



**“EXAMINING THE FEDERAL ROLE IN OVERSEEING
THE SAFETY OF PUBLIC TRANSPORTATION
SYSTEMS”**

**Testimony of
John B. Catoe, Jr.
General Manager, WMATA**

**Before the
Subcommittee on Housing, Transportation,
and Community Development
of the
Senate Committee on Banking, Housing,
and Urban Affairs**

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Washington Metropolitan Area Transit Authority
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Mr. Chairman, Ranking Member Vitter, and members of the Subcommittee, thank you for the opportunity to testify before you today. I am John Catoe, General Manager of the Washington Metropolitan Area Transit Authority, known as WMATA, or Metro. I last testified before this Subcommittee a few months ago on August 4, 2009. At that hearing, I discussed Metro's capital needs over the next ten years and made several recommendations about ways that the federal government could help rail transit systems meet their infrastructure needs. In that testimony, I stressed that the ability of transit agencies to maintain aging infrastructure in a state of good repair has a direct impact on the safety and reliability of transit service. Today I will focus on the oversight of rail transit safety and Metro's experience with the Federal Transit Administration's (FTA) State Safety Oversight program.

Background on Metro

Let me begin by providing some background on Metro. The agency was created in 1967 through an Interstate Compact agreed to by the Commonwealth of Virginia, the State of Maryland, and the District of Columbia, and approved by the Congress. Metro is the largest public transit provider in the Washington, D.C. metropolitan area and the second largest subway, sixth largest bus system, and the eighth largest paratransit system nationally. Sometimes known as "America's Transit System," Metro serves a

population of over 3.5 million within a 1,500 square-mile area, as well as visitors to our nation's capital from across the country and around the world. Not only is the Metro system critical to the economic vitality of this region, it was created to serve the federal government and continues to do so. For example, nearly half of all Metrorail stations are located at federal facilities, and federal employees comprise about 40 percent of Metrorail's rush hour riders.

During Metro's most recent fiscal year (July 1, 2008 - June 30, 2009), we provided on average 748,000 rail trips, 446,000 bus trips, and 7,000 paratransit trips every weekday. The Metrorail system operates a fleet of 1100 rail cars on a 106-mile system with 86 stations, and the Metrobus system operates a fleet of more than 1500 buses serving more than 12,000 bus stops along 340 routes in the District of Columbia, Maryland and Virginia. But perhaps our greatest asset is our human capital. Every day, our employees – operators, mechanics, technicians, inspectors – come to work committed to providing safe and reliable service to thousands of customers.

A Changing Industry

In many ways, moving people on transit today is much the same as it was thirty years ago. The focus of the station manager, vehicle operator, mechanic, or track inspector is the same. We support safe mobility in our communities today just as we did decades ago, by providing cost-effective transportation to jobs, healthcare, education, government services, shopping and entertainment.

Yet there have been changes over the last decade that make this period unique in the history of the public transportation industry. Today, people are using transit more

than at any time since the Eisenhower Administration. Here in the Washington area, ridership on the Metrorail system has grown by 15 million annual passenger trips over the last three years--a 7% increase. Ridership on our other modes is growing as well: Metrobus has grown by 2 million annual passenger trips (a 2% increase), and MetroAccess ridership is up by 43% since FY 2007. While we are currently seeing a decline in ridership growth as a result of the economic downturn, which we hope will be short-term, our growth rate in recent years has put us well above original expectations for the capacity of the system. The Metrorail system was designed in the late 1960s and early 1970s to carry 500,000 daily passengers. Today, we routinely provide nearly 750,000 rail trips each day.

At the same time, transit infrastructure across the country is aging, and existing capital resources have not kept pace with needs. As highlighted in the FTA's Rail Modernization Study earlier this year, there is a significant and growing backlog of investment needs among our nation's major rail transit systems. These needs include repairing leaking tunnels and crumbling platforms, upgrading tracks and associated infrastructure, fixing escalators, replacing buses and rail cars at the end of their lifecycle, and updating critical software.

The combination of increasing transit demand, aging infrastructure, and inadequate funding will combine to form a "perfect storm" that will undermine transit's success if we do not take steps to address them now. Both service and safety would suffer if our nation's transit systems do not receive the resources needed to maintain a state of good repair. This Subcommittee's examination of these issues could not be more timely.

Safety Oversight at Metro

As the members of this Subcommittee are aware, on June 22 of this year, a collision of two Metrorail trains resulted in the loss of nine lives, including the operator of the striking train, and more than 70 injuries. This was the worst accident in Metro's 30-year history, and we are cooperating fully with the National Transportation Safety Board (NTSB), the lead agency in the accident investigation. While it may be months before the NTSB issues a final report, we are not waiting for the final report before taking action to improve safety for our riders and employees. We have already taken a number of steps to ensure that the system is as safe as possible, including operating trains manually, increasing the frequency of our track circuit monitoring, and requesting an independent peer review of our entire track signaling system by a team of train signaling experts. We have also started testing the software that would alert us to circuit problems on a real-time basis, per the NTSB's interim recommendation to all transit agencies in September.

These efforts complement the wide range of initiatives, programs, and audits that Metro uses each day to enhance our system's safety. For example, we have increased the number and frequency of work-site inspections, including safety checks at all track maintenance work sites on all shifts. We have adopted stricter hiring standards and more stringent disciplinary actions for safety violations such as cell phone use while operating a Metro vehicle. We are working to provide refresher training to our front-line employees, and the Metro Transit Police Department has trained over 2,400 operations employees in emergency response, to provide better coordination between responding agencies to major service disruptions. Most recently, we began a pilot program of

placing warning signals on station platforms to alert train operators of maintenance work at upcoming stations. We also conduct regular inspections and preventive maintenance on all systems and components of the Metro system - including tracks, vehicles, aerial structures (bridges), and stations – to ensure that they are as safe as possible.

Our internal efforts to ensure the safety of the Metrorail system have been overseen since 1997 by the Tri-State Oversight Committee (TOC), which carries out FTA's State Safety Oversight program in our region. The TOC is composed of two members from each of Metro's Compact jurisdictions: the District of Columbia, State of Maryland, and Commonwealth of Virginia. The TOC is a partner in our efforts to maintain the highest levels of safety, and we have a strong, cooperative working relationship with the TOC.

Metro interacts with the TOC in a variety of ways. In addition to monthly meetings, which also include FTA staff, Metro and TOC staff members meet every two weeks for detailed discussions on current issues. The TOC has reviewed and approved our System Security Plan (SSP) and System Safety Program Plan (SSPP), which outlines the policy, goals, elements, processes, and controls for maintaining system safety. Metro notifies the TOC of incidents that meet certain thresholds in terms of property damage or injury. In addition, Metro provides the TOC with a variety of information and reports regarding, for example, accident investigations, hazard management, emergency management, rules compliance, training and certification, and internal safety reviews, audits and inspections. Metro also works with the TOC to develop corrective action plans to improve safety at the agency. The TOC oversees Metro's annual review of our SSP and SSPP, and reviews and approves our internal

safety and security audits. The TOC also completes extensive triennial reviews of our safety programs, with the next review scheduled for later this month.

TOC is aware of our limited resources, and we work together to manage a set of corrective action plans that address many long-term issues, such as the need to replace more than a quarter of our Metrorail fleet, for upgrades to our electrical and software systems, and for additional employee training. Many of these issues require funding that we simply do not have. The FTA is also kept abreast of these funding challenges through its regular meetings with TOC and Metro, as well as the TOC and FTA triennial reviews.

Strengthening Transit Safety Oversight

Let me turn now to the specific focus of this hearing - how to maintain the highest level of rail transit safety. While today's witnesses represent a variety of different perspectives, I believe that we all share the same basic goal: effective oversight that results in a safe environment for transit riders and employees. In order to meet that goal, I believe that the federal government should take a more active role than it does today, to ensure consistency and quality of oversight across the country.

As you examine the current safety oversight program and consider ideas for its improvement, I would like to share what I believe would be the key characteristics of effective safety oversight for heavy rail transit based on my first-hand experience:

1) Full-time, Trained and Experienced Staff

Safety oversight is not something that takes place only in periodic meetings or reviews. Effective oversight requires continuous monitoring and interaction with the transit agency. In order to carry out its function, the oversight agency must have a thorough knowledge of the systems, technology, infrastructure, and procedures at the transit agency. The effectiveness of an oversight agency is dependent on the quality of its staff. Funding must be made available to the oversight agency to attract and retain qualified, full-time staff. In a 2006 report on the State Safety Oversight program, the Government Accountability Office identified the lack of sufficient staffing, and sufficiently qualified staff, as key weaknesses in the current oversight program.

Let me also point out that it is equally important for the transit agency itself to have sufficient resources for its internal safety programs, including staffing and training. I cannot stress this enough. In this time of unprecedented budgetary challenges, transit agencies will have to make hard choices about how to use scarce dollars. Additional federal investment in the “human capital” of transit agencies could significantly benefit our efforts to improve transit safety.

2) A “System Safety” Focus

The current State Safety Oversight rule covers diverse forms of fixed guideway transit. Heavy rail systems (i.e., subways) such as Metrorail are unique in several ways from other rail transportation and even from other fixed guideway transit. They do not share tracks with other revenue vehicles (as commuter trains do with freight trains); they do not operate over grade-crossings (such as some light rail systems); and they do not

operate on city streets (as do some light rail and trolley systems). Heavy rail subway systems are self-contained and operate using technology and equipment that is customized for each system, due to differences of geography, geology, climate, population/ridership, and age of the system. Therefore, the focus of heavy rail safety oversight must continue to be on “system safety,” as it is in current System Safety Program Plans. Heavy rail transit vehicles operate in a closed, more controlled environment than vehicles which operate in “mixed traffic.” Safety is designed not only into the rail cars, but also into the other elements of the system, such as train control, power supply, communications, track access procedures, and intrusion protection. Therefore, I recommend that any standards or regulations relating to heavy rail transit be developed or adopted not as isolated elements, but as part of a system safety approach which considers how all of the components of a heavy rail system work together to ensure safe operation.

3) Involvement of Industry Experts

I commend Secretary of Transportation LaHood for convening a meeting of stakeholders in August to discuss rail transit safety and for including transit industry leaders in that meeting. I also applaud the FTA for taking the initiative to establish the new Transit Rail Advisory Committee for Safety (TRACS), which I hope will be a vehicle through which FTA will take advantage of the wealth of real-world knowledge and expertise in the U.S. transit industry.

In addition, I would urge Congress and the Administration to consider the national standards that already exist, and were developed by expert professionals with

years of transit experience. Many of these standards have been or are being developed by the American Public Transportation Association (APTA) and cover a breadth of system safety elements such as operating practices, train operator hours of service, inspection and maintenance of vehicles, signals and communications, and fixed structures (such as yards, shops, stations, tracks, and electrical substations). APTA also collaborated with the American Society of Mechanical Engineers to develop a heavy rail crashworthiness standard--using the application of crash energy management--that is used by transit agencies around the country.

Transit professionals know best the technical requirements and operating conditions of heavy rail transit. Their knowledge has already made, and will continue to make, significant contributions toward increasing the safety of transit systems.

4) Meaningful Enforcement Authority

Effective regulation requires the ability to ensure compliance when the situation warrants. However, it is important to keep in mind that unlike other transportation providers like freight railroads and airlines, transit agencies are not profit-making entities. Any fines or withholding of funds would have to come not from profits, but from our limited pool of public funding, which, if depleted further, could actually have the unintended consequence of reducing system safety.

I encourage the Congress and the Administration to consider alternative means of ensuring compliance. The federal government regulates or oversees numerous other industries and activities besides transportation, and I expect that a thorough review of compliance and enforcement mechanisms used by the various federal agencies would

yield some ideas that could be effective in the transit context without adversely impacting system safety.

5) Cost/Benefit Analysis for Safety Recommendations and Requirements

As I noted earlier, one of the major challenges we face in implementing corrective actions identified by the TOC, or safety recommendations from other agencies, is lack of sufficient funding. Transit agencies' choices are constrained by available resources. One way to address this challenge is for the oversight entity to use cost/benefit analysis to help develop workable solutions that can realistically be implemented by the transit agency.

The FTA's Rail Modernization Study found that more than one-third of transit agencies' assets are either in marginal or poor condition. At Metro, we have identified more than \$11 billion in capital needs over the next ten years, the majority of which is needed to maintain the current bus, rail and paratransit systems in a state of good repair and to deliver safe and reliable service. Perhaps the most important idea I want to convey to you today is that rail transit safety is not limited to those issues that you read about in news reports. While it is easy to say that scarce transit funds should be spent first on safety, it is important to understand that almost every element of a rail transit system has a potential impact on system safety. If transit agencies have to "rob Peter to pay Paul" and defer maintenance or other needed capital investments to address safety recommendations or requirements, there is the potential to create new safety issues.

Conclusion

I appreciate the Subcommittee's interest in the safety of public transportation. We at Metro take our responsibility for providing safe and reliable transportation very seriously, and we would welcome additional oversight to help us achieve that goal. In particular, I strongly urge the Congress to make sure that additional oversight comes with the funding to make sure that it is effective. In addition, I urge you to provide a higher level of investment in rail infrastructure to ensure that transit agencies across the country can maintain our systems to a level that allows us to provide the safest and most reliable service. Thank you for the opportunity to testify today, and I look forward to answering any questions you may have.