NEW FLYER - HYBRID	2010	147	6
NEW FLYER - XCELSIOR	2011	100	5
NEW FLYER - XCELSIOR	2012	67	4
ORION VII - HYBRID	2012	25	4
ORION VII - CLEAN DIESEL	2012	27	4
NEW FLYER - XCELSIOR	2013	105	3
FORD	2013	6	3
NABI - BRT	2014	105	2
NEW FLYER XCELSIOR HY	2015	55	1
NEW FLYER XCELSIOR CN	2015	53	1
NEW FLYER XCELSIOR HY	2016	76	0
NEW FLYER XCELSIOR CN	2016	111	0
<b>TOTAL**</b>		<b>1,538</b>	<b>5.72</b>
** Includes 35 strategic buses in accordance with fleet plan.			

Table H.4

Bus Fleet Size by Garage: FY 2017			
	Fiscal 2017 Maximum Scheduled Fleet*	Total Fleet	Spare Ratio
Bladensburg	218	252	15.5%
Shepherd Parkway	187	214	14.4%
Northern	130	150	15.3%
Western	103	119	15.5%
Southern Avenue	66	76	15.1%
Four Mile Run	189	218	15.3%
Landover	146	169	15.7%
Montgomery	178	206	15.7%
West Ox	83	96	15.6%
<b>SYSTEM TOTAL</b>	<b>1,300</b>	<b>1,500</b>	<b>15.3%</b>
* Maximum scheduled fleet Includes 25 strategic buses			

Table H.5

Comparison of Bus Miles Operated: FY2012- FY2016					
	FY2012 Approved	FY2013 Approved	FY2014 Approved	FY2015 Approved	FY2016 Approved
Total Scheduled	49,309,732	47,381,294	47,968,460	49,740,260	50,080,598
Strategic	-	-	-	-	-
Bus Bridges	-	-	-	600,000	600,000
Special Service	100,000	100,000	100,000	100,000	100,000
Change-Offs	265,000	260,780	267,522	277,403	281,025
Yard Work	448,670	441,525	449,553	466,158	472,245
Missed Trips	(104,000)	(102,344)	(104,205)	(108,088)	(109,499)
Total Unscheduled	709,670	699,961	712,869	1,335,473	1,343,772
<b>TOTAL MILES</b>	<b>50,019,402</b>	<b>48,081,255</b>	<b>48,681,329</b>	<b>51,075,733</b>	<b>51,424,370</b>
Estimated miles of articulated bus included in above	2,597,000	2,487,344	1,900,948	1,900,948	1,900,948
Strategic mileage included in Scheduled Miles.					
FY13 Actual Bus Bridge Mileage available for FY16 Estimates.					
The reduction in articulated miles is a result of extended headways on the 70 Line.					

Table H.6

## Bus Operator Payhours: FY2016

FY2016 Bus Operator Wages			
Category	Payhours	Average Hourly Rate	Budget
Scheduled (straight + OT)*	5,425,215	\$27.76	\$150,601,237
<b>Subtotal:</b>	<b>5,425,215</b>		<b>\$150,601,237</b>
Non-Scheduled OT/Special Event	236,429	\$27.76	\$6,563,150
Standing Extra	49,455	\$27.76	\$1,372,846
Utility	61,812	\$27.76	\$1,715,870
Training	210,797	\$16.00	\$3,372,752
Miscellaneous	179,252	\$27.76	\$4,975,945
Guarantees	57,757	\$27.76	\$1,603,305
Funeral Leave	5,993	\$27.76	\$166,363
Jury Duty	5,309	\$27.76	\$147,375
Vacation	355,458	\$27.76	\$9,867,335
Sick	310,980	\$27.76	\$8,632,648
Holiday	230,699	\$27.76	\$6,404,088
<b>Subtotal:</b>	<b>1,703,941</b>		<b>\$44,821,679</b>
<b>Grand Total:</b>	<b>7,129,156</b>	<b>\$27.41</b>	<b>\$195,422,915</b>

\* Pay hours for strategic buses are included in the FY16 Scheduled Pay Hours.  
Non-Scheduled OT includes funding for bus bridges, supporting Rail shutdowns, elevator shuttles.

Table H.7

Metrobus Route Summary: FY2016							
	ANNUAL PLATFORM HOURS						
	TOTAL SERVICE FY2010	TOTAL SERVICE FY2011	TOTAL SERVICE FY2012	TOTAL SERVICE FY2013*	TOTAL SERVICE FY2014*	TOTAL SERVICE FY2015*	TOTAL SERVICE FY2016
<b>Regional Routes</b>							
District of Columbia	1,615,035	1,616,829	1,637,513	1,701,790	1,691,338	1,755,539	1,783,989
Maryland	828,831	830,288	822,385	874,355	868,570	886,898	893,716
Virginia	731,804	738,549	743,905	798,923	800,416	823,206	830,318
<b>Totals for Regional:</b>	<b>3,175,671</b>	<b>3,185,666</b>	<b>3,203,803</b>	<b>3,375,069</b>	<b>3,360,324</b>	<b>3,465,643</b>	<b>3,508,023</b>
<b>Non-Regional Routes</b>							
District of Columbia	417,155	415,015	396,675	394,654	380,811	381,898	368,793
Maryland	384,846	385,773	387,451	391,759	379,565	379,118	387,432
Virginia	104,746	104,476	103,320	117,305	111,991	129,831	132,187
<b>Totals for Non-Regional:</b>	<b>906,747</b>	<b>905,264</b>	<b>887,446</b>	<b>903,718</b>	<b>872,367</b>	<b>890,847</b>	<b>888,413</b>
<b>Reimbursable Routes</b>							
District of Columbia	-	-	-	-	-	-	-
Maryland	-	-	-	-	-	-	-
Virginia	-	-	-	-	-	-	-
<b>Totals for Reimbursable:</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>TOTAL METROBUS ROUTES</b>	<b>4,082,418</b>	<b>4,090,930</b>	<b>4,091,249</b>	<b>4,278,787</b>	<b>4,232,691</b>	<b>4,356,490</b>	<b>4,396,435</b>
<b>OPERATOR SHUTTLES/STRATEGIC BUSES/HEADWAY MANAGEMENT</b>					107,651	175,549	118,566
* Reflects adjusted numbers							

## Regional and Non-Regional Metrobus Routes

Metrobus routes are designated as either regional or non-regional. The cost of providing Metrobus service on regional routes is allocated to all of the Metro contributing jurisdictions. Costs associated with non-regional are allocated to a greater degree to the jurisdiction receiving the benefit of the non-regional route.

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

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

Metrobus operating costs can be expressed in terms of cost per platform hour. Platform hours include both revenue and non-revenue (sometimes called “deadhead”) service, and this measure captures the total time between a bus leaving its storage and maintenance facility and its return at the end of the day. For the FY2016 budget, the average cost per platform hour for all routes is \$144.89. For the allocation of the FY2016 operating subsidy, the budgeted cost per platform hour for non-regional routes (which has certain overhead and administrative expenses removed) is \$115.73.

The following tables show the Metrobus regional and non-regional routes by major jurisdiction.

Table H.8

Metrobus Regional and Non-Regional Route Summary											
DC REGIONAL ROUTES - PLATFORM HOURS											
Line #	Line Name	Routes	Sched Days	FY2009	FY2010	FY2011	FY2012	FY2013*	FY2014*	FY2015*	FY2016
129	DC-Dulles	5A	W,Sa,Su	63,526	23,177	24,046	23,969	25,039	24,177	24,098	24,699
113	Friendship Heights - Southeast	30N,30S	W,Sa,Su				0	0	0	45,539	53,612
99	Wisconsin Avenue	31,33	W,Sa,Su	0	29,608	29,616	29,544	30,665	29,480	54,557	59,111
93	Pennsylvania Avenue	32,34,36	W,Sa,Su	161,599	112,534	112,449	112,688	117,081	116,722	89,936	86,020
58	Naylor Road	34	W,Sa,Su	0	21,979	22,002	21,958	25,237	25,134	3,757	
100	Wisconsin Avenue Limited	37	W (Sat Hol)	0	6,413	6,503	6,401	9,557	9,287	11,100	11,134
42	Pennsylvania Avenue Limited	39	W (Sat Hol)	0	8,245	8,415	8,283	11,223	10,743	10,700	11,075
81	Mount Pleasant	42,43	W,Sa,Su	21,055	64,897	63,575	63,396	62,404	61,160	61,157	61,473
52	14th Street	52,53,54	W,Sa,Su	97,975	97,970	98,990	99,294	103,195	100,479	101,678	102,571
43	Fort Totten-Petworth	60,64	W,Sa,Su	20,855	41,474	41,503	42,299	42,611	40,743	40,757	40,885
59	Takoma-Petworth	62,63	W,Sa,Su	20,396	31,086	31,048	31,535	31,564	32,316	32,305	32,411
50	Petworth-11th St	66,68	W,Sa,Su	33,339	0	0	0	0	0	0	0
118	Georgia Avenue-7th Street	70	W,Sa,Su	0	0	0	0	76,914	74,017	79,991	80,939
118	Georgia Avenue-7th Street	70,71	W,Sa,Su	99,346	88,060	88,202	88,310	0	0	0	0
119	Convention Center- S.W. Waterfront	74	W,Sa,Su	0	0	0	0	24,609	23,620	23,620	20,125
107	Georgia Avenue Limited	79	W (Sat Hol)	22,459	24,274	25,516	37,181	40,219	47,661	48,900	48,741
86	North Capitol Street	80	W,Sa,Su	60,735	60,743	60,768	60,447	62,707	61,285	62,822	63,038
130	U Street-Garfield	90,92,93	W,Sa,Su	108,815	108,182	107,115	106,788	111,925	110,825	112,344	117,549
141	Stanton Road	94	W,Sa,Su	11,614	11,614	11,634	11,562	11,952	12,424	13,151	11,561
18	East Capitol Street-Cardozo	96,97	W,Sa,Su	60,421	60,464	60,147	59,962	61,563	62,250	62,552	62,694
581	Anacostia-Congress Heights	A2,6,7,8,42,46,48	W,Sa,Su	79,438	79,686	79,720	79,526	82,643	79,472	79,656	80,014
582	Anacostia-Fort Drum	A4,W5	W,Sa,Su	25,139	25,168	25,278	25,212	25,517	35,008	36,009	36,192
111	M.L. King Jr. Avenue Limited Line	A9	W (Sat Hol)	6,548	6,460	6,477	6,359	7,768	9,596	9,509	9,584
150	Bladensburg Road-Anacostia	B2	W,Sa,Su	55,731	55,847	55,539	55,324	61,553	59,615	59,931	60,333
22	Glover Park-Federal Triangle	D1	W (Sat Hol)	0	0	5,049	4,978	5,719	5,898	5,938	5,886
55	Sibley Hospital - Stadium-Armory	D1,3,6	W,Sa,Su	67,358	67,413	55,492	55,317	0	0	0	0
48	Ivy City-Dupont Circle	D3	W (Sat Hol)	0	0	6,426	6,317	6,048	5,822	5,664	5,539
37	MacArthur Boulevard-Georgetown	D5	W (Sat Hol)	3,652	3,817	4,284	4,192	4,514	4,782	4,780	4,596
55	Sibley Hospital - Stadium-Armory	D6	W,Sa,Su	0	0	0	0	57,880	55,737	56,050	56,510
77	Military Road-Crosstown	E2,3,4	W,Sa,Su	48,931	48,968	48,834	48,658	50,472	48,559	48,628	0
79	Ivy City - Fort Totten	E2	W,Sa,Su								13,621
77	Military Road-Crosstown	E4 (E3 Eliminated)	W,Sa,Su								37,298
89	P Street-LeDroit Park	G2	W,Sa,Su	26,434	26,434	26,432	24,125	25,711	25,631	25,716	25,874
101	Rhode Island Avenue	G8	W,Sa,Su	34,519	34,477	32,588	34,653	39,574	37,858	37,821	37,945
62	Brookland-Potomac Park	H1	W (Sat Hol)	4,914	4,913	4,922	4,836	5,258	5,680	5,690	5,388
35	Crosstown	H2,3,4	W,Sa,Su	50,351	55,726	55,744	55,387	58,346	56,068	56,024	54,577
32	Connecticut Avenue	L1,2	W,Sa,Su	43,352	43,479	43,507	46,115	43,360	41,276	40,484	40,621
75	Massachusetts Avenue	N2,3,4,6	W,Sa,Su	43,908	44,353	44,597	43,676	43,505	41,577	41,535	40,296
98	Navy Yard Shuttle	N22	W	30,070	0	0	0	0	0	0	0
109	16th Street-Potomac Park	S1	W (Sat Hol)	9,647	12,261	12,215	12,031	12,613	12,278	12,293	13,711
108	16th Street	S2,4	W,Sa,Su	111,636	110,630	110,187	109,954	112,351	109,308	109,843	110,749
112	16th Street Limited	S9	W (Sat Hol)	0	18,692	19,049	18,720	23,391	24,757	24,760	25,722
134	Minnesota Avenue-Anacostia	U2	W, Sa	11,934	11,934	11,960	11,747	13,962	13,332	13,987	0
134	Deanwood-Minnesota Ave	U7	W,Sa,Su								10,216
132	Benning Heights- M Street	V1	W								8,047
133	Capitol Heights-Minnesota Avenue	V2,4	W,Sa,Su								55,105
57	Fairfax Village-L'Enfant Plaza	V5	W (Sat Hol)	5,475	5,474	5,483	5,388	5,455	5,212	4,448	4,466
114	Minnesota Avenue-M Street	V7,8,9	W,Sa,Su	44,757	44,752	43,206	43,240	48,717	48,089	43,429	0
95	Deanwood-Alabama Avenue	W4	W,Sa,Su	41,609	43,244	46,358	46,138	48,630	52,058	54,392	54,777
587	South Capitol St. Limited	W9	W	0	0	0	0	0	3,149	4,060	3,973
151	Benning Road	X1,3	W (Sat Hol)	10,697	10,829	10,863	10,776	11,819	11,631	11,862	11,884
14	Benning Road-H Street	X2	W,Sa,Su	65,883	69,759	71,090	69,969	71,975	69,541	72,808	72,123
11	Benning Road-H St Express	X9	W	0	0	0	11,257	11,585	11,257	11,257	11,302
SUBTOTAL Regional DC				1,604,118	1,615,036	1,616,829	1,637,513	1,701,790	1,691,338	1,755,539	1,783,989
* Reflects adjusted numbers											

\* Reflects adjusted numbers



Table H.8

<b>Metrobus Regional and Non-Regional Route Summary</b>											
<b>DC NON-REGIONAL ROUTES - PLATFORM HOURS</b>											
<b>Line #</b>	<b>Line Name</b>	<b>Routes Sched Days</b>	<b>FY2009</b>	<b>FY2010</b>	<b>FY2011</b>	<b>FY2012</b>	<b>FY2013*</b>	<b>FY2014*</b>	<b>FY2015*</b>	<b>FY2016</b>	
107	Georgia Avenue Metro Extra	79 W	11,800	12,505	12,505	0	0	0	0	0	0
23	Woodley Park-U Steet Loop	98 W,Sa,Su	6,249	0	0	0	0	0	0	0	0
49	Fort Lincoln Shuttle	B8,9 W (Sat Hol)	6,370	6,350	6,350	6,250	6,432	6,250	5,217	5,237	5,237
51	Glover Park-Dupont Circle	D2 W,Sa,Su	18,424	18,473	18,489	18,424	19,015	18,282	18,280	18,335	18,335
56	Ivy City-Franklin Square	D4 W,Sa,Su	16,391	16,452	18,420	18,408	19,169	18,404	18,406	18,462	18,462
45	Hospital Center	D8 W,Sa,Su	43,550	43,923	42,706	41,642	42,019	40,443	40,483	40,559	40,559
71	Chevy Chase	E6 W (Sat Hol)	5,745	5,920	5,916	5,827	5,997	5,827	5,827	5,851	5,851
34	Brookland-Fort Lincoln	H6 W,Sa,Su	18,971	18,970	19,009	19,430	20,124	19,336	19,336	19,397	19,397
91	Park Road-Brookland	H8,9 W,Sa,Su	33,123	33,113	33,013	32,817	32,881	31,734	31,528	32,499	32,499
551	Takoma- Walter Reed	K1 W (Sat Hol)	3,769	3,825	3,825	3,765	0	0	0	0	0
583	Takoma-Fort Totten	K2 W (Sat Hol)	4,355	4,352	4,361	4,143	4,170	4,813	4,824	4,844	4,844
64	Fairfax Village-Naylor Road	M2 W (Sat Hol)	1,879	1,879	1,887	1,849	1,903	1,849	0	0	0
84	Nebraska Avenue	M4 W (Sat Hol)	10,715	10,799	10,659	10,492	10,726	10,436	10,498	10,322	10,322
46	Fairfax Village	M6 W,Sa,Su	14,831	14,483	14,505	14,465	15,434	14,936	14,900	14,941	14,941
82	Congress Heights Shuttle	M8,9 W (Sat Hol)	7,862	7,863	7,854	7,739	8,007	7,798	0	0	0
79	Tenleytown-Glover Park	N8 W (Sat Hol)	10,501	10,502	10,506	4,728	0	0	0	0	0
544	Anacostia-Eckington	P6 W,Sa,Su	43,488	43,851	43,933	43,941	45,040	43,256	43,105	43,417	43,417
78	Sheriff Road-River Terrace	U4 W,Sa,Su	12,594	12,594	12,523	12,463	12,549	11,997	12,150	12,261	12,261
135	Mayfair-Marshall Heights	U5,6 W,Sa,Su	29,782	29,661	29,717	29,652	29,832	28,827	28,875	29,394	29,394
44	Capitol Heights-Benning Heights	U8 W,Sa,Su	35,960	36,519	36,547	35,708	36,555	34,955	34,953	19,593	19,593
82	Shopley Terrace-Ft. Drum	W1 W						0	0	12,254	12,254
158	United Medical Center-Anacostia	W2,3 W,Sa,Su	37,811	37,890	37,921	37,889	38,909	37,366	12,205	37,735	37,735
15	Garfield-Anacostia Loop	W6,8 W,Sa,Su	29,653	29,670	29,586	29,559	30,462	29,346	37,500	28,594	28,594
587	L'Enfant-Coast Guard	W9 W	-	-	-	-	-	0	28,310	0	0
25	Maryland Avenue	X8 W,Sa,Su	8,668	8,701	8,685	8,699	9,061	8,720	8,767	8,795	8,795
	<b>Subtotal Schools</b>	----- W	9,741	8,862	6,098	8,785	6,368	6,237	6,733	6,302	6,302
	<b>SUBTOTAL Non-Regional DC</b>		<b>422,232</b>	<b>417,155</b>	<b>415,015</b>	<b>396,675</b>	<b>394,654</b>	<b>380,811</b>	<b>381,898</b>	<b>368,793</b>	<b>368,793</b>

\* Reflects adjusted numbers

Table H.8

<b>Metrobus Regional and Non-Regional Route Summary</b>											
<b>MD REGIONAL ROUTES - PLATFORM HOURS</b>											
<b>Line #</b>	<b>Line Name</b>	<b>Routes</b>	<b>Sched Day</b>	<b>FY2009</b>	<b>FY2010</b>	<b>FY2011</b>	<b>FY2012</b>	<b>FY2013*</b>	<b>FY2014*</b>	<b>FY2015*</b>	<b>FY2016</b>
74	College Park	81,82,83,86	W,Sa,Su	47,889	48,038	48,053	47,781	49,880	48,312	48,331	49,540
542	Rhode Island Avenue-New Carrollton	84	W,Sa,Su	17,057	17,228	17,246	16,944	17,593	16,992	17,104	0
90	Martin Luther King Jr. Highway	A11,12	W,Sa,Su	33,803	33,803	33,931	33,760	35,032	33,691	35,392	35,746
13	Greenbelt-Twinbrook	C2,4	W,Sa,Su	99,603	99,603	99,753	90,553	94,211	94,462	94,726	95,178
642	Greenbelt-Glenmont	C7,9	W	8,027	0	0	0	0	0	0	0
103	College Park-White Flint	C8	W,Sa	18,886	26,241	26,327	26,269	28,253	27,091	27,087	27,184
29	Clinton	C11,13	W (Sat Hol)	4,929	5,015	5,024	5,003	5,149	5,003	5,066	5,056
63	Hillcrest Heights	C12,14	W,Sa	10,518	10,183	10,202	10,237	10,926	10,600	10,600	10,640
584	Oxon Hill-Suitland	D12,13,14	W,Sa,Su	46,602	46,953	47,037	47,022	54,802	52,846	53,462	54,458
28	Chillum Road	F1,2	W,Sa,Su	20,446	20,536	20,556	20,433	21,184	20,417	20,429	20,493
97	New Carrollton-Silver Spring	F4	W,Sa,Su	0	0	0	0	49,324	48,622	50,063	49,402
97	New Carrollton-Silver Spring	F4,6	W,Sa,Su	53,750	53,833	54,286	54,022	0	0	0	0
98	New Carrollton-Fort Totten	F6	W	0	0	0	0	16,541	17,761	17,909	18,000
73	Marlow Heights-Temple Hills	H11,12,13	W,Sa,Su	15,625	15,737	15,740	15,644	16,024	17,431	19,368	19,402
16	Bethesda-Silver Spring	J1,2,3	W,Sa,Su	57,611	57,603	57,465	61,053	62,472	60,097	60,131	60,541
629	College Park-Bethesda Limited	J4	W (Sat Hol)	10,379	10,379	10,379	10,216	11,819	11,994	12,027	12,079
85	New Hampshire Avenue-Maryland	K6	W,Sa,Su	41,611	42,147	42,158	42,089	44,639	45,561	45,173	47,007
83	New Hampshire Avenue-Limited	K9	W (Sat Hol)	0	0	0	0	3,954	8,749	10,329	13,024
47	Forestville	K11,12,13	W,Sa,Su	19,206	19,205	19,206	19,234	20,006	19,295	19,433	21,004
41	Eastover-Addison Road	P12	W,Sa,Su	46,147	46,144	46,200	46,173	47,819	50,606	50,952	46,702
88	Oxon Hill-Fort Washington	P17,18,19	W (Sat Hol)	25,569	25,164	25,169	25,029	25,864	24,947	24,942	25,249
123	Veirs Mill Road	Q1,2,4,5,6	W,Sa,Su	69,764	69,824	69,736	69,468	71,088	68,933	68,967	69,051
800	Riggs Road	R1,2	W,Sa,Su	29,135	29,434	29,461	29,163	27,325	26,591	26,652	27,134
<b>542</b>	<b>Rhode Island Ave. -New Carrollton</b>										
9	Amapolis Road	T18	W,Sa,Su	21,552	21,614	21,629	21,584	22,981	23,382	26,313	17,232
790	District Heights-Suitland	V11,12	W,Sa,Su	16,331	16,364	16,371	0	0	0	0	0
790	District Heights-Suitland	V12	W,Sa,Su	0	0	0	16,428	17,135	16,458	16,474	19,093
580	Bock Road	W13,14	W (Sat Hol)	14,581	13,664	13,821	13,575	14,302	13,939	13,982	14,352
40	Camp Springs-Indian Head Highway	W15	W (Sat Hol)	4,488	4,403	4,488	4,426	4,904	4,790	4,694	0
53	Georgia Avenue-Maryland	Y4,7,8	W,Sa,Su	59,084	59,124	59,395	59,579	63,235	63,681	70,975	71,952
147	Fairland	Z8	W,Sa,Su	36,307	36,594	36,655	36,701	37,892	36,321	36,319	36,504
<b>SUBTOTAL Regional MD</b>				<b>828,900</b>	<b>828,831</b>	<b>830,288</b>	<b>822,385</b>	<b>874,355</b>	<b>868,570</b>	<b>886,898</b>	<b>893,716</b>

\* Reflects adjusted numbers

Table H.8

Metrobus Regional and Non-Regional Route Summary												
MD NON-REGIONAL ROUTES - PLATFORM HOURS												
Line #	Line Name	Routes	Sched Days	FY2009	FY2010	FY2011	FY2012	FY2013*	FY2014*	FY2015*	FY2016	
526	Laurel Express	87	W (Sat Hol)	9,818	9,809	9,818	9,584	9,965	9,663	8,594	9,183	
525	Laurel	89,89M	W (Sat Hol)	8,229	8,228	8,236	8,015	8,377	8,143	8,990	10,218	
20	Bowie State University	B21,22	W (Sat Hol)	7,349	7,348	7,344	7,258	8,022	7,824	7,790	7,821	
19	Bowie-Belair	B24,25	W (Sat Hol)	10,613	10,574	10,583	10,366	10,797	10,398	10,331	10,506	
65	Bowie-New Carrollton	B27	W	3,473	3,472	3,468	3,418	3,517	3,418	3,340	3,473	
634	Crofton-New Carrollton	B29,31	W (Sat Hol)	3,231	3,222	3,213	3,171	3,212	3,104	3,104	3,116	
647	Greenbelt-BW1 Airport Express	B30	W,Sa,Su	17,470	17,469	17,480	17,452	18,187	17,441	17,441	17,491	
152	Central Avenue	C21,22,25,26,29	W,Sa,Su	27,130	27,162	27,175	0	0	0	0	0	
152	Central Avenue	C21,22,26,29	W,Sa,Su	0	0	0	27,022	28,590	27,845	27,839	28,062	
252	Central Avenue Extra service	C27	W,Sa,Su	0	0	0	0	382	595	299	2,038	
26	Pointier Ridge	C28	W (Sat Hol)	6,005	6,005	6,018	5,911	6,199	6,298	6,298	6,323	
96	Prince George's-Langley Park	F8	W,Sa,Su	18,019	18,019	18,030	17,951	18,702	18,045	18,070	18,028	
10	Ardwick Industrial Park Shuttle	F12	W (Sat Hol)	6,865	6,864	6,860	6,756	7,059	6,863	6,946	6,973	
149	Cheverly-Washington Business Park	F13	W (Sat Hol)	8,933	8,934	8,925	8,793	9,188	9,150	9,150	9,186	
105	Sheriff Road-Capitol Heights	F14	W,Sa	20,197	20,197	20,242	20,058	20,844	20,129	20,110	20,123	
527	Greenbelt-New Carrollton	G12,13,14,16	W,Sa	0	0	0	31,531	33,010	32,147	32,199	32,320	
67	Twinbrook-Silver Spring	J5	W (Sat Hol)	4,126	4,127	4,131	4,062	4,180	4,062	4,062	4,078	
6	I-270 Express	J7,9	W (Sat Hol)	8,364	8,364	8,288	8,145	8,586	8,421	8,421	8,455	
72	Marlboro Pk	J11,12,13	W,Sa,Su	0	0	0	12,622	13,085	12,530	12,484	12,524	
72	Marlboro Pk	J11,12,13,14,15	W,Sa,Su	12,674	12,675	12,675	0	0	0	0	0	
33	Connecticut Avenue-Maryland	L8	W (Sat Hol)	23,070	20,591	20,604	20,457	21,323	20,729	20,728	20,835	
7	National Harbor	NH1,3	W,Sa,Su	16,103	14,405	14,437	14,452	15,171	14,661	15,052	18,340	
801	Greenbelt-Prince George's Plaza	R3	W,Sa,Su	15,249	15,291	15,305	15,157	4,683	4,672	4,669	4,687	
802	Queens Chapel Road	R4	W,Sa,Su	12,023	12,183	12,259	12,207	12,649	12,208	12,208	12,359	
36	Kenilworth Avenue	R1,12	W,Sa	0	0	0	16,662	17,267	16,655	16,839	16,883	
36	Kenilworth Avenue-New Carrollton	R12	W,Sa	25,627	25,626	25,676	0	0	0	0	0	
102	River Road	T2	W (Sat Hol)	19,984	19,984	19,992	19,582	20,337	19,775	19,827	19,913	
132	Greenbelt	T16,17	W,Sa	17,319	17,336	17,364	0	0	0	0	0	
38	District Heights-Seaf Pleasant	V14,15	W,Sa,Su	16,931	16,977	16,989	17,109	17,958	17,387	17,512	17,469	
645	Indian Head Express	W19	W (Sat Hol)	10,328	12,929	12,929	12,726	11,511	10,444	10,480	10,548	
30	Colesville-Ashton	Z2	W (Sat Hol)	15,563	11,539	11,554	11,354	12,042	11,625	11,596	11,642	
146	Calverton-Westfarm	Z6	W (Sat Hol)	22,282	22,512	22,644	22,188	22,272	21,555	21,199	21,226	
104	Laurel-Burtonsville Express	Z9,29	W (Sat Hol)	10,603	10,604	10,965	10,919	11,374	10,824	10,634	10,676	
531	Greencastle-Briggs Chaney Express	Z11,13	W (Sat Hol)	12,388	12,402	12,597	12,525	13,269	12,955	12,905	12,938	
<b>SUBTOTAL Non-Regional MD</b>				<b>389,966</b>	<b>384,845</b>	<b>385,773</b>	<b>387,451</b>	<b>391,759</b>	<b>379,565</b>	<b>379,118</b>	<b>387,432</b>	

\* Reflects adjusted numbers

Table H.8

Metrobus Regional and Non-Regional Route Summary											
VA REGIONAL ROUTES - PLATFORM HOURS											
Line #	Line Name	Routes	Sched Day:	FY2009	FY2010	FY2011	FY2012	FY2013*	FY2014*	FY2015*	FY2016
137	Wilson Boulevard	1A,B,E,F,Z	W,Sa,Su	37,373	41,388	42,816	42,757	44,247	0	0	0
137	Wilson Boulevard-Vienna	1A,B,E,Z	W,Sa,Su	0	0	0	0	0	44,863	47,690	48,122
139	Fair Oaks-Dunn Loring	1C	W,Sa,Su	17,568	17,261	17,282	17,405	18,087	0	0	0
139	Fair Oaks-Fairfax Boulevard	1C	W,Sa,Su	0	0	0	0	0	19,212	21,224	21,466
126	Washington Boulevard-Dunn Loring	2A	W,Sa,Su	0	0	0	0	0	34,249	29,557	29,496
126	Washington Boulevard	2A,B,C,G	W,Sa,Su	35,488	39,648	40,519	40,724	41,810	0	0	0
128	Fair Oaks-Jermantown Road	2B	W,Sa	0	0	0	0	0	9,070	17,254	17,025
127	Tysons Corner-Dunn Loring	2T	W,Sa,Su	14,563	14,969	15,037	15,030	15,766	15,006	14,154	13,918
69	Lee Highway- Falls Church	3A	W,Sa,Su	0	0	0	0	0	31,881	31,577	32,097
69	Lee Highway	3A,B,E	W,Sa,Su	31,483	33,709	33,819	33,147	34,571	0	0	0
121	Pimmit Hills	3T	W,Sa	16,694	18,623	18,664	18,544	17,839	18,302	20,017	20,372
138	Lee Highway-Farragut Square	3Y	W	2,800	3,345	3,341	3,292	4,921	4,886	4,865	4,884
94	Pershing Drive-Arlington Blvd	4A,B	W,Sa,Su	0	0	0	0	0	27,161	26,764	26,956
94	Pershing Drive-Arlington Boulevard	4A,B,E,H	W,Sa,Su	23,140	24,746	24,797	24,247	28,533	0	0	0
70	Lincolnia-North Fairlington	7A,B,C,D,E,F,H,P,W	W,Sa,Su	42,261	42,044	42,084	0	0	0	0	0
70	Lincolnia-North Fairlington	7A,E,F,Y	W,Sa,Su	0	0	0	34,212	35,433	0	0	0
70	Lincolnia-North Fairlington	7A,F,Y	W,Sa,Su	0	0	0	0	0	34,718	35,227	35,636
76	Lincolnia-Park Center-Pentagon	7B,C,H,P,W,X	W (Sat Hol)	0	0	0	14,759	14,249	14,333	14,350	0
76	Lincolnia-Park Center-Pentagon	7C,H,P,W,X	W (Sat Hol)	0	0	0	14,759	14,249	14,333	14,350	12,897
106	Foxchase-Seminary Valley	8S,W,X,Z	W (Sat Hol)	12,885	12,601	12,623	12,588	12,948	0	0	0
106	Foxchase-Seminary Valley	8S,W,Z	W (Sat Hol)	0	0	0	0	0	12,109	10,242	9,981
31	Huntington-Pentagon	9A,E	W,Sa,Su	23,711	23,702	23,719	23,721	25,838	24,939	21,809	21,918
2	Hunting Point-Pentagon	10A,E,R,S	W,Sa,Su	22,874	22,866	22,267	23,055	26,108	25,076	27,749	27,729
156	Hunting Point-Ballston	10B	W,Sa,Su	28,887	29,046	29,368	29,363	32,317	33,893	30,175	30,266
157	Mt Vernon Express	11Y	W (Sat Hol)	4,327	6,171	6,171	6,074	6,251	6,118	6,997	7,326
39	National Airport-Pentagon-Washington	13A,B,F,G	W,Sa,Su	12,302	12,764	11,017	0	0	0	0	0
39	National Airport-Pentagon-Washington	13F,G	Sa,Su	0	0	0	804	863	806	0	0
39	Arlington Union Station	13Y	Sa,Su	0	0	0	0	0	0	776	804
27	Chain Bridge Road	15K,L	W (Sat Hol)	10,702	5,750	6,095	5,873	6,113	6,129	7,466	8,135
24	George Mason-Tysons Corner	15M	W (Sat Hol)	0	6,082	5,891	5,815	5,984	7,057	8,270	8,303
142	Columbia Pike	16A,B,D,E,F,J,P	W,Sa,Su	56,747	56,853	57,709	0	0	0	0	0
142	Columbia Pike	16A,B,D,E,J,P	W,Sa,Su	0	0	0	54,426	56,498	54,048	53,665	0
142	Columbia Pike	16A,B,E,J,P	W,Sa,Su	0	0	0	54,426	56,498	54,048	53,665	55,709
144	Columbia Pike-Federal Triangle	16F	W (Sat Hol)	0	0	0	9,651	0	0	0	0
143	Columbia Heights West-Pentagon City	16G,H,K	W,Sa,Su	35,365	33,521	33,533	34,066	35,590	34,454	34,360	34,479
521	Annandale-Skyline City-Pentagon	16L	W	1,691	1,768	1,760	1,849	1,900	1,832	2,174	4,502
144	Columbia Pike-Federal Triangle	16X	W	0	0	0	0	10,108	9,396	9,595	9,632
522	Columbia Pike-Farragut Square	16Y	W (Sat Hol)	9,231	10,481	10,634	10,421	13,270	13,914	14,014	14,070
512	Barcroft-South Fairlington	22A,B	W,Sa	14,622	15,791	15,749	19,254	19,907	19,169	19,175	0
512	Barcroft-South Fairlington	22A,B,C,F	W,Sa	14,622	15,791	15,749	19,254	19,907	19,169	19,175	31,185
54	McLean-Crystal City	23A,C	W,Sa,Su	47,745	48,702	48,784	48,635	52,005	49,799	0	0
54	McLean-Crystal City	23A,B,T,W	W,Sa,Su	0	0	0	0	0	0	46,763	46,986
120	Ballston-Pentagon	24P	W	6,724	1,906	0	0	0	0	0	0
92	Ballston-Bradlee-Pentagon	25A,C,D	W,Sa,Su	18,812	19,577	19,542	19,550	0	0	0	0
92	Ballston-Bradlee-Pentagon	25A,C,D,E	W,Sa,Su	0	0	0	0	20,604	19,866	19,993	0
3	Landmark-Ballston	25B	W,Sa	15,459	16,084	16,152	16,397	18,806	19,099	18,284	28,780
692	Annandale-East Falls Church	26A	W	0	0	0	0	0	3,808	7,685	8,379
5	Leesburg Pike	28A	W,Sa,Su	0	0	0	0	44,503	50,906	61,200	63,672
5	Leesburg Pike	28A,X	W,Sa,Su	39,007	42,010	48,514	48,255	0	0	0	0
110	Skyline City	28F,G	W (Sat Hol)	4,361	4,480	4,488	4,694	5,264	5,131	4,416	5,875
122	Tysons Corner-West Falls Church	28T	W (Sat Hol)	9,672	10,404	10,404	10,232	10,530	10,239	1,551	0
23	Leesburg Pike Limited	28X	W (Sat Hol)	0	0	0	0	14,603	15,446	14,896	14,599
8	Annandale	29C,E,G,H,X	W (Sat Hol)	20,311	20,311	20,324	19,695	21,207	21,702	24,759	0
8	Annandale	29C,G	W (Sat Hol)	20,311	20,311	20,324	19,695	21,207	21,702	24,759	13,427
4	Alexandria-Fairfax	29K,N	W,Sa	20,282	20,539	20,588	20,522	21,479	23,971	29,225	29,706
58	Braeburn Drive - Pentagon Express	29W	W	0	0	0	0	0	0	0	4,208
12	Ballston-Farragut Square	38B	W,Sa,Su	25,128	37,448	37,481	37,436	38,495	36,794	41,800	43,748
131	Richmond Highway Express	REX (R99)	W,Sa,Su	33,570	37,214	37,377	37,411	42,276	41,035	43,490	44,030
SUBTOTAL Regional VA				695,785	731,805	738,549	743,906	798,923	800,416	935,155	830,318
* Reflects adjusted numbers											

Table H.8

<b>Metrobus Regional and Non-Regional Route Summary</b>												
<b>VA NON-REGIONAL ROUTES - PLATFORM HOURS</b>												
<b>Line #</b>	<b>Line Name</b>	<b>Routes</b>	<b>Sched Days</b>	<b>FY2009</b>	<b>FY2010</b>	<b>FY2011</b>	<b>FY2012</b>	<b>FY2013*</b>	<b>FY2014*</b>	<b>FY2015*</b>	<b>FY2016</b>	
124	Vienna Oakton	2W	W	8,285	0	0	0	0	0	0	0	0
80	Mark Center-Pentagon	7M	W (Sat Hol)	0	0	0	0	1,118.7	1,046.9	923.32	927.6	0
155	Centreville South	12A,E,F,G *	W	5,332	0	0	0	0	0	0	0	0
145	Centreville North	12C,D *	W	3,590	0	0	0	0	0	0	0	0
153	Little rocky Run- Vienna	12L,M *	W	13,023	0	0	0	0	0	0	0	0
154	Stringfellow Road- Vienna	12R,S *	W	21,619	0	0	0	0	0	0	0	0
66	Kings Park	17A,B,F,M	W (Sat Hol)	4,445	15,003	14,994	14,989	14,364	13,853	13,957	14,057	0
61	Kings Park Express	17G,H,K,L	W (Sat Hol)	9,226	23,762	23,537	23,226	23,619	22,718	22,599	22,741	0
116	Springfield	18E,F	W (Sat Hol)	16,710	4,526	4,539	4,455	4,662	4,550	5,218	5,355	0
87	Orange Hunt	18G,H,J	W (Sat Hol)	5,384	11,063	11,067	10,889	11,236	10,110	9,361	9,429	0
541	Burke Centre	18P,R,S	W (Sat Hol)	9,784	18,020	17,825	17,771	18,655	17,813	17,019	17,311	0
60	Chantilly-Greenbriar	20,F,W,X	W	7,405	0	0	0	0	0	0	0	0
68	Landmark-Pentagon	21A,D	W (Sat Hol)	3,741	5,402	5,432	5,350	5,669	5,511	5,874	5,961	0
511	Pentagon-Army-Navy Drive-Shirley Park	22B	W	1,683	0	0	0	0	0	0	0	0
140	McLean Hamlet-East Falls Church	24T	W (Sat Hol)	9,529	4,097	4,106	4,033	4,349	4,064	620	0	0
148	Metroway Potomac Yard	MW-1	W (Sat Hol)	5,120	10,051	10,047	9,894	10,300	10,012	31,114	34,901	0
640	Springfield Circulator	TAGS (S80,91)	W (Sat Hol)	12,821	12,822	12,929	12,713	13,262	12,892	12,873	13,159	0
	West Park Shuttle			158	0	0	0	0	0	1,958	0	0
<b>SUBTOTAL Non-Regional VA</b>				<b>137,853</b>	<b>104,746</b>	<b>104,476</b>	<b>103,320</b>	<b>117,305</b>	<b>111,991</b>	<b>129,831</b>	<b>132,187</b>	

\* Reflects adjusted numbers

Table H.9

Metrorail Statistics: FY 2013 - FY 2016 (in thousands)				
	FY2013	FY2014	FY2015	FY2016
	<u>Actual</u>	<u>Actual</u>	<u>Approved</u>	<u>Approved</u>
<b>STATISTICS:</b>				
Total Railcar Miles	85,300	76,218	99,124	99,366
Total Revenue Service Miles	83,700	74,087	97,524	97,766
Total Passengers	208,969	204,067	222,868	216,405
Total Passenger Revenue	\$605,538	\$596,734	\$675,561	\$635,951
Total Operating Revenue	\$688,480	\$680,875	\$758,374	\$748,164
Total Operating Expense	\$886,165	\$964,348	\$1,022,639	\$1,058,513
Gross Subsidy	\$197,686	\$283,473	\$264,265	\$310,349
<b>RATIOS:</b>				
Passengers Per Revenue Service Mile	2.50	2.75	2.29	2.21
Cost Per Total Railcar Mile	\$10.39	\$12.65	\$10.32	\$10.65
Cost Per Passenger	\$4.24	\$4.73	\$4.59	\$4.89
Subsidy Per Passenger	\$0.95	\$1.39	\$1.19	\$1.43
Average Passenger Fare	\$2.90	\$2.92	\$3.03	\$2.94
Percentage of Operating Cost				
Recovered from Passenger Revenues	68.3%	61.9%	66.1%	60.1%
Percentage of Operating Cost				
Recovered from all Operating Revenues	77.7%	70.6%	74.2%	70.7%

Table H.10

Rail Car Miles				
	<u>FY2013</u>	<u>FY2014</u>	<u>FY2015</u>	<u>FY2016</u>
Red Line	27,915,168	27,921,100	27,916,500	28,011,000
Blue Line	14,626,741	12,438,200	12,848,700	13,858,400
Orange Line	15,405,908	15,742,200	14,595,100	14,368,900
Yellow Line	6,461,373	9,254,400	10,630,700	10,390,300
Green Line	12,069,838	11,991,300	12,276,900	12,132,400
Silver Line	-	7,998,000	16,698,700	16,447,300
Scheduled Revenue Service Miles	76,479,028	<b>85,345,200</b>	<b>94,966,600</b>	<b>95,208,300</b>
Verizon Arena	1,711,283	1,711,283	1,711,283	1,711,283
Gap Trains	300,000	360,000	360,000	360,000
National Baseball	486,000	486,000	486,000	486,000
Six-Car vs Four-Car off Peak*	-	-	-	-
Rush Plus	1,200,000			
50% 8-car Train Program**	<u>3,501,450</u>			
<b>Sub-Total Revenue Service Miles</b>	<b>83,677,761</b>	<b>87,902,483</b>	<b>97,523,883</b>	<b>97,765,583</b>
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
<b>Total Car Miles</b>	<b>85,277,761</b>	<b>89,502,483</b>	<b>99,123,883</b>	<b>99,365,583</b>
*Includes miles for Red Line turn back and Yellow Line extension				
**Previously named "6000 / Metro Matters Car Deployment"				

Table H.11

Table H.11

Payhours for Rail Operators and Station Managers: FY2016

FY2016 Train Operator Wages			
Category	Payhours	Average Hourly Rate	Budget
Scheduled F/T	1,086,530	\$32.92	\$35,767,267
Scheduled P/T (1)	46,800	\$33.71	1,531,778
Car Testing/Start Up	24,960	\$32.92	821,653
Interlocking Pay Hours	101,009	\$38.84	3,923,190
<b>Subtotal:</b>	<b>1,259,299</b>		<b>\$42,043,888</b>
NonScheduled Overtime/Special Event	213,550	\$50.36	\$10,754,355
Standing Extra	1,582	\$32.92	\$52,061
Utility	65,116	\$36.27	\$1,876,133
Training	76,197	\$32.92	\$2,508,314
Retraining	24,624	\$32.92	\$810,586
Misc.	7,179	\$32.92	\$236,331
Funeral/Other	1,731	\$32.92	\$56,999
Vacation	111,666	\$32.92	\$3,175,924
Sick	34,205	\$32.92	\$1,125,995
Holiday	54,812	\$32.92	\$1,448,350
<b>Subtotal:</b>	<b>590,662</b>		<b>\$22,045,048</b>
<b>Total:</b>	<b>1,849,961</b>		<b>\$64,088,936</b>

FY2016 Station Manager Wages			
Category	Payhours	Average Hourly Rate	Budget
Scheduled F/T	1,019,667	\$34.94	\$35,624,703
<b>Subtotal:</b>	<b>1,019,667</b>		<b>\$35,624,703</b>
NonScheduled Overtime/Special Event	132,036	\$50.88	\$6,717,985
Standing Extra	1,295	\$34.94	\$45,247
Utility	13,965	\$38.42	\$536,535
Training	42,047	\$34.94	\$1,469,022
Retraining	11,115	\$34.94	\$388,341
Misc.	4,856	\$34.94	\$169,658
Funeral/Other	2,266	\$34.94	\$79,164
Vacation	107,318	\$34.94	\$3,749,434
Sick	39,495	\$34.94	\$1,379,852
Holiday	43,045	\$34.94	\$1,503,882
<b>Subtotal:</b>	<b>397,438</b>		<b>\$16,039,121</b>
<b>Total:</b>	<b>1,417,105</b>		<b>\$51,663,824</b>

**GRAND TOTAL** **\$115,752,760**

(1) Maximum 30 hours work week

Table H.12

Rail Peak Period Service Levels: FY2013 - FY2016					
<u>Rail Lines</u>	<u>FY2013</u>	<u>FY2014</u>	<u>FY2015</u>	<u>FY2016</u>	
Red Line	Glenmont/Shady Grove Silver Spring/Grosvenor	Glenmont/Shady Grove Silver Spring/Grosvenor	Glenmont/Shady Grove Silver Spring/Grosvenor	Glenmont/Shady Grove Silver Spring/Grosvenor	
Blue Line	Largo/Franconia-Springfield	Largo/Franconia-Springfield	Largo/Franconia-Springfield	Largo/Franconia-Springfield	
Orange Line	New Carrollton/Vienna Largo/Vienna	New Carrollton/Vienna Largo/Vienna	New Carrollton/Vienna	New Carrollton/Vienna	
Yellow Line	Huntington/Mt. Vernon Sq. Franconia-Springfield/Greenbelt	Huntington/Mt. Vernon Sq. Franconia-Springfield/Greenbelt	Huntington/Mt. Vernon Sq. Franconia-Springfield/Greenbelt	Huntington/Mt. Vernon Sq. 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	
<u>RUSH HOURS TRAIL</u>	<u>FY2013</u>	<u>FY2014</u>	<u>FY2015</u>	<u>FY2016</u>	
Red Line	41	41	41	41	
Blue Line	16	16	12	12	
Orange Line	33	33	22	22	
Yellow Line	17	17	21	21	
Green Line	20	20	18	18	
Silver Line			26	26	
Gap	5	5	3	3	
Start-up	1	1			
<b>TOTAL</b>	<b>133</b>	<b>133</b>	<b>143</b>	<b>143</b>	



Table H.13

Rail Service Levels: FY2012 - FY2016						
		FY2012	FY2013	FY2014	FY2015	FY2016
<u>RUSH HOUR HEADWAYS (MINUTES BETWEEN TRAINS) BY LINE</u>						
Red Line	Glenmont-Shady Grove	6	6	6	6	6
	Silver Spring-Grosvenor	6	6	6	6	6
Orange Line *	Vienna - New Carrollton	6	6	6	6	6
	Vienna - Largo		18	18		
Blue Line	Largo/Franconia-Springfield	6	6/12	6/12	12	12
Yellow Line	Huntington - Mt. Vernon Sq.	6	6	6	6	6
	Greenbelt - Franconia Springfield		18	18	12	12
Green Line *	Greenbelt/Branch Ave.	6	6	6	6	6
Silver Line	Weihle-Reston East/Largo				6	6
<i>*During times of observed peaking in ridership, additional trains ("trippers") are operated to reduce crowding.</i>						
<u>NON-RUSH HOUR HEADWAYS BY LINE (MIDDAY-WEEKDAY/SAT/SUN/LATE NIGHT)</u>						
Red Line:	Glenmont-Shady Grove	12/12/15/15	12/12/15/15	12/12/15/15	12/12/15/15	12/12/15/15
	Silver Spring-Shady Grove	12/12/15	12/12/15	12/12/15	12/12/15	12/12/15
Orange Line	New Carrollton/Vienna	12/12/15/20	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	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	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	12/12/15/20
Silver Line	Weihle-Reston East/Largo				12/12/15/20	12/12/15/20
<u>AVERAGE COMBINED HEADWAYS FOR KEY SEGMENTS FOR FY2016</u>						
		Rush Hour	Mid-day			Late Night
			Weekdays	Saturday	Sunday	
Red	Silver Spring to Grosvenor	3	6	6	7.5	15
Orange/Blue/Silver	Rosslyn to Stadium Armory	2-4	4	4	5	7
Yellow/Green	L'Enfant Plaza to Mount Vernon	2-4	6	6	7.5	10
Yellow/Blue	King Street to Pentagon	2-4	6	6	7.5	10

Table H.14

## Rail Service Levels: FY2012 - FY2016

	FY2012	FY2013	FY2014	FY2015	FY2016
<b><u>PEAK SCHEDULED RAILCARS</u></b>					
Red Line	288	288	288	288	288
Blue Line	138	96	96	84	84
Orange Line	204	222	222	154	154
Yellow Line	60	102	102	126	126
Green Line	140	140	140	128	128
Silver Line				156	156
50% 8-Car Train Program*	52	34	34	-	-
Option Cars	-	-	-	-	-
Gap	30	30	30	18	18
<b>Total Scheduled Car</b>	<b>912</b>	<b>912</b>	<b>912</b>	<b>954</b>	<b>954</b>
Spares (20%)	182	182	182	146	146
Revenue Collection	4	4	4	4	4
<b>Total Car Requirement</b>	<b>1,098</b>	<b>1,098</b>	<b>1,098</b>	<b>1,104</b>	<b>1,104</b>
<b><u>HOURS OF OPERATION</u></b>					
Weekday (Mon-Thur)	19	19	19	19	19
Friday	22	22	22	22	22
Saturday	20	20	20	20	20
Sunday	17	17	17	17	17
<b><u>DAYS OF OPERATION</u></b>					
Weekday	251	251	252	251	252
Saturday	58	58	56	57	57
Sunday	57	56	57	57	57

*\*Note: previously "6000 series"*

Table H.15

Rail Service Levels: FY2012 - FY2016					
	FY2012	FY2013	FY2014	FY2015	FY2016
<b><u>CARS PER TRAIN RUSH HOUR</u></b>					
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	20-6's/21-8's
Blue Line	23-6's	16-6's	16-6's	6-6's/6-8's	6-6's/6-8's
Orange Line	18-6's/12-8's	21-6's/12-8's	21-6's/12-8's	11-6's/11-8's	11-6's/11-8's
Yellow Line	10-6's	17-6's	17-6's	21-6's	21-6's
Green Line	10-6's/10-8's	10-6's/10-8's	10-6's/10-8's	8-6's/10-8's	8-6's/10-8's
Silver Line				26-6's	26-6's
Gap	5's-6's	5's-6's	5's-6's	3's-6's	3's-6's
<b><u>CARS PER TRAIN WEEKDAY BASE/NIGHT (AFTER 8 P.M.)</u></b>					
Red Line	6/6	6/6	6/6	6/6	6/6
Blue Line	6/6	6/6	6/6	6/6	6/6
Orange Line	6/6	6/6	6/6	6/6	6/6
Yellow Line	6/6	6/6	6/6	6/6	6/6
Green Line	6/6	6/6	6/6	6/6	6/6
Silver Line				6/6	6/6

Table H.16

Railcar Fleet Profile				
Manufacturer	Series	Number Owned	Years Purchased	Number for Service*
Rohr Industries	1000	300	1974-1978	154
Breda Construzioni Ferroviarie	2000/3000	76/290	1983-1988	358
	4000	100	1992-1994	100
Construcciones y Auxiliar de Ferrocarriles, S.A.	5000	192	2001-2004	184
Alstom	6000	184	2006-2008	178
Kawasaki	7000	184	2014	184
<b>Total</b>		<b>1,206</b>		<b>1,158</b>
*There are 4 6K vehicles dedicated for revenue collection, 20 vehicles accident damaged and 16 vehicles in disposition pending status				
*The full complement of 184 7000 series cars will not be reached until the end of the fiscal year.				

Table H.17

Rail Car Fleet Storage Capacity			
<b>Location</b>	<b>Existing Storage Capacity</b>	<b>Current Fleet Need</b>	<b>Net Storage Capacity</b>
Alexandria	176	132	44
Branch Ave	166	98	68
Brentwood	86	86	0
Glenmont	132	132	0
Greenbelt	284	188	96
Largo	42	42	0
New Carrollton	114	114	0
Shady Grove	168	184	-16
West Falls Church	148	182	-34
<b>Total</b>	<b>1,316</b>	<b>1,158</b>	<b>158</b>

Table H.18

**WMATA PARK AND RIDE  
BASE AND SURCHARGE FEES  
As of July 1, 2015**

Station / Region	Capacity (parking spaces)	Parking Fee To Customer	Base Revenue To WMATA	Revenue To Reserve Fund
<b><u>MONTGOMERY COUNTY</u></b>				
Grosvenor	1,894	\$5.10	\$3.60	\$1.50
White Flint	1,270	\$5.10	\$3.60	\$1.50
<i>White Flint-Non-Metro</i>		<b>\$8.60</b>	<b>\$7.10</b>	<b>\$1.50</b>
Twinbrook	1,097	\$5.10	\$3.60	\$1.50
<i>Twinbrook-Non-Metro</i>		<b>\$8.60</b>	<b>\$7.10</b>	<b>\$1.50</b>
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
<b><u>PRINCE GEORGE'S COUNTY</u></b>				
New Carrollton	3,519	\$5.10	\$3.85	\$1.25
<i>New Carrollton-Non Metro</i>		<b>\$8.85</b>	<b>\$7.60</b>	<b>\$1.25</b>
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
<b><u>DISTRICT OF COLUMBIA</u></b>				
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	
<b><u>NORTHERN VIRGINIA</u></b>				
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	\$1.25
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
<b>System Total</b>	<b>59,421</b>			

*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. The information that follows reflects the most current data from the Federal Transit Administration Approved Plan. The most current plan can be found on the Metro website at: [http://www.wmata.com/pdfs/planning/MACS%202008%20FLEET%20PLAN%20\(4%2029%202009l\)final.pdf](http://www.wmata.com/pdfs/planning/MACS%202008%20FLEET%20PLAN%20(4%2029%202009l)final.pdf).

Table H.19

<b>MetroAccess Statistics: FY2012 - FY2016</b>					
	<b><u>FY2012</u></b> <b><u>Actual</u></b>	<b><u>FY2013</u></b> <b><u>Actual</u></b>	<b><u>FY2014</u></b> <b><u>Actual</u></b>	<b><u>FY2015</u></b> <b><u>Approved</u></b>	<b><u>FY2016</u></b> <b><u>Approved</u></b>
<b>STATISTICS:</b>					
Total # of MetroAccess - Dedicated Fleet:	600	600	600	650	675
<b>Total Passengers</b>	2,082,882	2,033,390	2,126,318	2,123,000	2,335,000
Total Passenger Revenue (000s)	\$7,824	\$8,280	\$7,720	\$8,041	\$8,500
Total Revenue (000s)	\$8,419	\$8,356	\$7,720	\$8,041	\$8,500
Total Operating Expense (000s)	\$104,224	\$114,727	\$114,111	\$113,292	\$120,822
<b>RATIOS:</b>					
Cost Per Passenger	\$50.04	\$56.42	\$53.67	\$53.36	\$51.74
Subsidy Per Passenger*	\$46.28	\$52.35	\$50.04	\$49.58	\$48.10
Percentage of Operating Cost Recovered from Passenger Revenues	7.5%	7.2%	6.8%	7.1%	7.0%
* 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 complementary and Personal Care Attendants (PCAs) ride free in accordance with the ADA, so the calculation will apply to all ridership.					

Table H.20

<b>MetroAccess Statistics: FY2012 - FY2016</b>					
	<b>FY2012</b>	<b>FY2013</b>	<b>FY2014</b>	<b>FY2015</b>	<b>FY2016</b>
	<b><u>Actual</u></b>	<b><u>Actual</u></b>	<b><u>Actual</u></b>	<b><u>Approved</u></b>	<b><u>Projected</u></b>
Total # of Vans in Fleet	582	582	582	634	659
Total # of Low Floor Vans in Fleet	16	16	16	16	16
Total # of Shuttles in Fleet	2	2	2	0	0
	600	600	600	650	675
*Fleet mix (Vans/Low Floor Vans) for FY15 & FY16 is a projection.					

Table H.21

<b>Active Proposed Fleet: FY2015-FY2016</b>			
	<b>Max Scheduled Fleet</b>	<b>Total Active Fleet</b>	<b>Vans/Low Floor Van/Shuttles</b>
FY2012 Year-End (6/30/2012)	600	600	582 / 16 / 2
FY2013 Year-End (6/30/2013)	600	600	582 / 16 / 2
FY2014 Year-End (6/30/2014)	600	600	582 / 16 / 2
FY2015 Year-End (6/30/2015)	650	650	634 / 16 / 0
FY2016 Year-End (Projection)	675	675	659 / 16 / 0

Table H.22

<b>MetroAccess Statistics: FY2012 - FY2016</b>			
Average age of fleet at end of FY2016 will be approximately 2.5 Years			
<b><u>Manufacturer</u></b>	<b><u>Fiscal Year Entered Service</u></b>	<b><u>Number of Vans</u></b>	<b><u>Vehicle Type</u></b>
FORD	2016	150	Vans
FORD	2015	185	Vans
FORD	2014	80	Vans
FORD	2013	116	Vans
MV1/VPG	2013	2	Low Floor Vans
FORD	2012	128	Vans
MV1/VPG	2012	14	Low Floor Vans
<b>Total Fleet Vehicles at End of FY2016</b>		<b>675</b>	





## Appendix I Glossary of Terms

AAC ( <i>Accessibility Advisory Committee</i> )	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 ( <i>Americans with Disabilities Act</i> )	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 500 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 ( <i>Arlington Transit</i> )	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 <i>Also see "Slinky" bus</i>	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 ( <i>Assistant General Manager</i> )	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.

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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 ( <i>Comprehensive Annual Financial Report</i> )	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 Plan	The six-year plan of capital projects to be completed by Metro.

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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 ( <i>Compressed Natural Gas</i> )	A natural gas fuel used in a clean engine technology.
COLA ( <i>Cost of Living Adjustment</i> )	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 ( <i>Deputy General Manager</i> )	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.

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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 to ride Metrorail. A pass is gate- activated the first time it is used and prints the last valid date on the pass. Farecards contain a set value. Trip values are subtracted from the farecard upon exiting the station gate.
Flash Pass	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 ( <i>Federal Transit Administration</i> )	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 ( <i>Generally Accepted Accounting Principles</i> )	Accounting standards, revised periodically, to which both private and public organizations within the United States are expected to conform.
GM/CEO ( <i>General Manager/Chief Executive Officer</i> )	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 ( <i>Frequency</i> )	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.

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JCC ( <i>Jurisdictional Coordinating Committee</i> )	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 <i>Also see Passenger lift</i>	Refers to a feature on all 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 ( <i>Key Performance Indicator</i> )	KPIs are Key Performance Indicators that measure long term progress in the strategic areas of safety, security, service reliability and customer satisfaction.
Layover Time <i>Also known as Spot time</i>	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.

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MARC ( <i>Maryland Area Regional Commuter</i> )	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 500 vans and sedans. The vans are equipped with passenger lifts and wheelchair tie-downs.
Metrobus	The operating unit of Metro that offers bus service on 332 routes on 180 lines throughout the Metro region. Buses currently running are made by Orion, New Flyer, Neoplan and NABI.
Metrorail	The operating unit of Metro that offers a subway system that consists of 106.3 route miles (subway, aerial and surface) and 86 passenger stations and a fleet of over 1,100 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 ( <i>Maryland Transit Administration</i> )	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.

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NTSB ( <i>National Transportation Safety Board</i> )	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 ( <i>Operations Control Center</i> )	The operations center that facilitates monitoring and communications for Metrorail operations.
Office	An organizational unit 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 <i>Also see Kneeling bus</i>	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 Services	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 ( <i>Passenger Information Display System</i> )	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.

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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 <i>Also known as Revenue Service</i>	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 <i>Also see Linked/Unlinked trip</i>	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 ( <i>Also known as a cycle</i> )	Refers to one inbound, plus one outbound trip (unless a loop route), equals one round trip or cycle.
"Slinky" Bus <i>Also see Articulated bus</i>	Refers to a nickname used by many passengers for the articulated bus.

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SmartStudent Pass	A monthly pass for unlimited travel on Metrobus and Metrorail for students under 19 years of age who live and attend school in the District of Columbia.
SmartTrip®	Refers to a technology built and designed by Cubic Transportation Systems, Inc., a subsidiary of San Diego-based Cubic Corporation to add and deduct value from an electronically encoded card when a rider passes the card near a programmed reader on Metrobuses 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 weekday bus service to Metrorail Stations.
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.
Transit Advertising	Refers to ads posted on the exterior and interior of buses and rail cars.
Tripper	Refers to trains or buses from a line or route used to re-route to serve another line or route.
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 ( <i>Transportation Safety Institute</i> )	A Federal Transit Administration-sponsored institute that conducts a full range of training programs in rail and bus safety and accident investigation.

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VRE ( <i>Virginia Railway Express</i> )	The commuter rail service that connects the Northern Virginia suburbs to Union Station in Washington, D. C., via two lines: the Fredericksburg Line from Fredericksburg, Virginia, and the Manassas Line from Broad Run/Airport station in Bristow, Virginia.
WMATA ( <i>Washington Metropolitan Area Transit Authority</i> )	Refers to the acronym used for Washington Metropolitan Area Transit Authority serving the Washington Metropolitan area which consists of Washington, D.C., suburban Maryland (Montgomery County and Prince Georges County) and Northern Virginia counties of Arlington and Fairfax and the cities of Alexandria, Fairfax and Falls Church. Also known as Metro.



## Appendix J Glossary of Acronyms and Abbreviations

### A

A&E	architecture and engineering
AA	alternatives analysis
AAI-CAF	(Spanish acronym) manufacturer of the 5000 Series rail cars
AC	air conditioning or alternating current
ACI	automatic car transponder identification system
ADA	Americans with Disabilities Act
AFC	automatic fare collection
AGT	automated guide-way transit
AIM	advanced information management
AIT	Arts in Transit
AP	Accounts Payable
APS	auxiliary power supply
APTA	American Public Transportation Association
ARS	adopted regional system
AST	above-ground storage tank
ATC	automatic train control
ATO	automated train operation
ATD	advanced technology diesel
ATS	automatic transfer switch
AVL	automatic vehicle locator
AVR	automatic voltage regulator
AWP	Annual Work Plan

### B

BAFO	best and final offer
BAH	Booz, Allen & Hamilton, Inc.
BDA	bi-directional amplifiers
BEAC	budget estimate at completion
BMM	Beyond Metro Matters Program
BOCC	bus operations control center
BRT	bus rapid transit

### C

CAD	computer-aided dispatch
CADD	computer-aided design and drafting
CAFE	computer authorization for expenditure workflow system
CAFR	Comprehensive Annual Financial Report
CAP	Certified Apprenticeship Program
CCP	communications control panel
CCTV	closed-circuit television
CD	calendar days
CDR	conceptual design review

CFA	Capital Funding Agreement (FY2011-2016)
CIP	Capital Improvement Program
CIWS	customer information web services
CM	construction manager
CMAA	Construction Management Association of America
CMAQ	Congestion Mitigation and Air Quality
CMC	construction management consultant
CMU	concrete masonry unit
CNG	compressed natural gas
COG	(Metropolitan Washington) Council of Governments
COLA	cost of living adjustment
COTS	commercial off the shelf
CPOS	compact point of sale
CRCS	Comprehensive Radio Communications System
CSP	Construction Safety Program
CTB	(Virginia) Commonwealth Transportation Board
CTC	Capital Transit Consultants
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
DMJM	Daniel, Mann, Johnson & Mendenhall
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

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EV	earned value
<b>F</b>	
FAI	first article inspection
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 employee
FTA	Federal Transit Administration
FUA	first unit accepted
<b>G</b>	
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
<b>H</b>	
HCM	human capital management
HEDS	hybrid enterprise document management system
HEOP	Heavy Equipment Overhaul Program
HVAC	heating, ventilation, and air conditioning
<b>I</b>	
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
ISTEA	Intermodal Surface Transportation Efficiency Act of 1991
ITS	intelligent transportation systems

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**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
LGS	Lane, Granite and Skanska Joint Venture
LNTP	limited notice to proceed
LPA	locally preferred alternative
LRT	light rail transit
LRV	light rail vehicle
LUA	last unit accepted

**M**

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 Airport Authority
MWCOG	Metropolitan Washington Council of Governments

**N**

NCPC	National Capital Planning Commission
NEPA	National Environmental Policy Act
NSP	New Start Project
NTSB	National Transportation Safety Board
NTD	National Transit Database
NTE	not to exceed



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	NTI	National Transit Institute
	NTP	notice to proceed
<b>O</b>		
	O&M	operating and maintenance (such as O&M costs)
	OCC	Operations Control Center
	ODC	other direct costs
	ODP	(U.S.) Office of Domestic Preparedness
	OFS	order for services
	OTP	on-time performance
	OWS	oil water system
<b>P</b>		
	PB(QD)	Parsons, Brinckerhoff, Quade & Douglas, Inc.
	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
	P2D	Parsons Transportation Group, Inc.; Parsons, Brinckerhoff, Quade & Douglas, Inc.; and Delon Hampton & Associates
<b>Q</b>		
	QA	quality assurance
	QC	quality control
<b>R</b>		
	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

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**S**

S&I	storage/service and inspection
SAFETEA-LU	Safe, Accountable, Flexible, Efficient Transportation Equity Act – A Legacy for Users
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 (fare collection equipment)
SMS	Safety Measurement System
SOC	station operator's console
SOS	scope of service
SOW	scope of work
SRO	station over-run
SSOA	state safety oversight agency
SSPP	System Safety Program Plan
SSPS	system safety program standards
SSWP	Site Specific Work Plan

**T**

TBS	tie breaker station
TC	train control
TCR	train control room
TEA-21	Transportation Equity Act for the 21 <sup>st</sup> Century
TIFIA	Transportation Infrastructure Finance & Innovation Act
TIIF	Transportation Infrastructure Investment Fund
TIP	Transportation Improvement Program
TOC	Tristate Oversight Committee
TOD	transit oriented development
TPSG	traction power switch gear
TPSS	traction power substation
TSI	Transportation Safety Institute
TSP	transit signal priority
TUN	temporary user notice

**U**

UPS	uninterrupted power supply
UST	under-ground storage tank

**V**

VE	value engineering
VMS	Vehicle Management/Monitoring System
VRE	Virginia Railway Express

**W**

WBS	work breakdown structure
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](mailto: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