# Office of Inspector General Audit Report

# CHALLENGES TO IMPROVING OVERSIGHT OF RAIL TRANSIT SAFETY AND IMPLEMENTING AN ENHANCED FEDERAL ROLE

Federal Transit Administration

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# Memorandum

U.S. Department of Transportation

Office of the Secretary of Transportation
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Subject:

ACTION: Challenges to Improving Oversight of

Rail Transit Safety and Implementing an Enhanced

Federal Role

Federal Transit Administration Report Number MH-2012-048

From Lou E. Dixon

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Reply to Attn. of: JA-1

Date:

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To: Federal Transit Administrator

Rail transit incidents since 2009 have raised significant concerns about safety oversight of the Nation's transit systems. Most notably, the National Transportation Safety Board (NTSB) identified serious oversight lapses and a lack of a safety culture at the Washington Metropolitan Area Transit Authority (WMATA) following the June 2009 Washington, D.C., Metrorail accident, which killed 9 people and injured 70 others. In December 2009, the Secretary proposed legislation that would transform the Department's current role from providing guidance in support of state-managed oversight programs to directly overseeing transit safety. Congressional stakeholders have expressed both support and opposition to enhanced Federal rail transit oversight.

Our audit objective was to identify future challenges the Federal Transit Administration (FTA) would likely face in developing and implementing enhanced rail transit safety oversight. We also identified actions FTA could take now, under its current authority, to improve safety oversight. Specifically, we assessed challenges related to (1) using the National Transit Database (NTD)<sup>1</sup> as an oversight tool, (2) employing performance measures to assess the impact of transit safety activities, (3) establishing new rail transit safety standards if enabling legislation is enacted, and (4) providing oversight and enforcement of any new national safety standards.

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<sup>&</sup>lt;sup>1</sup> Congress established the NTD as the primary source of information and statistics on transit systems in the United States. NTD data are used to apportion over \$5 billion of FTA funds annually to transit agencies in urbanized areas.

We conducted this audit in accordance with generally accepted Government auditing standards. To conduct our work, we interviewed a range of industry stakeholders and reviewed our prior audit work on other transportation safety programs, and relevant Government Accountability Office (GAO) and NTSB work. Exhibit A cites the documents we reviewed in developing this report and exhibit B provides additional information on our audit methodology. Exhibits C and D include a synopsis of challenges, priority actions, and key management questions for FTA's consideration.

#### **RESULTS IN BRIEF**

Although basic safety incident data, such as fatalities, injuries, and property damage, are currently captured in the NTD, the data are insufficient for FTA to effectively oversee transit safety at the national level. FTA needs more comprehensive data, such as detailed information on the condition of the Nation's transit assets, to fully identify safety risks and trends across the country, work with the transit industry to prioritize actions to mitigate identified risks, and evaluate the industry's performance in improving safety. FTA's own assessment determined that it lacked a plan and tools to interpret safety priorities and provide user friendly access to data analysis. Our discussions with transit agency stakeholders echoed these concerns and indicated that FTA can do more now to maximize the usefulness of NTD data. According to FTA, it has taken recent action to address data challenges by completing the first two phases of its data management assessment, cataloguing NTD data gaps, and working with an advisory committee to identify data needs. Continuing to work actively with this advisory committee to identify ways to address data gaps could help transit agency stakeholders improve their safety activities and could better position FTA to assume an enhanced oversight role.

FTA has not established goals, performance measures, and targets that are specific to its current rail transit safety activities. Even without enhanced authority, improved performance information would enable FTA to better assess the impact of its current safety activities, and identify and share best practices nationwide. For example, FTA could establish a separate performance measure in the Department's Annual Performance Report related to reducing transit rail-related fatalities and injuries. Currently, it reports on all modes of transit in a combined manner. A separate measure for rail transit could serve as a baseline for evaluating its current safety activities. If Congress expands FTA's oversight role, FTA would face challenges in working with States and transit agencies to develop a uniform set of national performance measures and processes for tracking and reporting performance progress. This has been difficult, in part because State safety oversight agencies (SSOA) directly oversee transit agencies—not FTA.

Establishing minimum national rail transit safety standards would present a number of challenges to FTA if Congress expands its oversight role. For example, FTA would be faced with establishing proposed safety management system requirements and issuing timely guidance to transit agencies. This would include prioritizing the greatest safety risks for rulemakings, enlisting leadership commitment to expedite rulemakings, and periodically reviewing and revising regulations as necessary. Although FTA is not authorized to issue national transit safety standards, it is working with an advisory committee to improve safety and prepare for enhanced safety oversight authority. Existing voluntary standards from industry organizations, such as the American Public Transportation Association (APTA), and the information the advisory committee collects could be useful to FTA in the development of national safety standards and regulations, if it receives enhanced authority.

An expanded oversight role would significantly increase FTA's oversight and enforcement activities to ensure that State and local agencies implement any new national standards and regulations. Developing a data-driven, risk-based oversight system to identify and mitigate safety risks, and establishing criteria and guidance for assessing and enforcing compliance with safety standards, would be key to maximizing limited resources. Further, under an expanded role, FTA would need to consider the organizational placement of its safety function and its resource and personnel needs, such as acquiring skill sets and expertise it currently lacks. FTA has taken steps toward addressing these issues, such as developing plans for the reorganization and collection of safety management system information, which could be used if enhanced oversight is authorized.

We are making a series of recommendations to improve FTA's oversight of rail transit safety, under its current authority, related to new and increased use of safety data and improved performance measures.

#### **BACKGROUND**

FTA's Office of Safety and Security implements ongoing rail transit safety oversight and technical assistance programs, such as State safety oversight, drug and alcohol testing compliance audits, and training for transit stakeholders. Under the State Safety Oversight program,<sup>2</sup> States set their own rail transit safety standards and oversee rail transit safety practices and procedures developed and implemented by rail transit agencies. Currently, 28 SSOAs oversee 35 light rail and 13 heavy rail systems operated by 48 transit agencies.<sup>3</sup> Federal and State funding for transit safety oversight is limited. FTA's Safety and Security Office operates with 2.5 full-time equivalent employees (FTE) devoted to the State Safety

<sup>&</sup>lt;sup>2</sup> The Intermodal Surface Transportation Efficiency Act of 1991 created the State Safety Oversight program.

<sup>&</sup>lt;sup>3</sup> Five agencies operate both heavy and light rail. Galveston Island Transit trolley service is currently suspended.

Oversight program. Excluding California, as of December 2009, SSOAs averaged less than one employee.

According to the Secretary's legislative proposal,<sup>4</sup> the Department would be required to: develop and implement a safety program for rail transit systems<sup>5</sup> that receive Federal funding, establish and enforce Federal rail transit safety standards, certify states' eligibility for assistance to carry out a federally approved transit safety program, and ensure that state agencies overseeing transit systems are fully independent. The Secretary anticipates that it would take 3 years to fully develop and implement these requirements.

#### COLLECTING DATA FOR EFFECTIVE SAFETY OVERSIGHT

Although basic safety incident data, such as fatalities, injuries, and property damage, are captured in the NTD, the data may not be sufficient to allow FTA to fully identify safety risks and trends across the country, work with the transit industry to prioritize actions to mitigate identified risks, or evaluate the industry's performance in improving safety. Actions to enhance its ability to provide effective oversight of rail transit safety would include maximizing the usefulness of current safety data, identifying additional data needs, and ensuring the quality of safety data it receives from the industry.

#### Maximizing the Usefulness of Current Rail Transit Safety Data

Consulting with and leveraging the expertise of SSOAs, transit agencies, and other industry stakeholders could help FTA maximize the usefulness of safety data it receives under its current authority. In particular, the Transit Rail Advisory Committee for Safety (TRACS),<sup>6</sup> APTA, and NTSB could provide insight on maximizing the usefulness of data. Further, benchmarking of data, which the Transportation Research Board (TRB)<sup>7</sup> has suggested, would allow transit agencies to identify strengths, weaknesses, and best practices among transit agencies to improve safety.

FTA collects safety data from transit agencies and SSOAs. In addition, it collects financial, ridership, performance, and safety data through the NTD, including data on fires, crashes, and related fatalities, injuries, and property damage. Transit agencies must notify SSOAs of reportable incidents within 2 hours of occurrence and SSOAs submit to FTA annual reports on these incidents. FTA compiles and

<sup>&</sup>lt;sup>4</sup> The Secretary's legislative proposal provides the option to establish a safety program for public transportation bus systems. Any reference to transit safety in the context of this report refers to rail transit.

<sup>&</sup>lt;sup>5</sup> The proposed program would not include transit systems that are regulated by the Federal Railroad Administration.

<sup>&</sup>lt;sup>6</sup> TRACS, comprised of members from transit agencies, SSOAs, labor unions, and other key constituencies, was established to analyze transit safety issues and facilitate development of rail transit safety standards.

<sup>&</sup>lt;sup>7</sup> Transit Cooperative Research Program Report 141: A Methodology for Performance Measurement and Peer Comparison in the Public Transportation Industry, Transportation Research Board, 2010.

publishes its Rail Safety Statistics report documenting its analysis of the safety performance of the rail transit industry. This analysis includes an evaluation of NTD data collected from transit agencies and data in annual reports from SSOAs.

In addition to annual reporting of compiled data, FTA responds to industry, congressional, and media requests for quantitative and anecdotal safety data. It also receives additional safety information from stakeholders, such as APTA, NTSB, and TRACS. The NTD data are available online, but SSOA and transit agency stakeholders we interviewed indicated that they do not use NTD data to identify safety concerns and are uncertain how FTA uses the data. SSOA officials stated that they focus on incident reports from transit agencies. Moreover, transit agency officials stated that comparative analyses of NTD safety data are not feasible because transit agencies with operational similarities, such as size or design, are not grouped for comparison.



Specifically, through the Volpe National Transportation Systems Center, FTA has assessed its existing data management activities and its safety and security data needs to prepare an action plan for transit safety and security data management. FTA reported that it completed the first two phases of this assessment and is working with an advisory committee to identify data needs. FTA identified key performance indicators, catalogued NTD data gaps, and determined that it lacked a plan and tools to interpret safety priorities

and provide user friendly access to data analysis. Our discussions with transit agency stakeholders echoed these concerns and indicated that FTA can do more now to maximize the usefulness of NTD data.

## Identifying Data to Develop and Implement Enhanced Transit Safety Oversight

If FTA takes on an expanded transit safety oversight role, it would need to identify the data necessary for a comprehensive risk-based approach to safety oversight, as other Operating Administrations have done. Our prior audit work identified a number of transit safety data needs FTA would have to address to facilitate a data-driven, risk-based approach to oversight. For example, in 1999, we reported that FTA lacked the data needed to identify factors contributing to transit crashes

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The Volpe study included interviews of officials from FTA, Federal Railroad Administration, Department of Homeland Security, and American Public Transportation Association, but not from SSOAs or transit agencies.

involving rail fixed-guideway crossings. Although FTA reported in 2009<sup>9</sup> the probable causes for these types of crashes, the causes were identified as "equipment failure," "workforce behavior," or other broad categories, giving FTA limited information on actions needed to identify and mitigate risks. GAO reported in January 2011<sup>10</sup> that data used in compiling this report were unreliable.

In addition, FTA lacks detailed data on the condition of the Nation's rail transit assets. According to an FTA study, one-third of assets at the seven largest rail transit agencies—which serve 80 percent of rail transit riders—are nearing or have exceeded their expected useful life. An estimated \$50 billion in rail transit asset improvements is needed to bring these systems to a state of good repair. The study noted that FTA would benefit from a National Transit Capital Asset Reporting System that would ensure regular and consistent reporting of asset conditions across all urban transit agencies. FTA has taken steps toward improving data on asset management, such as budgeting for the collection of such data from stakeholders in its fiscal year 2012 budget proposal. This information could assist FTA in adding transit asset data as a component of NTD reporting.

The lack of key data presented significant challenges for the Federal Aviation Administration (FAA) in establishing a risk-based oversight approach for ondemand operators. FAA lacked the data needed to evaluate the risk associated with different types of on-demand operations. For example, on-demand operators typically fly in an environment that poses a number of safety risks. Specifically, they tend to have short flights, resulting in more takeoffs and landings, the most dangerous part of a flight. They also operate at altitudes that are vulnerable to terrain and weather obstacles and fly to and from small airports that do not have air traffic control towers or emergency equipment. FTA would face similar challenges in collecting key data given the diverse equipment, infrastructures, technologies, and operating environments among transit operators.

Collaborating with key stakeholders, such as transit agencies and APTA, would be critical to identifying and closing safety data gaps. Collaboration was an approach the Federal Highway Administration (FHWA) adopted to address our January 2009 recommendation that it move toward collecting more detailed data on bridge conditions. FHWA participated in a task group organized by the American Association of State Highway Transportation Officials (AASHTO) to develop and implement a plan to collect more detailed data.

<sup>10</sup> GAO-11-217R, "FTA Rail Safety Data Reliability," Government Accountability Office, January 31, 2011.

<sup>&</sup>lt;sup>9</sup> FTA's 2009 Rail Safety Statistics Report.

<sup>&</sup>lt;sup>11</sup> On-demand (Part 135) operators use aircraft configured for 30 or fewer passengers or 7,500 pounds of payload or less. Most of these operators fly at the request of their customers. The on-demand industry consists of charter passenger flights, medical operations, air tours and cargo operations.

#### **Ensuring the Quality of Rail Transit Safety Data**

Quality data are critical to the successful development and implementation of a data-driven, risk-based approach to safety oversight, as demonstrated by our audits of other Department safety data systems. These audits indicated that new practices would likely be needed to ensure that new transit data systems can support enhanced safety oversight. FTA would be challenged to ensure that the NTD and other transit data it uses are complete, accurate, and timely. Other Operating Administrations faced similar challenges in improving data quality.

For example, significant data quality problems in the Federal Motor Carrier Safety Administration's (FMCSA) Safety Status Measurement System (SafeStat) limited FMCSA's ability to identify carriers with safety problems. In 2004, we reported that SafeStat—which was designed to target motor carriers with poor safety performance records for oversight—was missing records for at least 38 percent of truck and bus crashes. In addition, 61 percent of traffic citations issued were incorrectly coded and 31 percent of available records were reported over 180 days late. We also reported that this system could not identify carriers with the worst safety records because the underlying data were incomplete, inaccurate, and untimely. To improve data reporting, FMCSA conducted state data quality reviews and implemented improved data quality control measures and action plans.

The Federal Railroad Administration (FRA) has experienced timeliness problems with rail safety data. Our audit of FRA's oversight of highway-rail grade crossings found the 60-day requirement for railroad companies to notify the National Response Center of an incident was too long for FRA to initiate an investigation and address safety risks involving 115 crossing collisions that resulted in 116 fatalities. Similarly, transit agency officials we interviewed found FTA's analysis of safety data less useful in identifying risks because it was not timely.

In addition to impeding the identification of high-risk areas, poor quality data may affect attempts at corrective action following incidents. FHWA identified significant data errors in its National Bridge Inventory database <sup>12</sup> following the collapse of the I-35W bridge in Minnesota. While attempting to identify similar types of bridges, FHWA found that almost one-third of the 756 bridges identified as similar were not. As a result, FHWA could not effectively target such bridges for State inspections in the critical weeks following the I-35W bridge failure.

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<sup>&</sup>lt;sup>12</sup> The database includes records on the location, age, condition, and load rating and posting of nearly 600,000 public highway bridges nationwide.

## DEVELOPING AND IMPLEMENTING SAFETY GOALS AND PERFORMANCE MEASURES

FTA has not established goals, performance measures, and targets that are specific to its current rail transit safety activities. Even without enhanced authority, improved information would enable FTA to better assess the impact of its current safety activities, and identify and share best practices nationwide. If Congress expands FTA's oversight role, FTA would face challenges in working with States and transit agencies to develop a uniform set of national performance measures and processes for tracking and reporting performance progress.

#### **Evaluating the Current Transit Safety Oversight Program**

FTA has not established goals, performance measures, and targets that are specific to its current rail transit safety activities. Instead, FTA identified general safety outcomes and strategies in its fiscal year 2011 Performance Plan that are intended to reduce transit-related fatalities and injuries. In addition, the Department's Annual Performance Report for fiscal year 2010 included a measure for transit fatalities per 100 million passenger-miles traveled; however, the measure did not separate rail transit fatalities from the other modes of transit, such as buses or ferry boats.

Specific and quantifiable performance goals, measures, and targets are necessary to demonstrate whether a program is fulfilling expectations. FTA's efforts to

monitor progress in completing transit safety tasks identified in its annual performance plans have been limited—in part because the planned tasks change from year to year. As a result, FTA cannot track progress made over time in improving transit safety. Further, FTA's quarterly performance assessments do not provide meaningful information on whether tasks and



services provided have a positive impact on transit safety, largely due to FTA's lack of performance measures. Also, FTA's quarterly assessment reports have not been timely. For example, as of March 2010, its most recent assessment reported accomplishments for the fourth quarter of fiscal year 2008.

FTA has been challenged in evaluating the impact of its rail transit safety activities, in part, because SSOAs directly oversee transit agencies—not FTA. However, developing separate performance measures would enable FTA to establish a baseline for rail transit safety, set targets for safety improvements, analyze safety trends over time, and identify actions to respond timely to negative

trends. Clearly defined performance goals and measures would also better position FTA to take on an enhanced transit safety oversight role.

### **Establishing Uniform Performance Measures and Assessing Progress**

Under an enhanced oversight role, FTA would need to work closely with States and transit agencies to adopt a uniform set of national performance measures for evaluating the effectiveness of the newly established national safety program. This would be a significant shift in FTA's role. Currently, each transit agency establishes individual safety goals and objectives in annual system safety program plans. These plans include safety policies, procedures, goals, and objectives and describe how the transit agency will implement and manage safety programs. FTA does not require minimum uniform measures that apply to all transit agencies; therefore, nationwide analysis of performance progress is difficult. This prevents FTA from periodically reporting on the effectiveness of its limited oversight activities on transit safety. If FTA is to successfully evaluate the impact of a new program on transit safety nationwide, it would be critical that States and transit agencies periodically track and report to FTA on their safety performance.

Our audit work of other Operating Administrations demonstrates the difficulties FTA would face in accomplishing this task. For example, in March 2008, we reported that the National Highway Traffic Safety Administration (NHTSA) was unable to effectively assess State performance in meeting safety goals. In response, NHTSA coordinated with the Governors Highway Safety Association to establish common performance measures to enhance comparability among States, better track State progress in implementing highway safety grant programs, and target limited funds to safety programs that result in measurable success.

Our March 2008 report also noted that States did not track and report on their performance progress, further limiting NHTSA's ability to oversee State safety programs. States did not project current trends to demonstrate whether they were on track to meet goals and measures. For example, one State established a goal to limit highway fatalities but did not project a trend line to show whether it could meet the goal. Our analysis showed that the State was not on track to meet its goal.

#### ESTABLISHING NATIONAL RAIL TRANSIT SAFETY STANDARDS

While FTA is legally prohibited from issuing transit safety standards, it is working with an advisory committee to collect information on safety policies and practices. Were this barrier removed, establishing national rail transit safety standards would be difficult due to the diversity of the Nation's transit systems regarding equipment and infrastructures, technologies, and operating environments. In setting new standards, FTA would face other key challenges, such as establishing proposed

safety management system requirements and prioritizing the greatest safety risks for rulemakings.

#### **Collecting Information for Developing New Safety Standards**

The Department is working with TRACS, under its current authority, to collect information for new safety policies and practices, which could be useful in developing safety standards and national regulations under enhanced authority. Following legislative authorization, current industry standards and best practices may be adopted for certain areas. Best practices of other Operating Administrations could also provide a basis for transit safety requirements. For example, FHWA's National Bridge Inspection Standards outline safety requirements for inspection frequency, inspection personnel qualifications, and data collection. FHWA is in the early stages of developing National Tunnel Inspection Standards, which may be modeled, in part, after its bridge inspection standards. However, before new rail transit standards are finalized, transit agencies could consider using existing FHWA guidelines for inspection, maintenance, and rehabilitation of rail transit tunnels. Further, the Department could examine the FHWA and FRA standards for bridge inspection as a model when developing standards for rail transit bridges.

Our prior work has shown that advisory committees can help agencies resolve controversial issues, minimize adverse public comments, and shorten the overall time needed to complete new rules. <sup>13</sup> According to the FRA Administrator and FAA Manager of Rulemaking, working with advisory committees can take more up–front planning time, but less time later on when the agency is revising proposed rules and issuing final rules.

#### **Creating National Rail Transit Safety Standards and Regulations**

Under the existing State Safety Oversight program, States set their own rail transit safety standards and review their transit agencies' safety practices. According to the Secretary's legislative proposal, many oversight agencies lack enforcement authority and the current approach has led to inconsistent practices, limited standards, and marginal effectiveness. The Secretary's proposal would allow the establishment and enforcement of minimum transit safety standards nationwide. The Department would require State transit agencies to adopt program standards based on safety management system (SMS) principles <sup>14</sup>—an approach that could encourage the development of comprehensive safety procedures, practices, and policies that fit each transit agency's unique operation. The SMS approach also

<sup>&</sup>lt;sup>13</sup> According to FTA, TRACS will be involved in the rulemaking process, should enhanced authority be granted.

<sup>&</sup>lt;sup>14</sup> Implementing a safety management system involves taking a formal, top-down business-like approach to managing safety risk.

strongly emphasizes developing an organizational culture that supports a high level of safety performance.

If the Department pursues an SMS approach under enhanced authority, FTA would need to set clear expectations for transit agencies' implementation of SMS components. According to FTA, it is working through TRACS to identify such components. Our prior audit work has shown that vague guidance and regulations on how to structure safety-related systems can undermine the Department's efforts to improve safety. For example, following the January 2000 crash of Alaska Airlines Flight 261, FAA determined that Alaska Airlines' Continuing Analysis and Surveillance System (CASS)—a monitoring system carriers are required to design and maintain—was ineffective for analyzing the performance and effectiveness of the carrier's maintenance program. We found that ambiguous guidance on what an effective CASS should include contributed to the system's ineffectiveness.



Developing SMS requirements in a timely manner could also pose challenge. Although **TRACS** is collecting information on **SMS** principles and components. the rulemaking process can be difficult and time-consuming. Coordinating rules with other agencies, data problems, the need for further studies or analyses to improve data integrity, and unanticipated issues requiring further analysis can extend the rulemaking

process, which can take over 3 years. Even when Congress sets a statutory deadline to issue a rule, disagreement on the content of a proposed rule can cause significant delays. For example, in 2006 Congress directed FMCSA to issue new regulations for the commercial driver's license program within 18 months. These regulations were designed, in part, to implement recommendations we made in audit reports and correspondence going back to 2002. However, despite the congressional mandate, FMCSA did not issue the regulations until May 2011.

Department leadership can assist transit safety rulemaking by committing to timeliness on rulemakings prioritized by FTA. We reported that the overriding reason that average rulemaking time decreased by several months between 1999 and 2003 was high-level management emphasis. For example, the Secretary took an active interest in improving the rulemaking process and issued a memorandum to agency administrators reminding them of the importance of timely rulemakings.

Based on our stakeholder interviews, prior work, and NTSB recommendations, potential higher risk transit safety areas that could warrant particular focus include train operator certification, hours-of-service, medical fitness, and rail car crashworthiness.

- Train Operator Certification. Currently, transit agencies have different certification requirements for rail transit train operators. One transit agency official noted that licensing similar to the commercial driver's license used by the motor carrier industry could enhance safety. Another official suggested that FRA's locomotive engineer certification—which considers driving record, prior safety conduct and related work record, as well as knowledge and skill testing—could be used as a basis for train operator certification.
- Hours of Service. In March 2006, NTSB recommended FTA require transit agencies to ensure train operators obtain at least 8 hours of uninterrupted sleep between shifts. Some state and transit agency stakeholders agree that national hours of service standards should be established. However, both State and transit agency respondents to FTA's 2006 fatigue management survey raised concern with the potential cost of an hours-of-service rule. Opposition to implementing standards can be significant. For example, FMCSA's hours-of-service rules have been subjected to legal challenges since 2003, and a new rule proposed in 2010 was not completed until December 27, 2011.
- Operator Medical Fitness. Transit safety stakeholders identified operator medical fitness for potential regulation, and NTSB has cited sleep disorder as a medical condition and possible cause in passenger rail and transit crashes. Our audit work on commercial drivers indicates that operator medical fitness regulations can play a safety role. For example, we recommended that FMCSA expedite a medical certificate rulemaking—which was necessary to help prevent unqualified commercial drivers from "shopping" for a physician to certify their medical fitness. In addition, FRA is developing medical criteria and protocols to assess the medical fitness of safety-critical railroad employees.
- Rail Car Crashworthiness. NTSB recommended minimum rail car crashworthiness standards and eliminating cars that cannot be modified to meet standards. State and transit agency stakeholders cited concerns about heavier cars, including strain on infrastructure, power consumption, and cost. The Secretary's legislative proposal would require that costs and benefits be considered before issuing regulations, and states that NTSB recommendations

<sup>16</sup> At the time of our review, WMATA estimated a cost of \$835 million to replace 1000-series rail cars with 300 more crashworthy rail cars.

<sup>&</sup>lt;sup>15</sup> According to APTA, hours-of-service rules govern the number of hours a train operator may work and generally include mandatory rest periods.

should be considered to the extent practicable. Transit agencies with less crashworthy rail cars could address safety concerns by fully complying with automatic train control (ATC) safety standards as they incrementally replace rail cars. Minimum ATC safety standards for applicable transit systems could help reduce ATC component problems that compromise safety. NTSB cited track circuit failure as a key cause of the fatal WMATA crash in 2009.

Collaborating with other Operating Administrations with safety regulatory authority could help expedite efforts to develop and implement minimum safety standards and the proposed safety management system. However, it is important to recognize that stakeholders can find it difficult to reach consensus and may not expeditiously resolve all regulatory questions. For example, FAA formed a committee of aviation stakeholders to review on-demand operator regulations. While a committee subgroup noted that flight crews having sufficient rest prior to flights is an issue for on-demand operators, they were unable to reach a consensus on a specific flight duty and rest recommendation to FAA.

## Ensuring Periodic Reviews and Updates of Rail Transit Safety Standards and Regulations

Ongoing assessments of new regulations would be critical to ensuring that rail transit standards remain relevant and reflect the current state of the Nation's transit systems. Without regular reviews and revisions, FTA would risk monitoring and enforcing standards that are out-of-date or insufficient to address safety risks that emerge over time. For example, in July 2009, we reported that many provisions of FAA's regulations for on-demand operators had not been updated since 1978—despite significant changes in the industry. In addition, FAA had not implemented recommendations that its rulemaking committee made to strengthen the regulations or addressed 16 NTSB recommendations, some of which were in line with the committee's recommendations.

#### CONDUCTING ENHANCED OVERSIGHT AND ENFORCEMENT

If new national standards and regulations are established, ensuring they are carried out would require FTA to develop new organizational structures and systems for oversight and enforcement. Under the Secretary's legislative proposal, FTA would have direct responsibility for rail transit safety—creating a need to consider organizational placement and assess workforce and training requirements. In addition, it would be critical to develop a data-driven, risk-based oversight system and establish criteria and guidance for assessing and enforcing compliance with safety standards.

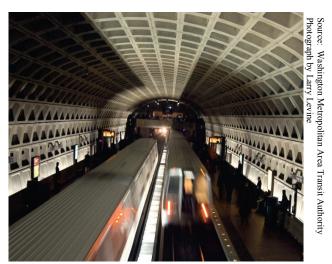
#### Addressing Organizational Placement and Workforce Issues

Under current law, FTA is responsible primarily for administering billions of dollars annually in infrastructure investment grants, with few staff to provide guidance to SSOAs. Under the Secretary's legislative proposal, FTA's transit safety role would be expanded to include direct oversight and enforcement of the national safety program. FTA has developed a strategic plan for reorganizing the Office of Safety and Security if it receives enhanced safety oversight authority. However, to meet this expanded role, FTA would likely require additional skills and expertise that it currently lacks.

The Department faced a similar challenge regarding FHWA's oversight of large truck and bus safety. In September 1999, the Inspector General testified that the Office of Motor Carriers' safety mission was eclipsed by FHWA's predominant mission, that is, investing billions of dollars annually in highway infrastructure projects. In January 2000, Congress addressed this organizational concern by separating the Office of Motor Carriers from FHWA and creating FMCSA.

FTA's 2011 budget request called for establishing a national safety program executive who would report to the FTA Administrator. The request estimates that \$30 million would be needed to fund on-site spot inspections and audits and to set up FTA's expanded safety office. To ensure success, the authority and responsibilities of safety personnel must be clearly defined. As specific provisions of authority are finalized, continued assessments would be needed to determine staffing levels; identify the knowledge, skills, and abilities needed; develop position descriptions; and consider options for obtaining required resources, such as direct hiring, contracting, or re-training current staff.

The value of staffing assessments demonstrated bv the Department's experience in meeting the demands the American Recovery and Reinvestment Act (ARRA) of 2009. To award grants for its new high-speed rail program under ARRA, FRA used staff detailed from other Operating Administrations. Despite actions, FRA attributed delays in awarding these grants, in part, to



insufficient staff and technical capacity to manage the program. We also reported that other Operating Administrations had not hired staff with the expertise needed

for enhanced oversight, as called for by ARRA and Office of Management and Budget requirements.

Effective deployment of staff is also important. Our work on the North American Free Trade Agreement's cross-border trucking provisions demonstrated the risks of an insufficient inspection presence. We found that trucks entering the United States at partially staffed crossings were more likely to have safety problems, as evidenced by their greater out-of-service rates compared with trucks entering the country at fully staffed crossings.<sup>17</sup>

#### Developing a Data-Driven, Risk-Based Approach to Oversight

A data-driven, risk-based approach—one that uses information to identify and prioritize nationwide risks and systematically target higher priority risks for remediation—would be necessary to ensure prudent use of limited oversight and enforcement resources. The Department's intention to require that transit agencies adopt such a safety program would meet the need for data-driven, risk-based oversight, but experience shows that adopting such an approach is difficult.

FAA's experience in implementing the Air Transportation Oversight System (ATOS) demonstrates the complexity of developing data-driven, risk-based oversight. ATOS was designed to analyze and prioritize safety risks identified during inspections of air carrier systems. We found that this approach is essentially sound. However, a number of actions were needed to realize the system's benefits. For example, in 2002 and 2005, we reported that FAA needed to strengthen its oversight to ensure consistent implementation of ATOS in the field. In 2008, we reported that FAA did not track field office inspections and alert the local, regional, and Headquarters offices to overdue inspections. In 2010, we found that FAA's ATOS inspections were still untimely, even after reducing the number of required inspections. The lack of timely inspections, combined with a greater need for inspector training in using the system, hindered FAA's ability to effectively target inspector resources to the areas of greatest need.

FMCSA was similarly challenged to implement SafeStat, which used an algorithm to rank large truck and bus motor carrier risks using data on crashes, drivers, vehicles, and safety management practices. We reported in 2004 that FMCSA did not use standard model development tools such as weighting and normalization to determine the relative importance or value of indicators developed for the SafeStat model. To address our concerns, FMCSA hired a contractor to revalidate SafeStat. In December 2010, FMCSA implemented the Safety Measurement System, a component of its Compliance Safety Accountability program, to replace SafeStat and address limitations in how it measures safety.

<sup>&</sup>lt;sup>17</sup> The out-of-service rate is the percentage of trucks removed from service because of serious safety violations.

FTA's efforts to work with TRACS in collecting information on safety management system principles and components could be useful in the development of a data-driven, risk-based oversight and enforcement approach. However, several key tasks remain. Specifically, FTA would need to identify and collect data on the most significant safety risks; develop a valid oversight model that identifies safety elements for assessment and uses accepted statistical tools such as weighting, regression analysis, and normalization; and periodically refine its oversight model as needed to ensure the most effective safety program.

### **Ensuring Effective Oversight and Enforcement of New Standards and Regulations**

FTA's thorough oversight and enforcement would be needed to ensure states' compliance with new transit safety standards it may establish under an enhanced oversight role. Our work has shown that Operating Administrations have faced the challenge of implementing effective oversight and enforcement—due in part to a lack of clear and comprehensive criteria and guidance. For example, in 2010, we reported that due to a lack of criteria and guidance, FHWA bridge engineers judged States to be substantially compliant with National Bridge Inspection Standards, despite deficiencies that could pose serious risks to public safety. In one case, a State failed to close 96 bridges as required.

We found similar weaknesses at FAA. Between 2005 and 2007, FAA did not perform required routine oversight of American Airlines' CASS and reliability programs—key systems for monitoring aircraft maintenance. FAA reviewed the carrier's policies and procedures governing the systems, but did not determine whether the carrier actually followed them. In April 2009, NTSB determined that the CASS failed to detect repeated maintenance discrepancies, which contributed to the September 2007 in-flight engine fire on an American Airlines aircraft.

Various options exist for promoting compliance, such as funding incentives, withholding grant funds, and imposing civil penalties. Funding incentives encourage compliance with regulations, standards, and other initiatives. For example, FMCSA funded incentive grants to states that improved the quality of safety data. For rail transit safety, Federal funding could serve as a significant incentive as States currently devote very limited resources for oversight. With the exception of California, State staffing levels average less than one FTE employee.

Alternatively, if FTA is given a direct role in overseeing rail transit safety as proposed by the Secretary, its options would include withholding funding or imposing civil penalties for noncompliance with safety regulations. In using these tools, however, FTA should consider the potential for service reductions or higher fares if States have difficulty covering the additional costs resulting from withholding funds or imposing civil penalties. This risk is mitigated if safety

enforcement guidance clearly defines the situations that call for withholding funds or imposing civil penalties. We reported in January 2010 that FHWA's lack of clear and comprehensive guidance defining procedures to enforce compliance with bridge inspection standards led to inconsistencies in enforcement activities and delays in States' remediation of deficiencies.

#### CONCLUSION

While rail transit is relatively safe, catastrophic incidents such as the WMATA crash in June 2009 have raised significant concerns about the effectiveness of rail transit safety oversight. In response to those concerns, the Secretary proposed legislation that would expand and enhance the Federal role in the oversight of rail transit safety. The nature and scope of any future enhancements to FTA's oversight authority would depend on whether Congress enacts authorizing legislation. Whatever the future decision, the Department has initiatives underway to enhance transit safety under current authority, such as establishing TRACS to analyze transit safety issues. However, sustained action is needed within FTA's current authority to improve rail transit safety activities related to new and increased use of safety data. Additionally, if Congress enacts future enhancements, consideration of the key challenges we identified in this report could help FTA avoid difficulties that other Operating Administrations experienced in standing up and implementing nationwide safety programs.

#### RECOMMENDATIONS

We recommend that the FTA Administrator identify actions taken or planned to:

- 1. Work with the Volpe National Transportation Systems Center to complete FTA's assessment of existing data management activities and safety data needs.
- 2. Consult with stakeholders to identify gaps in NTD data and opportunities, under its current authority, to improve the NTD's usefulness to the transit industry.
- 3. Develop an updated performance plan that identifies clear and specific rail transit safety performance measures that align with the Department's strategic goals and with FTA's rail transit safety activities.
- 4. Assess FTA's progress in meeting the rail transit safety performance measures on an annual basis and produce a report summarizing results.

# AGENCY COMMENTS AND OFFICE OF INSPECTOR GENERAL RESPONSE

We provided FTA our draft report on October 3, 2011, and received its response on December 16, 2011. FTA's response is included in its entirety as an appendix to this report. We made technical clarifications in this final report, where appropriate, based on FTA's input to the draft report. FTA fully concurred with recommendations 1 and 2 and partially concurred with recommendations 3 and 4.

For recommendations 1 and 2, we consider FTA's reported actions taken to be sufficient, and therefore, consider these recommendations resolved but open pending receipt of documentation supporting the actions taken.

For recommendations 3 and 4, FTA stated that it would evaluate the need for improved performance information on rail transit safety, but only if Congress enacts legislation authorizing an enhanced safety oversight role for FTA. FTA further stated that until such time, its performance measures and reporting processes are sufficient. We recognize that significant expansions to existing performance measures and reporting mechanisms may not be appropriate at this time because of FTA's limited authority and resources. However, in our view, FTA's current authority allows FTA to at least separate rail transit fatalities and injuries from other modes of transit in the Department's Annual Performance Report to provide a baseline for evaluating its current rail transit safety activities. Incorporating a new rail transit-specific measure into this existing annual report would meet the intent of recommendations 3 and 4. Accordingly, we request that FTA reconsider its position in regards to recommendations 3 and 4.

#### **ACTIONS REQUIRED**

In accordance with follow-up provisions in Department of Transportation Order 8000.1C, we request that FTA provide information and documentation demonstrating actions taken to implement recommendations 1 and 2. Further, we request that FTA reconsider its response to recommendations 3 and 4, based on the additional explanation provided in our final report. We request that FTA provide this additional documentation and response within 30 days. We appreciate the courtesies and cooperation of FTA representatives during this audit. If you have questions concerning this report, please call Joseph W. Comé, Assistant Inspector General for Highway and Transit Audits, at (202) 366-5630 or Kerry R. Barras, Program Director, at (817) 978-3318.

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cc: Audit Liaison, FTA Audit Liaison, OST

# EXHIBIT A. REPORTS, TESTIMONIES, AND OTHER DOCUMENTS REVIEWED

- 2010 National State of Good Repair Assessment, Federal Transit Administration, U.S. Department of Transportation, June 2010.
- State Safety Oversight Program for Rail Fixed-Guideway Systems, Report Number TR-1999-071, Office of Inspector General, U.S. Department of Transportation, March 12, 1999.
- 2009 Rail Safety Statistics Report, Federal Transit Administration, U.S. Department of Transportation, March 2010.
- Rail Modernization Study, Report to Congress, Federal Transit Administration, U.S. Department of Transportation, April 2009.
- Surface Transportation Safety: Motor Carrier Safety and Related Matters, Testimony Number TR-1999-055, Office of Inspector General, U.S. Department of Transportation, February 23, 1999.
- Audit of Oversight of Highway Rail Grade Crossing Accident Reporting, Investigations, and Safety Regulations, Report Number MH-2006-016, Office of Inspector General, U.S. Department of Transportation, November 28, 2005.
- National Bridge Inspection Program: Assessment of FHWA's Implementation of Data-Driven, Risk-Based Oversight, Report Number MH-2009-013, Office of Inspector General, U.S. Department of Transportation, January 12, 2009.
- Best Practices for Improving Oversight of State Highway Safety Programs, Report Number MH-2008-046, Office of Inspector General, U.S. Department of Transportation, March 25, 2008.
- Effectiveness of Federal Drunk Driving Programs, Testimony Number CC-2008-013, Office of Inspector General, U.S. Department of Transportation, October 25, 2007.
- GAO-10-730, "Transit Rail: Potential Rail Car Cost-Saving Strategies Exist," Government Accountability Office, June 2010.
- Federal Highway Administration: National Tunnel Inspection Standards Notice of Proposed Rulemaking, 75 Federal Register 140, July 22, 2010.
- The Department of Transportation's Rulemaking Process, Report Number MH-2000-109, Office of Inspector General, U.S. Department of Transportation, July 20, 2000.
- Hearing on Public Transit Safety: Examining the Federal Role, Statement of the Honorable Ray LaHood, Secretary of Transportation, Before the Committee on Transportation and Infrastructure, Subcommittee on Highways and Transit, U.S. House of Representatives, December 8, 2009.

- Oversight of Aircraft Maintenance, Continuing Analysis and Surveillance Systems, Report Number AV-2002-066, Office of Inspector General, U.S. Department of Transportation, December 12, 2001.
- Audit of DOT's Rulemaking Process and Tracking System, Report Number SC-2004-035, Office of Inspector General, March 2, 2004.
- Follow-Up Audit of DOT's Rulemaking Process and Tracking System, Report Number SC-2005-031, Office of Inspector General, U.S. Department of Transportation, December 21, 2004.
- GAO-09-205, Federal Rulemaking: Improvements Needed to Monitoring and Evaluation of Rules Development as Well as to the Transparency of OMB Regulatory Reviews, Government Accountability Office, April 2009.
- Review of the Office of Defects Investigation, Report Number MH-2002-071, Office of Inspector General, U.S. Department of Transportation, January 3, 2002.
- National Transportation Safety Board Accident Report: Collision Between Two Washington Metropolitan Transit Authority Trains at the Woodley Park-Zoo/Adams Morgan Station in Washington, D.C. November 3, 2004 (NTSB/RAR-06/01), Adopted March 23, 2006.
- Fatigue Management Survey Results: State Safety Oversight and Rail Transit Agencies Affected by 49 CFR Part 659, Federal Transit Administration, Office of Safety and Security, U.S. Department of Transportation, September 2006.
- DOT's FY 2001 Top Management Challenges, Report Number PT-2001-017, Office of Inspector General, U.S. Department of Transportation, January 18, 2001.
- Significant Improvements in Motor Carrier Safety Program but Loopholes for Repeat Violators Need Closing, Report Number MH-2006-046, Office of Inspector General, U.S. Department of Transportation, April 21, 2006.
- On-Demand Operators Have Less Stringent Safety Requirements and Oversight than Large Commercial Air Carriers, Report Number AV-2009-066, Office of Inspector General, U.S. Department of Transportation, July 13, 2009.
- DOT's FY 2011 Top Management Challenges, Report Number PT-2011-010, Office of Inspector General, U.S. Department of Transportation, November 15, 2010.
- S. 1501: the Motor Carrier Safety Improvement Act of 1999, Report Number TR-1000-134, Office of Inspector General, U.S. Department of Transportation, September 29, 1999.
- FY 2011 Federal Transit Administration Budget Estimates, Federal Transit Administration, U.S. Department of Transportation, Submitted for use of the Committees on Appropriations.
- DOT's Implementation of the American Recovery and Reinvestment Act: Continued Management Attention is Needed to Address Oversight

- Vulnerabilities, Report Number MH-2010-024, Office of Inspector General, U.S. Department of Transportation, November 30, 2009.
- Interim Report on Status of Implementing the North American Free Trade Agreement's Cross-Border Trucking Provisions, Report Number MH-2001-059, Office of Inspector General, U.S. Department of Transportation, May 8, 2001.
- Air Transportation Oversight System, Report Number AV-2002-088, Office of Inspector General, U.S. Department of Transportation, April 8, 2002.
- Safety Oversight of an Air Carrier Industry in Transition, Report Number AV-2005-062, Office of Inspector General, U.S. Department of Transportation, June 3, 2005.
- Review of FAA's Oversight of Airlines and Use of Regulatory Partnership Programs, Report Number AV-2008-057, Office of Inspector General, U.S. Department of Transportation, June 30, 2008.
- FAA Needs to Improve Risk Assessment Processes for its Air Transportation Oversight System, Report Number AV-2011-026, Office of Inspector General, U.S. Department of Transportation, December 16, 2010.
- SafeStat, Motor Carrier Safety Status Measurement System, Methodology: Version 8.6, Federal Motor Carrier Safety Administration, U.S. Department of Transportation, January 2004.
- Improvements Needed in the Motor Carrier Safety Status Measurement System, Report Number MH-2004-034, Office of Inspector General, U.S. Department of Transportation, February 13, 2004.
- Final Report on FHWA Oversight of the Highway Bridge Program and National Bridge Inspection Program, Report Number MH-2010-039, Office of Inspector General, U.S. Department of Transportation, January 14, 2010.
- FAA's Oversight of American Airlines' Maintenance Programs, Report Number AV-2010-042, Office of Inspector General, U.S. Department of Transportation, February 16, 2010.
- GAO-11-217R, "FTA Rail Safety Data Reliability," Government Accountability Office, January 31, 2011.

OIG reports and testimonies are available on our website: www.oig.dot.gov.

#### **EXHIBIT B. OBJECTIVE, SCOPE, AND METHODOLOGY**

Our audit objective was to identify future challenges FTA would likely face in developing and implementing enhanced rail transit safety oversight. We also identified actions FTA could take under its current authority to improve safety oversight. To answer our objective, we conducted research and interviewed a broad range of industry stakeholders to identify and discuss challenges and risks associated with the proposed enhanced oversight program. We made site visits and held teleconferences with officials representing the following organizations.

- Federal Transit Administration Headquarters in Washington, D.C.
- Federal Transit Administration regional offices in New York, New York; Fort Worth, Texas; and San Francisco, California
- State Safety Oversight Agencies in New York, Texas, and California
- Tri-State Oversight Committee, SSOA for the Washington Metropolitan Area Transit Authority
- Transit agencies, including Dallas Area Rapid Transit, Bay Area Rapid Transit, New York City Metropolitan Transportation Authority, and Washington Metropolitan Area Transit Authority
- National Transportation Safety Board
- American Public Transportation Association
- Federal Motor Carrier Safety Administration

In addition, we attended the Department's Transportation Safety Institute training course on Transit Rail System Safety. While at the training site in Denver, Colorado, we discussed transit safety challenges with other training attendees representing Federal, State, and transit system stakeholders.

We reviewed prior OIG audit reports and testimonies that focused on data quality and reporting, program goals and performance measures, development of safety standards, and oversight and enforcement. We also reviewed relevant work of the Government Accountability Office and the National Transportation Safety Board.

We conducted our work from January 2010 through October 2011 in accordance with generally accepted Government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

# EXHIBIT C. CHALLENGES AND PRIORITY ACTIONS FOR ENHANCED RAIL TRANSIT SAFETY

Phase	Challenge	Priority Actions		
Collecting Data For Effective Safety Oversight				
Current Authority	Maximize the usefulness of current rail transit safety data	Consult stakeholders on safety data improvements and usefulness; complete assessment of existing data management activities and data needs		
Program Development	Identify data needed to develop and implement enhanced oversight	Conduct assessment of data needs and start collecting needed data		
Program Implementation	Ensure quality of rail transit safety data	Implement new practices as needed to collect complete, accurate, and timely data		
Developing and Implementing Safety Goals and Performance Measures				
Current Authority	Evaluate current transit safety activities and key strategies	Update performance plan with measures and targets; report on impact of transit safety activities and strategies		
Program Development	Establish uniform measures with states and transit agencies	Collect data on state and transit agency implementation of key strategies		
Program Implementation	Assess performance progress	Analyze trend projections; report on impact of safety oversight; update goals		
Establishing National	Rail Transit Safety Standards			
Current Authority	Collect information for developing new safety standards	None		
Program Development	Create national rail transit safety standards and regulations	Establish requirements for proposed safety management system and issue guidance for rail transit agencies; enlist leadership commitment for timely rulemaking; identify and prioritize high risk safety areas and develop rules		
Program Implementation	Ensure periodic reviews and updates of safety standards and regulations	Continue rulemaking process to establish new and update existing safety standards and regulations		
Conducting Enhanced	Oversight and Enforcement			
Current Authority	none	None		
Program Development	Address organizational placement and workforce issues; develop enhanced data-driven, risk-based oversight	Develop measures to ensure organizational independence and effectiveness; assess human capital requirements for enhanced oversight; identify and prioritize nationwide transit safety risks, and target mitigation strategies to the highest priority risks		
Program Implementation	Follow through to ensure effective oversight and enforcement of new standards and regulations	Develop criteria for assessing transit agencies' compliance with Federal standards and guidance defining actions to address noncompliance		

Exhibit C. Challenges and Priority Actions for Enhanced Rail Transit Safety

# EXHIBIT D. KEY MANAGEMENT QUESTIONS BASED ON IDENTIFIED CHALLENGES

Challenge	Key Management Questions	
Collecting data for effective safety oversight	1a. Is the Department maximizing the use of current data to improve transit safety?	
	1b. Is the Department sufficiently consulting with stakeholders to fully utilize current data?	
	1c. Has the Department identified the data elements needed to implement enhanced risk-based safety oversight?	
	1d. Are procedures in place to ensure that essential data elements are defined in a uniform manner and provided timely, completely, and accurately?	
Developing and implementing safety goals and performance measures	2a. Has the Department developed uniform performance measures for application across transit agencies?	
	2b. Will these measures allow the Department to establish baselines for transit safety against which progress can be measured?	
	2c. Are procedures in place to ensure the Department can evaluate nationwide progress?	
Establishing national rail transit safety standards	3a. Has the Department developed a plan for prioritizing standards and addressing past problems with delays in issuing new standards?	
	3b. Has the Department made sufficient use of advisory committees in the development of standards?	
	3c. Has the Department developed a process to regularly assess standards to ensure that necessary updates occur?	
Conducting enhanced safety oversight and enforcement	4a. Has the Department addressed key organizational and workforce issues necessary to foster enhanced oversight and enforcement?	
	4b. Has the Department selected appropriate and statistically valid tools or models to perform data-driven risk-based oversight?	
	4c. Does the Department have the systems in place to successfully implement the tools and models selected?	
	4d. Has the Department identified tools for promoting compliance that strike the proper balance between incentives, withholding funding, and civil penalties?	

#### **EXHIBIT E. MAJOR CONTRIBUTORS TO THIS REPORT**

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Harriet Lambert	Writer-Editor
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#### **APPENDIX. AGENCY COMMENTS**



### **Memorandum**

U.S. Department of Transportation Federal Transit Administration

Subject: ACTION: Management Response to OIG Draft Report, Date: December 16, 2011

"Challenges to Improving Oversight of Rail Transit Safety and Implementing an Enhanced Federal Role"

From: Peter Rogoff, Administrator Reply to Angela Dluger Federal Transit Administration Attn. of: (202) 366-5303

To: Calvin L. Scovel III Inspector General

The Federal Transit Administration (FTA) agrees with the Office of Inspector General (OIG) draft report finding that we lack sufficient statutory authority to issue and enforce national rail transit safety standards. FTA has initiatives both completed and under way to enhance rail transit safety under its current authority. However the single most important rail transit safety priority for the Department is providing FTA with the statutory authority necessary to implement a national comprehensive safety management system (SMS) that is data-driven, risk-based, and offers a consistent safety foundation for rail transit systems. As a result, we differ with some of the OIG draft report's recommendations to develop additional performance measures or reporting mechanisms under FTA's current legal authority. Instead, FTA has focused its limited resources and authority on other actions, described below, which offer greater potential safety benefit, as it continues to pursue authority to establish a consistent approach to safety fundamentals for rail systems across the U.S.

#### Why FTA Needs Regulatory Oversight Authority

The FTA, which finances the majority of the capital expenditures for rail transit systems nationwide, has been prohibited by law for 47 years from directly overseeing transit safety. As a result, the FTA is annually awarding funding to transit providers across the Nation with no direct way to ensure this investment is administered within a consistent and appropriate safety approach for rail transit passengers and workers. Instead, rail transit safety oversight is left almost entirely to a patchwork of 27 state agencies with inconsistent standards, as well as some with inadequate powers and insufficient staffing. Today, more than 14 million passengers use the nation's rail transit systems every weekday — eight times more passengers than commuter railroads and Amtrak, and over six times more passengers than the airlines. However, as rail

transit ridership continues to grow, this hands-off approach to providing consistent standards has increasingly come into question.

Concerns have been cited about current rail transit safety regime by the National Transportation Safety Board (NTSB) and others. As far back as 1971, the NTSB issued a series of recommendations urging the government to strengthen all aspects of safety among transit agencies. Again in 1978 the NTSB recommended that the Department develop oversight capabilities to ensure that safety is regulated and enforced on all of the Nation's rail transit systems. The NTSB made similar findings from investigations involving the 2009 Washington Metro rail accident that killed nine people and the 2008 Miami International Airport people mover accident. In the case of Miami, NTSB's November 2011 report cited serious oversight lapses and a lack of Federal oversight authority as contributing factors.

While FTA is taking action, to the full extent of its existing statutory authority, we continue to maintain that FTA requires enhanced statutory authority to establish consistent, meaningful policies and procedures and a better means to ensure that standards are met on every system. This consistent national oversight framework would establish a basic foundation from which rail transit systems could build upon as necessary to meet system-specific requirements.

#### FTA is Taking Action Under Current Authority

Consistent with its limited authority, FTA has ongoing efforts to improve rail transit safety oversight and is taking steps now to prepare for enhanced oversight.

TRACS. FTA's current focus is to raise awareness on safety incidents of the greatest concern and to develop the necessary SMS framework as guided by the Transit Rail Advisory Committee for Safety (TRACS). The Department established TRACS to provide information, advice, and recommendations to the Secretary of Transportation and the FTA Administrator on all matters relating to the safety of U.S. public transportation systems and activities. For example, FTA, along with the TRACS committee, are reviewing various models of voluntary non-punitive close-call employee accident reporting systems in order to develop recommendations to assist the FTA with implementing a pilot program for the transit industry. This effort is an essential component of an effective data-driven SMS and would generate real-time data to assist with identifying and remediating potential hazards.

Outreach. FTA conducts a variety of key safety activities, such as workshops, roundtables, National Transit Database (NTD) safety and security module training and safety newsletters. These activities target the most frequent causes of rail transit accidents; focus technical assistance resources to address high-risk causal factors; and spotlight industry activities and practices to accelerate industry awareness in order to mitigate the largest risks.

<u>Data Management</u>. FTA has completed numerous actions to improve transit safety data and has several major efforts underway that will improve the availability and quality of data. FTA validated historic industry data where possible, has improved the validation checks for rail State Safety Oversight Agency (SSOA) data annually for recent reporting years and reviews and analyzes data continuously to identify gaps and to monitor the quality of safety data it receives

from the industry. FTA is working to integrate the NTD and rail SSOA reporting processes based on SMS principles.

#### OIG RECOMMENDATIONS AND FTA RESPONSE

**Recommendation 1:** Work with the Volpe National Transportation Systems Center (Volpe) to complete FTA's assessment of existing data management activities and safety data needs.

**Response:** Concur. FTA completed the recommended action. FTA has assessed its existing data management activities and safety data needs. Two reports document these activities. The first, titled "Safety and Security Data Management – Assessment Report," was completed on August 31, 2009. It evaluated internal processes and developed a comprehensive safety and security data inventory. The second, titled "Safety and Security Data Needs Assessment Report - FTA's Safety and Security Data Management Program Initiative," was completed on August 26, 2011. It provided a needs assessment of FTA's safety data quality, needs and strategies.

**Recommendation 2:** Consult with stakeholders to identify gaps in NTD data and opportunities, under its current authority, to improve NTD's usefulness to the transit industry.

**Response:** Concur. FTA completed the recommended action. FTA's commitment to stakeholder outreach and obtaining industry input is exemplified by the advisory role of TRACS. TRACS has considered safety data gaps and opportunities through its work groups. As a result, TRACS established and tasked a workgroup with providing consensus advice to FTA on proposed models and strategies for transit systems to implement a voluntary non-punitive reporting system for close-call/near-miss incidents. Two other FTA efforts address this recommendation: (1) the needs assessment report completed in August 2011 contains a catalog of NTD data gaps and opportunities and (2) stakeholder outreach and public comments will inform FTA's efforts to add transit asset data collection as a component of NTD reporting.

**Recommendation 3:** Develop an updated performance plan that identifies clear and specific rail safety performance measures that align with the Department's strategic goals and with FTA's rail transit safety activities.

**Response:** Concur in part. As described above, the Department believes the most fundamentally important action to improve rail transit safety at the Federal level is for Congress to empower FTA with the statutory authority necessary to construct a logical and consistent national safety framework. The Department's rail transit safety proposal, a version of which was transmitted to Congress in December 2009, and which received unanimous bipartisan support of the Senate Banking Committee, proposed the basis for one such structure.

Subsequent to the passage of legislation that provides FTA with sufficient and appropriate rail transit safety authority, it would be necessary to evaluate the nature and extent of a performance plan that could provide meaningful and useful information in measuring the effectiveness of our actions. Until such time, we believe the performance standards in place, along with the efforts underway to improve data and as guided by TRACS to prepare for a possible future enhancement of safety oversight authority, are sufficient.

**Recommendation 4:** Assess FTA's progress in meeting the rail safety performance measures on an annual basis and produce a report summarizing results.

**Response:** Concur in part. FTA maintains an array of regular reporting mechanisms conveyed annually in the Department's Annual Performance Report and the Department's Agency Financial Report, as well as in FTA's Congressional Justification of Appropriations. Transit condition and performance information is also included in the Department's Conditions and Performance Report which is updated every two years.

As described above, if enhanced safety oversight authority were provided, it may be necessary and appropriate to reevaluate FTA's progress in meeting established rail safety performance measures and reporting mechanisms. Until such time, we believe those currently in place and as identified by TRACS are sufficient.