

**STATEMENT OF
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BEFORE THE
SUBCOMMITTEE ON HOUSING, TRANSPORTATION AND COMMUNITY
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UNITED STATES SENATE
HEARING ON
RAIL MODERNIZATION: GETTING TRANSIT FUNDING BACK ON TRACK
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Chairman Menendez, Ranking Member Vitter, and Members of the Subcommittee, thank you for the opportunity to appear before you today to discuss the state of good repair of the nation's public transportation systems. In the interest of both the safety and the reliability of our public transportation systems, it is imperative that we aggressively address and stay on top of their aging condition. Deferred maintenance items, if deferred long enough or left undetected, can become critical safety risks. The issues of the conditions of our transit infrastructure and the safety of our transit systems are inextricably linked. The Federal Transit Administration's (FTA) role in the safety oversight of these systems is extremely limited as a matter of Federal law. We are statutorily prohibited from establishing national safety standards for a large segment of the nation's rail transit system. Still, FTA continues to regularly assess the condition of transit infrastructure and disseminate and encourage best practices by the industry.

Safety

Safety is the Department's highest priority. And, as we address safety issues as part of this hearing, it must be remembered that traveling by rail transit in the United States remains an extraordinarily safe way to travel—far safer than traveling on our highways. That makes it particularly important that our transit systems maintain their infrastructure to a standard where

they can provide riders with service that is both reliable and comfortable. Conditions that prompt commuters to abandon transit and get back into their cars adversely impact highway safety performance. And, defective equipment, late trains, broken escalators, and malfunctioning air conditioners do just that.

While transit remains the safest mode of surface transportation in the United States, the National Transportation Safety Board (NTSB) has been called in to investigate several transit-related accidents in the recent past. The NTSB investigated the July 2006 Chicago Transit Authority (CTA) Blue Line derailment that resulted in 152 injuries. They concluded that “[t]he tie plates and fastener systems failed to maintain the track gauge because of the effects of corrosion, wear and tear, and degraded ties.” Their report stated, “[the accident is a] wake up call....to all transit agencies....with equipment and infrastructure that ages with each passing day.” This lag screw served as one of thousands holding CTA rail to ties in the area of the Blue Line derailment. As you can see, it is corroded and deformed from its original design. It was so ineffective that it could be removed by hand. The NTSB report noted that most of these ties and fasteners date back to the installation of the original Blue line that opened for revenue service on February 25, 1951. It should not be a surprise to anyone that a 58-year-old track structure is prone to failure.

The NTSB statements appear prophetic today. While its investigation of the June 22, 2009, Washington Metropolitan Area Transit Authority (WMATA) subway train collision is not complete, NTSB preliminarily reports that the condition of equipment and age of the rolling stock may have resulted in the tragic loss life and injuries. Such tragedies are unacceptable. A little over a year earlier, on June 9, 2008, there was a derailment on WMATA’s Orange Line

outside the Court House station. The accident investigation and WMATA's subsequent public announcements indicated that an undetected track defect had contributed to the derailment. WMATA responded by initiating the purchase of a track geometry car which should be on the property by this September to better assess and evaluate track defects to find and correct problems before a derailment occurs.

We all must focus our attention and resources on this important issue of maintaining the significant public investment in transit systems, if we are to maintain public confidence. Moreover, while transit remains a safe mode of travel, data indicates that a number of accident categories have trended up in recent years.

Equipment failures at transit stations can also cause safety problems and erode customer confidence. A little over two months ago, New York's Metropolitan Transportation Authority, (MTA) released a list of 23 of its worst-functioning elevators and escalators. MTA operates 158 passenger elevators and 169 escalators in five boroughs. According to the report, three escalators have not operated in over a year, another two escalators worked less than 37 percent of the time, and yet another escalator operates only 67 percent of the time. The report also showed that about 31 MTA elevators and escalators dropped from working more than 90 percent of the time in 2008 to working only 80 percent of the time or less. And, in July 2008, a "subway report card" issued by the Straphangers Campaign said that the New York City Transit subway system experienced mechanical failures every 156,624 miles in 2006 and every 149,646 miles in 2007.

On July 19, 2006, the Boston Herald reported that Massachusetts Bay Transportation Authority (MBTA) received 99 complaints within 2 days about air-conditioning breakdowns. MBTA acknowledge that “roughly 14 percent of the fleet—47 cars—had air-conditioning problems” the day before.

Safety is not just about the condition and aging of equipment. The human factor is a critical element. On July 28, 2008, two MBTA trains collided, killing one of the operators and injuring three crewmembers. Of the 185 to 200 passengers on the two trains, four sustained minor injuries and one was seriously injured. In its July 23, 2009 report, the NTSB stated that the total damage was estimated at \$8.6 million and found that the probable cause was the failure of the operator of the striking train to comply with the controlling signal indication. In this instance, the NTSB also found that a contributing factor was the lack of a positive train control system that would have intervened to stop the train and prevent the collision. In yet another incident involving MBTA transit system on May 9 of this year, approximately 46 people were taken to area hospitals after an operator slammed his trolley into another trolley. It has been reported that the operator admitted to texting at the time of the accident.

Similarly, on July 22, 2009, a collision between San Francisco Municipal Railway (Muni) light-rail vehicles at the West Portal station injured 47 people. While the NTSB is far from concluding its investigation into this accident, investigators reported that the operator involved in the crash appears to have switched his train to manual about 24 seconds before the light-rail vehicle plowed into another train stopped in the station. In so doing, he may have disabled the

very system designed to avoid such accidents. These incidents point up the nexus between the state of good repair and the organizational safety culture at transit agencies. Employee attitudes and performance are shaped by the environment they work in. If important maintenance and renewal are deferred, it sends a message. If leadership at all levels of government allow transit infrastructure to degrade, FTA is concerned that public transit employees may become disheartened and be less confident in the functional capacity of their automated safety equipment systems.

Rail transit provides more than three billion passenger trips each year, and moves millions of people each day. At the same time, national passenger fatality rates for heavy rail transit systems are about 0.03 per million passenger miles. This accident rate is lower than most other modes of transportation and far safer than traveling by automobile. However, as evidenced by the recent accidents and incidents highlighted in my statement, in order to maintain this level of safe performance, government at all levels must address each transit system's state of repair and safety regimes more aggressively. We cannot rest on the laurels of a good safety record—we must take action to ensure that we stay on top of aging infrastructure so that we can not only maintain, but also improve that record. Otherwise safety will degrade.

It is important that we ensure that transit systems know how to develop asset management systems, and that they use them to make tough, but critical investment decisions. Asset management systems focus the attention of transit operators on undertaking the most critical repairs first, and optimizing the sequence of maintenance and repair work over the life of the asset so that the asset is maintained at a state of good repair and at the highest level of safety.

This statement is not directed at only the older systems. Newer systems built with advanced technology are aging, and we are uncertain of the useful life of these technologies. So this must be a focus for the entire industry as well.

Federal Regulation

Our nation's rail transit systems operate under two very different Federal safety regimes. Some commuter rail systems are funded by FTA but regulated by the Federal Railroad Administration (FRA) safety regulations, while light, heavy, and other urban rail systems are overseen by the State safety oversight (SSO) agencies. For example, commuter rail operations on the general system of railroads—like the Southeastern Pennsylvania Transportation Authority's (SEPTA) Philadelphia/Doylestown regional rail line (R-5) and New Jersey Transit's Northeastern Corridor Line—fall under FRA's safety regulatory system, which includes national mandatory safety standards and on-site spot inspections and audits by Federal technical specialists and inspectors, who have backgrounds in train control, track operations and other disciplines. FRA is also empowered to dictate operating practices and assess fines on those transit operators that don't comply. On the other hand, for rail systems not subject to FRA oversight—such as the SEPTA's trolley system and Market-Frankford heavy rail line, NJ Transit's Hudson-Bergen light rail system, and PATCO (which is a subsidiary of the Delaware River Port Authority of Pennsylvania and New Jersey)—the State is expected to take the lead for oversight and require those agencies to establish a safety program. The State, through a designated SSO agency, is then expected to monitor the transit system's implementation of its safety program. FTA's role is to identify elements of requisite system safety program plans and requirements regarding the timing and establishment of an SSO agency (when there is an FTA funded rail system in the

State), provide training and technical assistance to the SSO agency, establish some requirements for State oversight responsibility, and monitor the State's oversight activities. FTA is prohibited by law from establishing national safety standards, requiring Federal inspections, or requiring specific operating practices.

Given this gap between the level of regulatory oversight for rail transit operations and commuter rail operations, a team of safety officials and experts under the leadership of Deputy Secretary John D. Porcari is focused on developing options for transit safety reforms, which may extend to bus operations as well. To that end, the Deputy Secretary's workgroup is collaborating with other modal administrations within the Department of Transportation (DOT) with jurisdiction in safety regulation. These include the Federal Railroad Administration, the Federal Motor Carrier Safety Administration, and the Federal Aviation Administration. We are also assisted in our analysis by the Research and Innovative Technology Administration. This team will review the many alternative models within DOT to address safety as well as review the statutory authority on safety for transit with an eye toward developing reforms.

Conditions and Performance

As suggested earlier, the state of good repair is not just about safety—it is also about the condition of the infrastructure and reliability of transit systems nationwide. The expected useful life for rail vehicles is 25 years, 10 to 12 for heavy-duty transit buses, and 40 to 50 years for facilities. However, transit assets are often called upon to work beyond their original useful life, which requires renewing capital improvement investment. According to DOT's 2006 Conditions and Performance Report (C&P report), the average age of urban light rail cars is 16.5 years and

for commuter rail passenger coaches it is 17.8 years. The average age of bus vehicles in urban areas is 6.1 years. Meanwhile, nearly half of the nation's urban bus maintenance facilities are more than 21 years old. More to the point, on average nearly one-third of urban bus maintenance facilities are in marginal or poor condition, as are 51 percent of urban rail passenger stations and eight percent of rail transit track. Yet, as transit infrastructure is aging, the demand for service continues to rise. Americans took 10.3 billion trips on public transportation in 2008, the highest level ever, surpassing increases in any other mode of transportation.

Marginal or poor transit infrastructure conditions exist despite FTA's financial support of rehabilitation and replacement activities, primarily through section 5309 Fixed Guideway Modernization funds and Section 5307 Urbanized Area Formula Grant funds. In addition, preventive maintenance is an eligible capital project expense for transit agencies in both large and small urbanized areas. It includes a variety of expenditures -- activities, supplies, materials, labor related to maintenance, services, and associated costs -- required to preserve or extend the functionality and serviceability of a transit vehicle, facility, or other asset in a cost-effective manner.

For the most part, systems that are adequately financed are those that have a dedicated funding source. For example, WMATA does not have a dedicated source of funding, which we believe has contributed to the system's deteriorating state of repair. Secretary LaHood and I support any Congressional effort to make public transportation agencies more financially viable with dedicated local revenue funding sources, which we believe should be directed to addressing the most safety critical issues in the systems as identified by appropriate vulnerability assessments.

State of Good Repair

Clearly, funding is not enough. Public transportation agencies must make it a top priority to achieve and maintain a state of good repair to provide safe and reliable service to millions of daily riders. To foster this commitment, FTA has made transit infrastructure's state of good repair its priority and has embarked on a multi-pronged initiative, in partnership with the transit industry, to make progress on this key priority. FTA's state of good repair initiative includes sharing ideas on recapitalization and maintenance issues, asset management practices, and innovative financing strategies. FTA kicked off its state of good repair initiative in 2008, with an initial meeting of 14 transit properties to help the agency identify key issues in bringing the industry into a state of good repair. Since then, FTA has published reports on issues associated with state of good repair; set up a state of good repair website; formed an FTA-Industry working group to discuss and share issues and ideas; and, just last month, convened a "State of Good Repair Roundtable" hosted by WMATA in Washington, DC. The purpose of this roundtable meeting was to draw attention to the issue, share experiences, and identify needs to address the repair of our nation's transit infrastructure. It was attended by over 50 transit experts representing nearly 30 large and small rail and bus transit systems.

Continuing the momentum, in April 2009 FTA presented its State of Good Repair Study, prepared in response to the conference report accompanying the fiscal year 2008 Transportation-HUD Appropriations Act and to a December 7, 2007, letter from Senator Richard Durbin and 11 other senators to FTA.

The State of Good Repair Study assessed the level of capital investment required to attain and maintain a state of good repair for the nation's seven largest rail transit operators (Chicago's CTA, Boston's MBTA, New York's MTA, New Jersey Transit, San Francisco's Bay Area Rapid Transit System (BART), Philadelphia's SEPTA, and Washington's WMATA), which carry 80 percent of the nation's rail transit ridership. Unlike the most recent C&P report, which looks at the average condition of large and small transit agencies' bus and rail fleets and facilities, the study assessed assets based on their useful life. The study also estimated the total value of the existing backlog of over-age assets at these seven agencies.

The State of Good Repair Study finds that more than one-third of the seven agencies' assets are in marginal or poor condition, compared with less than 20 percent for transit agencies in the nation as a whole. This finding indicates that these assets are near or have already exceeded their expected useful life. In addition, the study finds that there is a backlog of unmet recapitalization needs of about \$50 billion at the nation's seven largest rail transit operators. Imagine the impact to the nation's economy if these seven systems could no longer provide, due to the deteriorating conditions of infrastructure, the basic mobility that so many Americans depend on daily.

Estimating future transit infrastructure needs is difficult, but additional investment will be needed over the next few decades to deal with physical deterioration, congestion, and travel demand.

Transit agencies recognize the need to progress on their state of good repair. For example, SEPTA, one of the seven study agencies, will receive \$190 million in funds from the American Recovery and Reinvestment Act of 2009, which the agency is dedicating to long-deferred rehabilitation of rail stations and other facilities and the purchase of 40 replacement hybrid

buses. While all seven study agencies maintain asset inventories for capital planning purposes, and while the industry recognizes the need to improve conditions, the State of Good Repair Study found that other asset management practices are lacking. These include the use of decision-support tools that provide for the ranking and prioritization of re-investment needs and the conduct of comprehensive asset condition assessments on an ongoing basis. In order to assist agencies in correcting these deficiencies, FTA is developing a transit asset management training course, working with the Federal Highway Administration Office of Asset Management, to glean “lessons learned” from their bridge and pavement management systems to see how they might be applied in transit, and conducting a review of U.S. and international agency asset management practices.

Next Steps

The importance of bringing the transit industry into a state of good repair and addressing the industry’s safety and reliability problems makes clear that further action is needed. To this end, FTA will initiate an expanded study, looking beyond the seven largest transit agencies, to better understand industry-wide state of good repair needs. As part of this follow-on study we will seek to identify what we define as safety critical infrastructure. We will also consider the relationships between a transit agency’s current infrastructure conditions, its ability to maintain and improve those conditions, and its plans to implement new projects under FTA’s discretionary New Starts program.

My staff and I are eager to work with this committee to identify authorization proposals that will assist agencies in achieving and maintaining a state of good repair that is so necessary to the

safety and reliability of public transportation service in our nation. I will be happy to answer any questions you may have.