



**Testimony of
Richard Sarles, General Manager
Washington Metropolitan Area Transit Authority**

**Before the
U.S. Senate Appropriations Committee
Subcommittee on Transportation,
Housing and Urban Development, and Related Agencies**

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Testimony of Richard Sarles, General Manager
Washington Metropolitan Area Transit Authority
before the Subcommittee on Transportation, Housing and Urban Development,
and Related Agencies of the U.S. Senate Committee on Appropriations
May 19, 2010

Madam Chairman, Ranking Member Bond, and members of the Committee, thank you for the opportunity to testify before you today. I am Richard Sarles, General Manager of the Washington Metropolitan Area Transit Authority, known as WMATA or Metro.

I began my service as Metro's General Manager over one month ago. My career in rail and public transportation has spanned 40 years, during which time I worked with the Port Authority of New York and New Jersey, Amtrak, and most recently, New Jersey Transit. I have used the Metro system many times, and have always been impressed by Metro's services and how well they are delivered. But Metro is no longer new. We have requested an appropriation of \$150 million in federal fiscal year 2011 to help us address some of the challenges associated with our aging system. As you consider that request, I want to let you know what Metro is doing to move forward on improving our system's safety, reliability, and financial stability.

Safety

As the Subcommittee is aware, this region experienced an unprecedented tragedy on June 22 of last year, when two Metrorail trains collided on the Red Line north of the Fort Totten station. Nine people lost their lives and dozens of others were injured in an accident that has had ripple effects throughout the transit industry. The National Transportation Safety Board's (NTSB) investigation of the accident has focused on technological issues, not human error, as the key factor leading to the collision, and as a result, transit and rail providers across the country have been re-examining their track signaling systems for signs of the same potential failure that caused the June 22 accident.

The NTSB's final report on the accident has not yet been issued, but Metro has already taken steps to improve safety on the rail system. We have been operating trains in manual mode since the accident, and we will continue to do so until the NTSB report is issued and any necessary modifications are completed. We have increased the frequency of computerized testing of track circuits, and we are holding the performance of those circuits to a higher standard than previously required. In addition, as recommended by the NTSB, we are working with a contractor to develop a real-time monitoring system which will provide an alert should a track circuit fail.

In addition to the June 22 accident, Metro has experienced a number of other incidents over the past year that require us to re-assess the way that we go about

ensuring the safety of our customers and employees. Our internal assessments and findings regarding safety have been supplemented by external agencies' reports, such as the March 2010 audit of Metro's safety program by the Federal Transit Administration, requested by Senator Mikulski. These external reports have been and will be critically important in helping Metro identify where we need to improve with regard to safety. We have learned even from those incidents which were not hazardous in nature, such as the May 5th emergency braking near the Wheaton station. Although there were no hazardous conditions present, we have taken action to improve reporting of such incidents to our operations control center and our oversight agencies.

The following section describes a number of other actions that we have taken in recent months to address both internal and external findings in the areas of staffing, communications, track worker protection, and rail operations.

Staffing

The FTA audit and other assessments have identified lack of sufficient safety staff and expertise as an issue at Metro. To address that issue, Metro has hired a new Chief Safety Officer, James Dougherty, who began his duties on April 19. Mr. Dougherty brings 25 years of experience in transit safety, occupational safety and health, industrial hygiene and environmental protection, and he will report directly to me. In addition, we have filled six of 12 new positions in the safety department, and we expect to fill the remaining vacancies within 60 days. These new positions will help us to effectively investigate incidents/accidents, review and document safety policies and procedures, ensure safety protocols are in place and implemented, and analyze safety trends. We have also arranged for needed training for our safety personnel with the Transportation Safety Institute, an arm of the U.S. Department of Transportation, with seven courses scheduled through September.

Communications

Lack of communications across and within departments has also been cited in various reports as a problem at Metro. We have recently begun several new communications initiatives. For example, to improve communication between the Safety Department and operational personnel, we now have safety officers assigned to each bus and rail division. These safety officers participate in regular meetings of the front-line staff in their division, as well as interacting on a daily basis with operations employees on safety-related matters.

In addition, my predecessor held six "Safety Action Report Out" meetings with 60 front-line superintendants to increase their awareness and accountability regarding safety. I intend to continue those meetings on a regular basis. We have also established a cross-departmental Safety Action Team tasked with finding ways to create a safer organization. The Team's first initiative is designed to further improve

communications with front-line employees to ensure that safety-related information, as well as other messages, reaches all employees regardless of their work location.

Track Worker Protection

Employees who work on and around our track areas are exposed to dangerous situations each day they come to work. Protection of these workers must be robust and effective. Metro is committed to improving our current practices and has established a cross-departmental Roadway Worker Protection Work Group which includes representatives from several Metro departments, union representatives, and representatives from FTA and TOC. This group has drafted a new roadway worker protection manual which has been submitted to the TOC for review. The group is also in the process of developing a new roadway worker training plan, and will also test and evaluate new technologies and processes for use in the Metro system; these activities are expected to be complete by the Fall of 2010.

Metro's track environment shares certain characteristics with other transit and rail systems, and we have reached out to our peers to learn from them and share best practices. Metro conducted a workshop in January with peer transit agencies, FTA, TOC, and union representatives, and convened a roundtable discussion in April with the Federal Railroad Administration and inter-city rail operators. The results of these discussions are reflected in the new draft manual and will be included in the training regimen being developed by the Roadway Worker Protection Work Group.

Rail Operations

In addition to the operational changes implemented in response to the June 22 accident, discussed above, Metro is continuing to respond to earlier NTSB recommendations. We expect to award a contract in the near future to begin building the cars to replace our oldest vehicles, the 1000 series cars, as the NTSB has recommended. In addition, we are continuing to add rollback protection for rail cars operating in manual mode, another NTSB recommendation. About half of our fleet currently has such protection, and we are working to install it on the remaining cars with completion anticipated by the end of calendar year 2012.

Six-month Action Plan – Safety

While we have made progress with regard to safety, we still have work to do. We have established the following safety-related priorities:

- **Fill remaining safety department vacancies and increase training.** Specifically, we must continue to have front-line safety briefings while we develop more effective right-of-way training and identify other needed training for front-line staff. In addition, we have begun labor relations training for

supervisors of represented employees, re-emphasizing the supervisors' role in safety; we intend to complete that training by the end of 2010.

- **Continue accelerated close-out of open safety-related audit findings.** With the approval of the TOC, Metro develops corrective action plans (CAPs) in response to findings from both external and internal audits and investigations. Metro has closed 190 CAPs since 2007, with the rate of closure increasing significantly in recent months. Currently 85 CAPs remain open (including CAPs that were recently added in response to the TOC's Roadway Worker Protection study and internal safety audits). I have communicated to Metro staff that continuing to close CAPs promptly is a top priority. I am particularly focused on responding to the recommendations in the FTA audit; we submitted a CAP for that audit to FTA on April 29. (Please see attachment #1 for details.)
- **Develop incident tracking and safety management reporting system.** We are taking advantage of improvements in technology to develop a web-based tool to allow for communication of safety-related information and tracking across departments. Development is expected to be complete by the end of August 2010.
- **Encourage near-miss reporting, including anonymous hotline and strengthened whistleblower protection.** David Gunn's report cited Metro for having a "shoot-the-messenger" culture. I am taking steps to end that perception. I have informed all employees of the existence of a safety hotline and safety email address through which they can report safety concerns, anonymously if desired. In addition, we are updating Metro's whistleblower protection policy to encourage employees to raise safety-related concerns.
- **Complete new right-of-way worker protection manual and revisions to Metrorail Safety Rules and Procedures Handbook (MSRPH).** When rules are outdated or unclear, they tend to be ignored. By Fall 2010 we intend to complete work on a new set of rules for right-of-way workers as well as an updated MSRPH, with rules and procedures that are clear, up-to-date, and effective.
- **Complete self-assessment of safety-related internal controls and initiate thorough assessment of safety culture.** We intend to complete further self-assessments in safety-related areas, the first of which is focused on internal controls. In addition, we have contacted the U.S. Department of Transportation, the AFL-CIO, and the American Public Transportation Association to seek their assistance in assembling a team of experts not only to review Metro's safety culture, but also to recommend specific measures to improve that culture and to provide assistance in implementing those recommendations. We intend to initiate this review by Fall 2010, while recognizing that organizational culture change is a long-term process.

Service Reliability

According to the *Washington Post*, "most riders give the [Metro] system high marks for comfort, reliability and generally the ability to take them where they want to go." ("In Survey, Metro Still Gets High Marks after a Year of Low Points," April 5, 2010). Still, we know that we need to do better. The quality of our customers' experience is the key to the continued success of our system. We are taking steps to improve the on-time performance of all of our modes -- Metrorail, Metrobus, and MetroAccess -- as well as the availability of our elevators and escalators which have a very direct impact on the quality of our customers' trips.

For Metrorail, we have evaluated ways of improving service reliability through schedule adjustments and are preparing to implement the first adjustment on the Red Line. We have also implemented revised 30-, 60-, and 90-day training performance reviews for newly certified train operators to ensure that they are meeting our standards for safe operations and customer service and to provide us with an on-going source of review regarding the effectiveness of our training programs.

For Metrobus, we are in the process of replacing 148 older buses, with deliveries between March and September 2010. With newer vehicles we expect fewer equipment failures, leading to improved service delivery. We have also reorganized our bus transportation division, retrained operators and supervisors, and increased supervision of street operations to better monitor and address service reliability issues. We have implemented NextBus, which provides customers with real-time bus arrival information by phone or online, and have created a new online service disruption notification for bus customers. For MetroAccess drivers, we have developed a new training program and installed Drive-Cam in MetroAccess vehicles to record incidents for investigation and training purposes.

With regard to elevators and escalators, we are consolidating our command and maintenance centers to eliminate reporting layers and improve accountability, a process which we expect to have fully implemented by the end of June 2010. Also by June, we intend to have restructured our technicians' shifts to create rapid response teams with responsibility for maintenance and repair in defined geographic areas.

Six-month Action Plan – Service Reliability

I have established the following priorities regarding service reliability:

- **Increase training for front-line employees and supervisors.** Specifically, we intend to provide additional training to all station managers with a renewed emphasis on customer service, as well as complete training that we have already begun related to the reorganization of our bus department, designed to improve management of operators, reduce accidents, and improve service.

- **Create transparent performance tracking & reporting systems.** New performance measurement tools are currently under development, including web-based dashboards, a monthly vital signs report of key performance indicators, and an annual performance report to assess what is working well, what is not, and why. By the end of June 2010 we expect to release many of these new tools publicly to foster increased accountability and transparency.
- **Revise inspection and maintenance procedures to accommodate changes in operations.** As in the area of safety, our rules and procedures for inspections and maintenance need to be clear and relevant for our current operating environment. With changes in place related to manual operation and restricted speeds, our new vertical transportation command center, etc., we must start revising our related procedures accordingly.
- **Pilot Metrorail schedule adjustment on Red Line.** As I mentioned earlier, we intend to adjust schedules on the Red Line to improve service reliability and the quality of the customers' experience. The new schedules will reflect reality and allow for more time for customers to board and alight the trains at our busiest stations, and will involve more 8-car trains running to the ends of the line, which will maintain our passenger throughput capacity for the Red Line as a whole.
- **Initiate external assessment of elevator/escalator maintenance and repair programs.** We intend to contract with outside experts to conduct a review of these programs in order to assess their efficiency and effectiveness and make recommendations for additional improvements.
- **Continually re-emphasize safety and state of good repair as top priorities.** Maintenance of vehicles, track, structures, signals, and other infrastructure in a state of good repair has a direct impact on the safety and reliability of the Metro system, as it does for every transit agency in the country. If the condition of the Metro system is allowed to degenerate further, issues related to service reliability will continue to increase. The most effective action we can take to improve reliability is to improve the physical condition of our system.

Financial Stability

Now let me turn to a topic which is integrally related to our ability to improve service reliability – Metro's budget and current funding constraints. Metro's proposed fiscal year 2011 budget totals \$2.1 billion. That total is composed of Metro's operating budget, which supports the daily delivery of transit service (including personnel costs, fuel and propulsion costs, etc.), and the capital budget, which funds investments in the vehicles, equipment, facilities, and infrastructure of the transit system. Sources of funding for those needs include state and local funds; federal funds (primarily for capital costs); passenger fares and parking revenues, and other sources (such as advertising and fiber optic revenue). Passenger fares cover about half of the cost of

Metro's operations; broken out by mode, they cover more than 70% of Metrorail operations, about 30% of Metrobus operations, and 5% of MetroAccess operations.

OPERATING BUDGET

Fiscal year 2011 is likely the most difficult year, financially speaking, that Metro has ever had to face. The economic slowdown is having a continued impact on Metro, as it is across the country. For the transit industry as a whole, the economic slowdown has meant that ridership and revenue are down, while costs continue to go up.

Despite the encouraging ridership numbers that Metro has experienced in the last few weeks, Metrorail ridership for fiscal year 2011 is projected to be just 2% above the FY 2009 levels, and on Metrobus, ridership growth over 2009 levels is only projected to be 1.5%. These projections are primarily due to continued high unemployment in the region combined with reduced spending by consumers. Lower Metrorail ridership has resulted in less revenue coming in from Metro parking facilities as well. Major cost drivers in the FY2011 operating budget include the rise in health care cost (which is in line with national trends), market losses in pension values, the increasing demand for MetroAccess service, and liability insurance and claims associated with the June 22 accident.

The imbalance between projected revenues and expenses created a \$189 million gap in our fiscal year 2011 operating budget, if jurisdictional subsidies (which cover about half of our operating costs) were held constant at FY2010 levels. In order to close that gap, I have proposed a budget that includes further layoffs, fare increases, some service reductions, and an increase in jurisdictional subsidies. Metro's Board is currently considering that proposed budget. Without knowing what they will decide, it is fair to say that balancing Metro's FY2011 budget will require hard choices. When we raise fares or reduce service, we have a direct impact on the people we serve every day, on their ability to get to jobs, school, medical services, and recreational opportunities. The economic downturn has affected everyone in this nation, and unfortunately Metro is not immune.

CAPITAL PROGRAM

Over the last six years, Metro has funded its capital program through a multi-year agreement with our jurisdictional partners, known as Metro Matters, which expires June 30, 2010. The stable funding stream provided by Metro Matters allowed us to, among other things, purchase 667 new Metrobuses to reduce the age of our fleet from over 10 years to under 8 years; and purchase 122 Metrorail cars, expand rail yard maintenance and storage facilities, and upgrade power systems to run 8-car trains.

Board Chairman Peter Benjamin's testimony addresses our capital needs, and I simply want to reiterate his point that the funding Metro has requested from this Subcommittee in federal fiscal year 2011 is urgently needed to allow us to maintain the

Metro system in a state of good repair. (Please see attached spending plan.) However, due in part to national economic conditions and in part to declining revenues in the federal Highway Trust Fund, both federal and state/local sources of funding for capital projects are severely constrained. Even with the new federal funding authorization and the associated state/local match, these constraints have required Metro to limit our capital investment for the next six years to only the most critical, "must-do" safety and system maintenance projects. "Must-do" projects include, for example, replacement of the 1000 series rail cars; replacement of our oldest buses; rehabilitation of the oldest segment of our rail line, and replacement and/or rehabilitation of decades-old bus facilities. "Must do" projects do not include other investments that should be made, such as investments to address crowding (more frequent bus service; more 8-car trains); more elevators/escalators in core stations; and system and fleet expansion to accommodate projected growth in demand over the next several decades.

Six-month Action Plan – Budget

By Fall 2010, we intend to accomplish the following objectives related to Metro's budget:

- **Implement Board-approved FY2011 budget.** As I have discussed, the budget will include job cuts and likely some combination of fare increases and service reductions in order to fill the \$189M projected gap. Successful implementation of such changes will require timely and effective customer communication as well as operational changes such as reprogramming of farecard readers.
- **Manage transition from Metro Matters capital funding agreement to next capital funding agreement, currently being negotiated.** I want to note that the National Transportation Safety Board is expected to issue its final report on the June 22, 2009 Red Line collision shortly before or during fiscal year 2011, and that report may contain recommendations that will have a cost associated with their implementation. Metro is committed to responding to those recommendations and that response may affect our ability to undertake some of the projects that have been planned for the next six years, absent additional funding.
- **Initiate a discussion with regional and federal stakeholders on Metro's long-term fiscal outlook to identify both challenges and solutions.** The basic challenge is this: the Metro system must be brought into a state of good repair. Unless there is a renewed commitment to this goal, the system will continue to degrade.

Conclusion

Madam Chairman, in the Fall of this year, I intend to deliver to Metro's Board of Directors an interim performance assessment, along with recommendations for further improvement, in each of the areas I addressed above: safety, service reliability, and budget. But you do not have to wait until then to track our progress. Metro is developing products that will allow the public to see how we are doing on a more frequent basis. We expect to launch shortly a monthly "Vital Signs" report, which will initially track operational performance and identify trends, with the goal of expanding the range of performance metrics to other areas in the future. We also plan to issue an annual performance report, beginning this September. Metro is committed to improving transparency and communication with our customers and other stakeholders, including Congress.

Thank you for the opportunity to testify today. I greatly appreciate your leadership on these issues, and I hope that you will favorably consider our FY2011 appropriations request. I would be happy to respond to any questions.

Attachment #1

WMATA Response to Recommendations in the March 4, 2010 Federal Transit Administration Safety Audit

Recommendation	Actions Taken	Next Steps	Completion Date
#1 Conduct assessment to identify resources and expertise necessary for Safety Dept. to carry out activities specified in System Safety Program Plan and Safety Rules and Procedures Manual	Developed statement of work for contractor support	Initiate and award contract, with Board approval. received April 22, 2010	Final Report, including identified needs and recommendations by end of August 2010
#2 Use results of assessment to ensure adequate staffing levels and expertise within Safety Department	Included in statement of work under #1	Initiate and award contract, with Board approval received April 22, 2010	Issuance of Safety Dept. staffing & recruitment plan by end of August 2010
#3 Increase Safety Dept.'s access to operating & maintenance information and reports to ensure this information is being analyzed for potential impacts on safety	Established Interdepartmental Safety Working Group, now receiving monthly reports on operations/maintenance	Review process for information-sharing and quality of information shared	Formalize process by end of August 2010
#4 Develop internal process to require communication of safety-related info. across depts., including impacts of budget reductions & resource constraints on performance of safety-related maintenance activities/requirements	Initiated development of web-based tool	Develop process for identifying and evaluating maintenance-related safety issues	Complete development by end of August 2010
#5 Define and implement the process for the top Safety Department position to communicate safety priorities to the GM in a timely and consistent manner	Chief Safety Officer (CSO) now reports directly to General Manager	Continue weekly CSO meetings and reports to GM; revise System Safety Program	Completed by end of April 2010
#6 Identify technical skills required to perform system-wide hazard analysis; if needed, provide training as soon as practicable	Included in statement of work under #1	Plan to reflect relationship Initiate and award contract, with Board approval	Contractor to issue needs assessment & training plan by end of August 2010
#7 Update the System Safety Program Plan to develop a hazard management process that ensures all departments participate in an on-going manner	Interdepartmental Safety Working Group has met to design a new process	Confirm design of new process with contractor support	Completed by end of September 2010
#8 Institute process to ensure changes in operating rules are analyzed for safety impacts before system-wide implementation	Outreach to peer transit agencies for model forms and processes has begun	Continue outreach to peer agencies and consultation with union; revise rule book	Metrorail Safety Rules and Procedures Handbook revisions completed by end of September 2010
#9 Finalize right-of-way protection rules; develop training to implement new rules. Ensure all ROW employees & contractors receive training before accessing ROW.	Roadway Worker Protection Working Group established; new manual has been drafted; workshop and roundtable held	Finalize new manual; finalize new training program	Roll out of new training program in October 2010
#10 Implement configuration management program described in System Safety Program Plan	Included in statement of work under #1	Initiate and award contract, with Board approval received April 22, 2010	Create action plan & training program by end of September 2010

Attachment #1 (cont'd.)

WMATA Response to FTA Findings of the TOC that relate to WMATA in the March 4, 2010 FTA Safety Audit

Recommendation	Actions Taken	Next Steps	Completion Date
<p><u>Finding #1</u> Require WMATA to complete a timely, thorough, and competent review and update of WMATA's Safety Rules and Procedures Manual.</p>	<p>The update of both the SSPP and WMATA's Safety Rules and Procedures Manual will be included as part of the contractor SOW for the Safety Assessment and Hazard Management Program.</p>	<p>Seek permission to initiate and award contract with WMATA Board approval Board Approval received April 22, 2010</p>	<p>MSRPH revisions to be completed by the end of September 2010.</p>
<p><u>Finding #2:</u> Require WMATA to develop (and TOC to review and approve) an internal WMATA safety audit recovery plan for calendar year 2010 and calendar year 2011.</p>	<p>The Safety Assessment and Action Plan will ensure that we have personnel skilled in auditing in the Safety Department. We also will receive contractor support in reviewing and updating our existing checklists and procedures.</p>	<p>Seek permission to initiate and award contract with WMATA Board approval Board Approval received April 22, 2010</p>	<p>Completed by the end of August 2010</p>
<p><u>Finding #3</u> Require WMATA to develop a recovery plan to complete all open accident investigations following procedures established in TOC's Program Standard, WMATA's System Safety Program Plan and WMATA's Accident Investigation Procedures.</p>	<p>We are working closely with TOC to address this finding and have made considerable progress.</p>	<p>In the May 4, 2010 submission, both TOC and WMATA will report that a recovery plan of closing at least ten open accidents investigations per month is accomplished.</p>	<p>The goal is to completed 90% by the end of September 2010</p>
<p><u>Finding #4:</u> Work with WMATA to ensure that there is a process in place for evaluating Corrective Action Plan (CAP) alternatives that may be necessary as a result of capital and operating program resource limitations.</p>	<p>The contractor SOW for the hazard management work will also address this issue.</p>	<p>Seek permission to initiate and award contract with WMATA Board approval Board Approval received April 22, 2010</p>	<p>Completed by the end of August 2010</p>
<p><u>Finding #5:</u> Require WMATA to develop and implement a comprehensive and system-wide hazard management program (as specified in 49 CFR Part 659.31).</p>	<p>Interdepartmental Safety Working Group to design new process has taken place and with contractor support and will:</p> <ul style="list-style-type: none"> • Integrate into web-based tool • Integrate into Internal Safety Audit process and Quality Assurance (QA) process • Integrate into day-to-day activities 	<p>Seek permission to initiate and award contract with WMATA Board approval Board Approval received April 22, 2010</p>	<p>Create action plan & training program by end of September 2010</p>

Washington Metropolitan Transit Authority (WMATA) Proposed PRIIA (Dedicated Funds) Plan

as of May 17, 2010

dollars in millions

Budget

CIP	Project Name	Project Description	Budget	
			FFY 2010	FFY 2011
RAIL CAR FLEET REPLACEMENT AND REHABILITATION			\$108.9	\$53.0
CIP057	1000 Series Rail Car Replacement	This project will design and purchase 300 7000 Series rail cars, which will replace all 1000 Series rail cars that were purchased between 1974 and 1978. This project is one component of a long-term fleet plan to avoid repetitive developmental cost associated with new car design and procurement. The replacement of the 1000 Series with the 7000 Series will improve reliability, reduce maintenance and operating costs and incorporate technology and enhancements of newly designed rail cars.	\$79.3	\$20.5
CIP063	Rail Rehabilitation Program	This project will procure major repairable rail car components to support the overhaul of essential systems in the fleet. To maintain a state of good performance, major railcar components must be refurbished or replaced on a regular basis. These components include but are not limited to wheels, trucks, brake systems, HVAC, and traction motors. Approximately 225 rail cars, or 20 percent of the fleet, will receive major overhauls funded through this project.	\$12.4	\$12.5
CIP067	Rail Car Safety & Reliability Enhancements	This project will perform 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. The project work will resolve compatibility issues across the multiple series of railcars and infrastructure related to changes in technology and components. Examples of specific issues to be resolved are emergency exterior door releases, wrong side door openings, and car roll back.	\$12.1	\$2.5
CIP071	Test Track & Commission Facility	This project will procure, design and construct a test track and commissioning facility that will be utilized for ongoing engineering analysis and enhancements to the fleet, as well as acceptance testing of new railcar procurements and will be in constant use. A dedicated facility will allow testing to be done and not impact night-time maintenance activities.	\$5.2	\$17.5
TRACK SAFETY IMPROVEMENTS			\$60.2	\$51.5
CIP018	Track Welding Program	This project will provide for the welding of approximately 500 open running rail joints throughout the Metrorail system and to purchase flash butt welding kits. The track welding program will improve the electrical conductivity of the rail, eliminate joint defects, reduce noise and wear, reduce maintenance and inspection costs, and eliminate cross tie fires.	\$1.5	\$2.7
CIP019	Track Floating Slab Rehabilitation	This project will prevent services delays and speed restrictions due to differential settlement of the track structure and reduces noise and vibration to the surrounding building and structures by replacing failed isolation pads and restoring the track structure to the proper elevation.	\$1.7	\$1.3
CIP020	Replacement of Rail Track Signage	This project will procure and install 3,000 markers and 500 safety signs to replace old, illegible rail track graphic signs and various other signs indicating locations and warnings to employees, emergency responders, and the general public. Track graphics are essential for safe operations and emergency responses. Many signs throughout the Metrorail System are approximately 30 years old. Some of these signs require upgrading because they are damaged, deteriorated, or obsolete.	\$1.0	\$1.1

Washington Metropolitan Transit Authority (WMATA) Proposed PRIIA (Dedicated Funds) Plan

as of May 17, 2010

dollars in millions

CIP	Project Name	Project Description	Budget	
			FFY 2010	FFY 2011
CIP021	Track Pad/Shock Absorber Rehabilitation	This project will maintain the integrity of the track structure by rehabilitating 7,000 linear feet of grout pads on Rhode Island and Minnesota Avenue Metrorail Station Aerials. Grout/plinth pads (concrete pads) located below the track provide elevation and support for the track and track fasteners. They are replaced as needed to restore the track structure to the proper elevation. Improper elevation can result in damage to the car's third rail collector shoes and the vibrations can potentially lead to structural cracking in the surrounding buildings and structures.	\$4.3	\$2.1
CIP022	Track Structural Rehabilitation	This project will be utilized for the rehabilitation of structural components and to restore the track structures, such as elevated platforms, bridges, and retaining walls to their designed load carrying capacity. These rehabilitations are critical, as the loss of one of these structures could result in the functional loss of an entire Metrorail line segment. The rehabilitation work includes the anchor bolts of sixty-five (65) bridge piers on Minnesota Avenue Aerial and additional anchor bolts at Grosvenor and I-495. One (1) down and under crane for underbridge inspections and rehabilitation will be procured.	\$2.3	\$1.5
CIP023	Third Rail Rehabilitation	This project will replace the original third rail (5 miles annually) with the composite third rail. Original third rails have become worn throughout the Metrorail system. New aluminum and steel composite third rails will provide less resistance for eight car trains and allow trains to run more efficiently. This project will result in maintained tracks and fewer train delays.	\$0.0	\$5.5
CIP024	Track Rehabilitation	This project will be utilized for the procurement of material and specialized equipment to facilitate the removal and installation of the track and switch panels, which prevents service delays and speed restrictions. Track components (which include running rail, cross ties, direct fixation fasteners, third rail insulators, and turnouts) require replacement when, based on industry standards, they become worn or unserviceable due to deterioration, excessive wear, or defects. No. 8 turnouts will be upgraded from unguarded to guarded turnouts based on National Transportation Safety Board recommendations.	\$44.4	\$33.3
CIP027	Switch Machine Rehabilitation Project	This provide will improve the safety and reliability of the interlocking track structure by replacing 20 switch machines throughout the Metrorail Systems. Switch machines have a normal life expectancy of ten years; all the switches to be replaced have been in service over ten years.	\$0.9	\$1.0
CIP133	Wayside Work Equipment	This project is for the installation of a safety signaling system at rail portals and other locations to alert personnel to approaching trains. This project will provide for enhanced safety for customers and WMATA personnel.	\$4.1	\$3.1
TRACK EQUIPMENT			\$21.5	\$27.0
CIP025	Track Maintenance Equipment	This project is for the rehabilitation and replacement of heavy-duty track equipment. Track maintenance equipment is essential to deliver quality service and for the safe and efficient execution of the track rehabilitation work. Timely rehabilitation and replacement of four self-propelled prime movers will ensure equipment reliability, reduce the probability of delays due to equipment breakdowns, and allow for efficient use of the right-of-way track time.	\$17.3	\$20.7

Washington Metropolitan Transit Authority (WMATA) Proposed PRIIA (Dedicated Funds) Plan

as of May 17, 2010

dollars in millions

CIP	Project Name	Project Description	Budget	
			FFY 2010	FFY 2011
CIP066	Rail Shop Repair Equipment	This project funds the replacement of rail shop equipment that has reached the end of its useful life. Purchases will include approximately 125 pieces maintenance equipment, 48 pieces shop test equipment, and 15 pieces shop machine equipment. Some examples of equipment to be purchased are overhead cranes, rail train lifts, hoists, industrial shop air compressors, service elevators, hoisting mechanisms, wheel truing machines, and electrical controls.	\$2.2	\$4.2
CIP089	Track Fasteners	This project is for the replacement of track fasteners. Deteriorated track fasteners cause stray current and have been found to cause fires in the system. Track fasteners are an integral structural component of the track system that needs to be replaced periodically. Approximately 15,000 track fasteners will be replaced on the Red Line with these funds.	\$2.1	\$2.1
MAJOR RAIL LINE SEGMENT OVERHAUL			\$34.5	\$85.4
CIP110	Rail Rehabilitation Tier 1: National Airport to Stadium Armory	This project encompasses engineering and design to begin rail line segment rehabilitation of the Orange/Blue/Yellow Lines from National Airport to New Carrollton which includes 23 Stations with a route mileage of approximately 18.7 miles. Stations scheduled for rehabilitation were completed and put into service between 1977 and 1978. Work to be initiated includes but is not limited to traction power, automatic train control and communication upgrades, track fastener replacement, tunnel ventilation, air conditioners, replacing suspended ceiling tiles, canopy roof replacements, platform rehabilitation lighting, public address, and CCTV system upgrades.	\$34.5	\$60.6
CIP116	Rail Yard Facility Repairs Tier 1: Alexandria, Brentwood and New Carrollton	This project is a rail yard rehabilitation of Alexandria, Brentwood and New Carrollton Rail Yards that were put into service between 1976 and 1983. The contract will include items from the Inventory Database and other items identified by rail operations and maintenance, security and environmental to enhance operations and maintenance activities and provide a better work environment. Work will include all systems and infrastructure to increase overall efficiency.	\$0.0	\$24.8
RAIL PREVENTIVE MAINTENANCE			\$40.9	\$20.8
CIP125	Rail Preventive Maintenance	This project is for preventive maintenance and related purchases for rail cars. Activities will include regularly scheduled maintenance of railcar components and systems at scheduled duty-cycle intervals. Purchases will include brake parts, truck parts, propulsion parts and other parts necessary for maintaining functionality of rail car features.	\$40.9	\$20.8
TRACK SIGNAL IMPROVEMENTS			\$1.2	\$11.3
CIP135	Train Control Signal	This project funds the initial engineering support for analysis of the train control signaling system in an effort to improve the system.	\$1.0	\$10.3
CIP136	FCC Radio Frequency Communication Changes	This project will meet the new FCC "narrow banding" requirement that affects the agency's UHF radio system. Planned activities include specification development, engineering, prototype testing, and project management. The primary impact is to the infrastructure equipment (as opposed to the subscriber equipment - handheld and mobile radios).	\$0.2	\$1.0
NTSB RECOMMENDATIONS			\$10.3	\$10.3

Washington Metropolitan Transit Authority (WMATA) Proposed PRIIA (Dedicated Funds) Plan
as of May 17, 2010
dollars in millions

CIP	Project Name	Project Description	Budget	
			FFY 2010	FFY 2011
CIP139	NTSB Recommendations	This is project will allow Metro to implement any forthcoming NTSB recommendations as a result of the ongoing accident investigation.	\$10.3	\$10.3
BUS FLEET REPLACEMENT AND REHABILITATION			\$0.0	\$0.0
CIP006	Bus Replacement	This project will purchase 100 buses a year to maintain an average fleet age of 7.5 years based on the 2009 fleet size of approximately 1,500 buses that range in size from 26 to 62 feet, and are a mix of conventional and articulated buses.	\$0.0	\$0.0
MAINTENANCE OF BUS GARAGES			\$18.9	\$25.7
CIP119	Bus Garage Facility Repairs Tier 1: Western, Northern and Landover	This project is a bus facility rehabilitation of Western, Northern and Landover bus garages and other auxiliary facilities, includes Metro Supply facility, Landover Open Storage and Blair Road Support Shop. The facilities in this project were originally put in service between 1906 and 1989. Work will include all systems and infrastructure to increase overall efficiency.	\$18.9	\$25.7
BUS SAFETY IMPROVEMENTS			\$3.7	\$15.1
CIP007	Bus Camera Installation	This project is based on completing installation on remaining buses, which will ensure that all buses will be equipped with camera systems to reduce detrimental impact of fraudulent claims, reduce or eliminate vandalism, deter crime, assist in criminal prosecutions, and help employees assist customer concerns and complaints.	\$0.0	\$3.0
CIP002	Automatic Vehicle Location Equipment Replacement	This project will begin the replacement of Advanced Vehicle Location (AVL) equipment on buses that was installed on buses prior to 2002. The equipment, which allows monitoring of bus locations, has a life span of 7-10 year. If Metro does not replace obsolete AVL equipment, Metro will not be able to monitor the location of buses with the old equipment.	\$3.7	\$12.1
PRIIA Funds			\$300.0	\$300.0