GAO

Report to the Committee on Transportation and Infrastructure, House of Representatives

July 2006

RAIL TRANSIT

Additional Federal Leadership Would Enhance FTA's State Safety Oversight Program





Highlights of GAO-06-821, a report to Committee on Transportation and Infrastructure, House of Representatives

Why GAO Did This Study

The U.S. rail transit system is a vital component of the nation's transportation infrastructure. Safety and security oversight of rail transit is the responsibility of statedesignated oversight agencies following Federal Transit Administration (FTA) requirements. In this report, GAO addressed: (1) how the State Safety Oversight program is designed; (2) what is known about the program's impact; and (3) challenges facing the program. We also provide information about oversight of transit systems that cross state boundaries. To do our work we surveyed state oversight agencies and transit agencies covered by FTA's program.

What GAO Recommends

GAO is recommending that the Secretary of Transportation direct FTA to (1) set performance goals for the program and develop a plan for maintaining the stated schedule of auditing oversight agencies and (2) develop and encourage completion of a recommended training curriculum for oversight agency staff. Also, we recommend that the Secretary of the Department of Homeland Security (DHS) direct the Assistant Secretary of the Transportation Security Administration (TSA) to coordinate their security oversight activities and audits with FTA and transit and oversight agencies. FTA and TSA generally concurred with the report and are considering how to implement the recommendations.

www.gao.gov/cgi-bin/getrpt?GAO-06-821.

To view the full product, including the scope and methodology, click on the link above. For more information, contact Katherine Siggerud on (202) 512-2834 or siggerudk@gao.gov.

RAIL TRANSIT

Additional Federal Leadership Would Enhance FTA's State Safety Oversight Program

What GAO Found

FTA designed the State Safety Oversight program as one in which FTA, other federal agencies, states, and rail transit agencies collaborate to ensure the safety and security of rail transit systems. FTA requires states to designate an agency to oversee the safety and security of rail transit agencies that receive federal funding. Oversight agencies are responsible for developing a program standard that transit agencies must meet and reviewing the performance of the transit agencies against that standard. While oversight agencies are to include security reviews as part of their responsibilities, TSA also has security oversight authority over transit agencies.

Officials from 23 of the 24 oversight agencies and 35 of the 37 transit agencies with whom we spoke found the program worthwhile. Several transit agencies cited improvements through the oversight program, such as reductions in derailments, fires, and collisions. While there is ample anecdotal evidence suggesting the benefits of the program, FTA has not definitively shown the program's benefits and has not developed performance goals for the program, to be able to track performance as required by Congress. Also, because FTA was reevaluating the program after the September 11, 2001, terrorist attacks, FTA did not keep to its stated 3-year schedule for auditing state oversight agencies, resulting in a lack of information to track the program's trends. FTA officials recognize it will be difficult to develop performance measures and goals to help determine the program's impact, especially since fatalities and incidents involving rail transit are already low. However, FTA has assigned this task to a contractor and has stated that the program's new leadership will make auditing oversight agencies a top priority.

FTA faces some challenges in managing and implementing the program. First, expertise varies across oversight agencies. Specifically, officials from 16 of 24 oversight agencies raised concerns about not having enough qualified staff. Officials from transit and oversight agencies with whom we spoke stated that oversight and technical training would help address this variation. Second, transit and oversight agencies are confused about what role oversight agencies are to play in overseeing rail security, since TSA has hired rail inspectors to perform a potentially similar function, which could result in duplication of effort.

Examples of Rail Transit Systems Subject to FTA State Safety Oversight Program



Sources: PennDOT; Seattle Center Monorail; San Francisco Municipal Railway; GAO

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Abbreviations

APTA	American Public Transportation Association
ATSA	The Aviation and Transportation Security Act
CPUC	California Public Utilities Commission
DHS	Department of Homeland Security
DOT	Department of Transportation
DRPA	Delaware River Port Authority
FAA	Federal Aviation Administration
FMCSA	Federal Motor Carrier Safety Administration
FRA	Federal Railroad Administration
FTA	Federal Transit Administration

FTE full-time equivalent

GPRA Government Performance and Results Act NJDOT New Jersey Department of Transportation

MUNI San Francisco Municipal Railway NTSB National Transportation Safety Board PATCO Port Authority Transit Corporation

PennDOT Pennsylvania Department of Transportation

PHMSA Pipeline and Hazardous Materials Safety Administration

PTSB Public Transportation Safety Board TOC Tri-State Oversight Committee

TSA Transportation Security Administration

TSI Transportation Safety Institute

WMATA Washington Metropolitan Area Transit Authority

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United States Government Accountability Office Washington, D.C. 20548

July 26, 2006

The Honorable Don Young Chairman The Honorable James L. Oberstar Ranking Democratic Member Committee on Transportation and Infrastructure House of Representatives

Rail transit moves over 7 million daily passengers. According to Federal Transit Administration (FTA) statistics, rail transit accounts for less than 6 percent of all public transportation's accidents while providing almost 32 percent of all public transportation's passenger trips, making it one of the safest modes of public transportation. However, safety and security are still concerns, especially as the number of rail transit systems—and therefore the number of passengers riding rail transit—increases. For example, the number of rail transit systems in FTA's State Safety Oversight program increased from 32 in 1997 to 42 in 2006, and as many as 7 new systems are expected to open in the next 3 years. Furthermore, the number of fatalities and accidents has varied over the past few years. For example, while fatalities ranged from 26 to 57 per year (with an approximate average of 40 per year) between 1999 and 2005, total reported accidents decreased 3 percent. Finally, recent acts of terrorism on European and Indian transit systems illustrate the need to maintain high levels of safety and security for transit.

The federal government is involved, in varying degrees, with the safety and security of the nation's transportation system. For example, the Department of Transportation (DOT) provides oversight of several transportation modes. Within DOT, the Federal Railroad Administration (FRA), Federal Motor Carrier Safety Administration (FMCSA), Federal Aviation Administration (FAA), and the Pipeline and Hazardous Materials Safety Administration (PHMSA) promulgate regulations and technical standards that govern how vehicles or facilities in their respective modes must be operated or constructed. In addition, each of these agencies use federal or state inspectors, or a combination of both, to determine compliance with the safety regulations and guidance they issue. Finally, these agencies can mandate corrective actions and levy fines to transportation operators who do not comply with regulations.

FTA's oversight of safety and security differs from the other DOT agencies. In 1982, FTA's role in transit safety evolved when Congress gave it the

discretion to investigate unsafe conditions in any operation financed by the agency. Congress also gave FTA the power to withhold funds until a plan for correcting the conditions had been approved, but did not give it power to levy fines or take legal actions against transit agencies. However, the National Transportation Safety Board (NTSB) suggested that states and localities take a more proactive role in overseeing transit safety, and that FTA closely monitor this state and local oversight.² Subsequently, in 1991, Congress required FTA to (1) issue regulations requiring states to designate an oversight agency to oversee the safety and security of rail transit agencies and (2) withhold federal funds if a state did not comply with the regulations. Through the resulting State Safety Oversight program, which became effective in 1997, FTA requires states to designate an oversight agency to implement FTA safety and security oversight over rail transit agencies. In addition, in 2001, Congress passed legislation creating the Transportation Security Administration (TSA), and defined its primary responsibility as ensuring security in all modes of transportation. While TSA's most public role to date has been its airport screening duties, the agency is taking several steps to secure the U.S. rail transit system, including developing a rail inspector force.

To assist with Congress' oversight activities, we (1) describe how the State Safety Oversight program is designed, (2) identify what is known about the impact of the program on rail transit safety and security, and (3) identify any challenges to the State Safety Oversight program. In addition, you asked us to provide information on how the State Safety Oversight program functions in areas where transit systems cross state lines. See appendix I for a description of program implementation where transit systems cross state lines.

To determine how the program is designed, we interviewed a wide range of stakeholders including FTA, NTSB, TSA, and the American Public Transportation Association (APTA), an industry group. We also reviewed program documentation and guidance. To identify what is known about the impact of the program on rail transit safety and security, we reviewed FTA

¹Prior to 1991, FTA was known as the Urban Mass Transportation Administration. For simplicity, we will refer to the agency as FTA throughout this report.

²NTSB is an independent federal agency charged with investigating every civil aviation accident in the United States and significant accidents in the other modes of transportation—railroad, highway, marine, and pipeline—and issuing safety recommendations aimed at preventing future accidents.

documents and interviewed officials with FTA, NTSB, APTA, transit agencies, and state safety oversight agencies. To identify challenges facing the program, we conducted interviews with 24 of the 25 state safety oversight agencies across the country and 37 of the 42 operating rail transit agencies. We visited 8 oversight agencies and 17 transit agencies. We selected these agencies to present a cross-section of transit and oversight agencies in major cities, smaller cities, states with several rail transit agencies, and states with only one rail system. In addition, 2 of the 17 transit agencies that we selected will soon begin operations to see how the program may be incorporated into new transit systems. Also, we selected 3 of the 17 because they cross state boundaries, so that we could determine how the program functions in these regions. We interviewed staff of the transit and oversight agencies we visited and reviewed relevant program documentation such as interagency agreements and program standards. We conducted our work from August 2005 through June 2006 in accordance with generally accepted government auditing standards. (See app. III for more detailed information on our methodology.)

Results in Brief

FTA designed the State Safety Oversight program as one in which FTA, other federal agencies, states, and rail transit agencies collaborate to ensure the safety and security of rail transit systems.

• FTA requires states to designate a state safety oversight agency and develops rules and guidance that those designated agencies are to use to perform their oversight. FTA's rules and guidance are generally based on a system safety approach to provide a comprehensive and organized approach to safety and security. In addition, FTA officials require that oversight agencies include risk management components in what they require of the transit agencies they oversee. FTA officials stated that these risk management components, such as hazard analysis and risk mitigation procedures, are applicable to transit and are similar to those used in other transportation mode safety approaches. Although FTA develops and enforces regulations, it neither directly oversees transit operations, nor provides funding for the program after state oversight agencies are designated.

³One oversight agency and five transit agencies declined to participate in our review.

- The designated state oversight agencies directly oversee transit agencies' activities. Among other things, they review transit agencies' safety and security system plans, audit the transit agencies at least every 3 years, and conduct periodic reviews of safety and security trends. States have designated several different types of agencies to serve as state oversight agencies. Most commonly, states have designated their transportation departments to fulfill this function, but public utility commissions, public safety agencies, and regional transportation authorities also serve in this role. In terms of funding, although states can use federal New Starts⁴ funding to set up a new oversight agency, states must support the continuing operation of the oversight agency with other, generally non-federal, sources of funding. Officials in 17 of the 24 state oversight agencies with whom we spoke reported that they use state funds for the program, while 10 of the 24 reported they charge the transit agency for oversight.
- Transit agencies develop and implement safety and security plans, assess hazardous conditions, report certain incidents to the oversight agency, conduct self audits, and keep the state oversight agency apprised of corrective actions.
- Federal agencies other than FTA have oversight responsibility for part of the safety and security of rail transit operations. Since 2003, the Department of Homeland Security (DHS) has had a role in transit security. DHS's Office of Grants and Training provides grants to transit and other local agencies to enhance security while TSA has security regulatory authority over rail transit agencies. TSA recently hired and is deploying a rail security inspector force to oversee compliance with existing security directives and any future regulations. In addition, FRA has jurisdiction to regulate the safety of portions of rail transit systems that share track or rights-of-way with the general railroad system.

Almost all oversight and transit agencies report that the State Safety Oversight program is worthwhile in terms of promoting and improving the safety and security of rail transit systems; however, there is limited information showing its impact on safety and security. Officials at 23 of the

⁴The New Starts program awards full-funding grant agreements for capital expenses for fixed guideway rail projects, and certain bus, trolley, and ferry projects. A full-funding grant agreement establishes the terms and conditions for federal participation in a project, including the maximum amount of federal funds available, which, by statute, cannot exceed 80 percent of the project's net cost.

24 oversight agencies and 35 of the 37 transit agency officials with whom we spoke believe the program is worthwhile. The transit agency officials primarily cite the importance of having state oversight agency staff "look over their shoulder," review safety and security trends, and require audits and corrective actions. Although many officials support the program, FTA's methods for obtaining information on transit safety and security (i.e., transit and oversight agency data and FTA audits of the oversight agencies) do not include performance measures and related program goals. FTA has not conducted audits every 3 years, as envisioned when the program began. According to FTA officials, they did not keep to their stated audit schedule because they were reassessing the priorities for the program after the September 11, 2001, terrorist attacks. FTA issued annual reports from 1999 through 2003 that track transit accident, crash, fatality, and other safety data; however, FTA officials have had difficulty identifying performance measures for the program and setting performance goals, because of the relatively low number of fatalities and incidents, and the varying design of rail transit systems, such as street trolleys and heavy rail. Furthermore, FTA audited all oversight agencies at least once in the past 8 years (except those that began operations in 2004 or later). They noted that while they conducted only four audits of oversight agencies from 2001 to 2004, they also conducted nine "safety and security readiness reviews" to ensure transit systems about to begin operations would be able to safely and securely begin passenger operations. Although the agency was focused on security after September 11, 2001, this infrequent schedule limits FTA's ability to conduct oversight, including collecting information on the safety oversight agencies and making informed and timely revisions to the program. Recent changes in FTA's program regulations and leadership provide an opportunity to address this lack of information, performance measures, and program goals, and to resume its stated audit schedule. For example, FTA has issued a revision to the regulations governing the State Safety Oversight program, recommitted to the audit process, and signed a contract that includes developing performance measures by the end of fiscal year 2006 and evaluating how new rail systems are implementing the program.⁵

⁵Congress passed the Government Performance and Results Act (GPRA), Pub. L. No. 103-62, in 1993. Under the act, federal agencies are to develop multiyear strategic plans, annual performance plans, and annual performance reports. According to GPRA, federal agencies are to include performance goals for agency activities in their strategic plans.

FTA faces some challenges in managing and implementing the program. First, the amount of staff and the level of state oversight-staff expertise (and thus their potential ability to oversee transit agencies) varies widely across the country. For example, one oversight agency requires its staff to have at least 5 years of rail transit experience. In contrast, another oversight agency assigned a state DOT transportation planner to work on safety and security oversight as a collateral duty. Although no officials identified a safety or security problem resulting from a lack of staff or expertise, officials from 16 of 24 state safety oversight agencies raised concerns about possibly not having enough qualified staff to carry out their oversight. Officials from three state oversight agencies stated that additional funding to hire more staff for this program would be helpful. Most transit and oversight agency officials with whom we spoke believe that federal funding for training and an FTA-developed curriculum would improve the qualifications and effectiveness of state oversight agency personnel. While FTA provides technical support on and supports the exchange of best practices for meeting its regulations, these activities do not include training on oversight approaches or providing funding to attend training classes. This contrasts with the approach taken by other DOT agencies, such as FRA and PHMSA, which provide free training or use agency funds to pay for state agency personnel to attend training sessions, in at least some instances. Although FTA considered addressing the lack of consistency in qualifications among state agencies in its recent regulations, FTA officials determined the agency lacks the legal authority to direct states to hire state safety oversight personnel with specific experience, training, or certification. A second challenge to implementing the program, according to officials from 20 of 24 state oversight agencies and 14 of 37 transit agencies, is the uncertainty about the federal role in transit security given that TSA has no formally defined role in FTA's program—even though it is the lead agency on security matters and has regulatory authority over security activities in transportation including rail. Although TSA's program is still developing, several oversight and transit agency officials with whom we spoke were concerned about the potential for duplication of effort given that state safety oversight agencies and TSA both review and comment on transit systems' security plans. Several transit agency officials described this as a particular concern due to the already limited resources they had available for responding to oversight activities. TSA and FTA recognize this concern and have begun discussions on how to coordinate their oversight efforts.

To help ensure that FTA has sufficient information to evaluate the program's performance, we are recommending that FTA's new program

leadership set performance goals for the program and develop a plan for maintaining FTA's stated schedule of auditing oversight agencies' performance at least once every 3 years. Also, to help oversight agency staff obtain adequate training to perform their duties, we are recommending that FTA develop a recommended training curriculum for oversight agency staff and work with oversight agencies to identify ways to address training deficiencies that exist among oversight agency staff. Finally, to reduce the potential for duplication of effort and confusion on the part of oversight and transit agencies regarding the security portion of the program, we are recommending that FTA and TSA coordinate their security oversight activities, including performing security audits in a coordinated fashion.

In commenting on a draft of this report, officials from FTA, TSA, and NTSB provided comments generally concurring with the report. Furthermore, FTA and TSA officials stated that they are working to determine how to implement the recommendations. Finally, TSA provided a technical comment, which we included in the report.

Background

In 1991, Congress passed the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA), which added Section 28 to the Federal Transit Act. ISTEA required FTA to establish a state-managed safety and security oversight program for rail transit agencies. As a result, on December 27, 1995, FTA published a set of regulations, called Rail Fixed Guideway Systems; State Safety Oversight (subsequently referred to as FTA's rule in this report), for improving the safety and security of rail transit agencies. State oversight agencies were required by the rule to approve transit agencies' safety plans by January 1, 1997, and security plans by January 1, 1998. As part of the FTA rule, FTA officials stated they incorporated APTA's 1991 Manual for the Development of Rail Transit System Safety Program Plans to describe steps the state oversight agencies should take in developing the program standards that transit agencies would have to meet.

⁶Pub. L. No. 102-240.

⁷Codified at 49 U.S.C. Section 5330.

⁸Codified at 49 CFR Part 659.

In 1995, at the time of the FTA rule's publication, 5 of 19 states affected by the FTA rule had oversight programs in place for rail transit safety and security, and no oversight agency met all the requirements in the FTA rule. During the first few years of implementation, FTA worked with states to develop compliant programs that addressed FTA's requirements. Ten years after FTA promulgated the initial rule, FTA published a revision to it in the Federal Register on April 29, 2005. The FTA rule stated that oversight agencies had to comply with the revised rule by May 1, 2006. The revisions address, in part, the needs of a growing oversight community and NTSB's recommendations arising from transit accident investigations. For example, according to FTA and NTSB, NTSB found that the initial rule did not include the requirement that oversight agencies verify transit agencies are following safe and secure operating procedures by formally documenting how transit agency employees were performing specific work functions in compliance with the transit agency's rules and procedures—a process known as "proficiency and efficiency testing." Thus, the revised rule specifies what the state oversight agency must require of rail transit systems regarding such verification, and incorporates into the regulation material previously incorporated by reference to the APTA manual. Finally, the revised rule included additional information on ensuring rail transit security and emergency preparedness.

FTA relies on staff in its Office of Safety and Security to lead the State Safety Oversight program—and hired the current Program Manager in March 2006. This manager is also responsible for other safety duties in addition to the State Safety Oversight program. Additional FTA staff within the Office of Safety and Security assist with outreach to transit and oversight agencies and additional tasks. For example, FTA has devoted a Transit Safety Specialist to the program full time; a Training Manager, Data Analyst, and Safety Analyst are also available to assist on an as-needed basis. FTA regional personnel are not formally involved with the program's day-to-day activities, though officials from several FTA Regional Offices help address specific compliance issues that occasionally arise at transit agencies. Also, staff in at least one FTA Regional Office have taken it upon themselves to take an active role supporting transit agencies and oversight agencies in meeting the program's requirements. In addition, regional staff

⁹Since the beginning of the State Safety Oversight program, the transit community affected by this oversight program grew from 19 states and 32 rail transit agencies to 26 states and 42 rail transit agencies as of July 2006. FTA anticipates that two new states and as many as seven new rail transit agencies will enter the State Safety Oversight program by 2009.

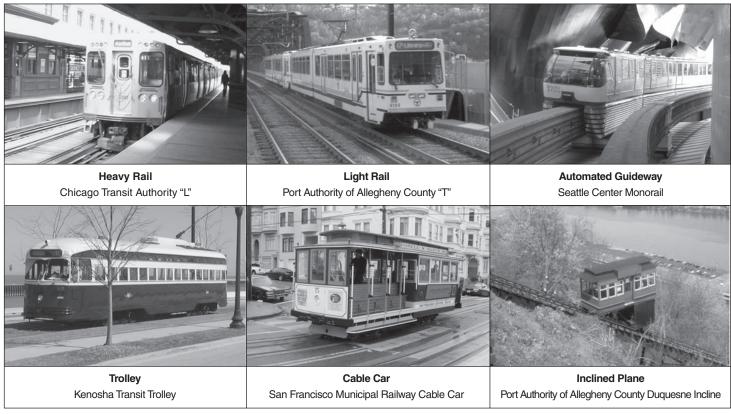
help states with new transit agencies establish new oversight agencies, help new transit agencies create safety and security plans, and have helped facilitate disputes between oversight and transit agencies as needed. However, after a transit system begins operations, the program is primarily managed from FTA's headquarters office. FTA also relies on contractors to do many of the day-to-day activities ranging from developing and implementing FTA's audit program of state oversight agencies to developing and providing training classes on system safety.

FTA's rule applies to all states with rail fixed guideway systems operating in their jurisdictions. The FTA rule defines a rail fixed guideway system as any light, heavy, or rapid rail system; monorail, inclined plane, funicular, trolley, or automated guideway that is not regulated by FRA and

- is included in FTA's calculation of fixed guideway route miles or receives funding under FTA's formula program for urbanized areas (49 U.S.C. 5336); or
- has submitted documentation to FTA indicating its intent to be included in FTA's calculation of fixed guideway route miles to receive funding under FTA's formula program for urbanized areas (49 U.S.C. 5336).

Figure 1 shows examples of the types of rail systems that are included in the State Safety Oversight program.

Figure 1: Examples of Rail Systems Included in the State Safety Oversight Program



Sources: PennDOT; Seattle Center Monorail; San Francisco Municipal Railway; GAO.

FTA's rule states that rail systems that are regulated by FRA, such as commuter railroads, are not considered rail transit agencies and are therefore not subject to its rule. In addition, FRA has oversight authority over the safety of portions of rail transit systems that share track or rights-of-way with the general railroad system. ¹⁰ Furthermore, the revised rule's definition of "rail fixed guideway system" includes systems built entirely without FTA capital funds, but that intend to receive FTA formula funding. Examples of these systems include Houston's METRORail system and the

¹⁰Information on FRA's jurisdiction over rail transit agencies with shared-use track can be found in FTA and FRA policy statements published in the *Federal Register* in July 2000. FRA clarified its position on safety jurisdiction over shared track situations. See 65 Fed. Reg. 42529 (July 10, 2000).

New Jersey Transit RiverLINE system. Rail transit operations that do not receive FTA formula funds are not subject to oversight through FTA's program. Las Vegas' monorail line does not receive FTA formula funds and therefore does not fall within the FTA program. However, some of the rail transit systems—including automated airport people-movers and sightseeing tramways—that are not subject to the FTA program may be subject to state-mandated oversight in certain states.

FTA and FRA have different regulatory authority and this has implications for their ability to provide oversight. 11 According to statute, FTA cannot regulate safety and security operations at transit agencies except for purposes of national defense or in cases of regional or national emergency. ¹² In addition, FTA does not have safety inspectors. FTA may, however, institute nonregulatory safety and security activities, including safety- and security-related training, research, and demonstration projects. In addition, FTA may promote safety and security through grant-making authority. Specifically, FTA may stipulate conditions of grants, such as certain safety and security statutory and regulatory requirements, and FTA may withhold funds for noncompliance with the conditions of a grant. ¹³ In relation to the State Safety Oversight program, both the authorizing statute and the FTA rule state FTA may withhold urbanized area program funds from states that do not meet the requirements of the program. ¹⁴ For example, FTA invoked this authority and withheld federal funding from two states that failed to meet initial deadlines specified in the FTA rule. FTA withheld approximately \$95 million in federal funding from one state for its failure to designate a state safety oversight agency and approximately \$2.3

¹¹We also contacted Canadian transit officials in Toronto and Montreal to discuss their safety and security oversight system. However, we found that there is no standard national system of rail safety and security oversight in Canada, except in cases where a transit system is classified as a regular railroad. According to officials, rail transit systems are usually self-regulated in Canada, though some submit to external safety audits conducted by APTA.

¹²49 U.S.C. sec. 5334 (b).

¹³See 49 U.S.C. sec. 5334 (b) and 49 U.S.C. sec. 5330.

 $^{^{14}}$ The Urbanized Area Formula Program makes federal resources available to urbanized areas and to state governors for transit capital assistance in urbanized areas. An urbanized area is an incorporated area with a population of 50,000 or more. Urbanized areas with populations of fewer than 200,000 people may also use FTA's formula funds for operating assistance.

million from another state for failure to meet the FTA rule's implementation deadlines.

FRA has broader jurisdiction over safety regulation than FTA. FRA oversees over 500 freight railroads and over 20 commuter railroads, in addition to Amtrak. According to agency officials, FRA can directly enforce safety statutes or regulations against railroads using a "toolkit" of consequences, which vary in severity and are used to compel rail carriers to comply with safety regulations. Most commonly, FRA will issue a civil penalty, or fine, against a railroad not in compliance with a particular regulation. Depending on the infraction, however, FRA can also issue an emergency order (the strongest response to noncompliance) or it can cite a defect (a minor deficiency that needs to be addressed but is not egregious enough to warrant a fine). FRA officials stated that the agency trains and maintains its own cadre of safety inspectors that are authorized to conduct safety inspections at any time, 24 hours per day and 7 days per week. In addition to these inspectors, FRA manages a program called the State Rail Safety Participation Program which allows states to employ their own FRAcertified inspectors who can enforce FRA regulations.

Under the Government Performance and Results Act of 1993 (GPRA), federal agencies should design programs with measurable goals that support the agency's strategic goals. Congress enacted GPRA to shift agencies' focus from simply monitoring activities undertaken to measuring the results of these activities. Each agency's strategic plan is to include a mission statement, a set of outcome-related strategic goals, and a description of how the agency intends to achieve these goals. To measure progress toward the strategic goals, we have previously reported that the agency should also have a plan for collecting data to measure and evaluate program performance. Without measurable goals and evaluation, it is difficult to determine whether the program is accomplishing its intended purpose and whether the resources dedicated to the program efforts should be increased, used in other ways, or applied elsewhere.

¹⁵GAO, Executive Guide: Effectively Implementing the Government Performance and Results Act, GAO/GGD-96-118 (Washington, D.C.: June 1996).

Many Agencies Are Involved in the State Safety Oversight Program

FTA designed the State Safety Oversight program as one in which FTA, other federal agencies such as DHS, states, and rail transit agencies collaborate to ensure the safety and security of rail transit systems. Under the program, FTA is responsible for developing the regulations and guidance governing the program, auditing state safety oversight agencies to ensure the regulations are enforced, and providing technical assistance and other information; FTA provides funding to oversight agencies in only limited instances under the program. State oversight agencies directly oversee the safety and security of rail transit systems by reviewing safety and security plans, performing audits, and investigating accidents. Rail transit agencies are responsible for developing safety and security plans, reporting incidents to the oversight agencies, and following all other regulations state oversight agencies set for them. In addition to FTA, federal agencies such as FRA, DHS's Office of Grants and Training, and TSA also have regulatory or funding roles related to rail transit safety and security.

FTA Oversees and Administers the State Safety Oversight Program

FTA officials stated that they used a multi-agency system-safety approach in developing the State Safety Oversight program. ¹⁶ Federal, state, and rail transit agencies collaborate to ensure the rail transit system is operated safely; each of these agencies has some monitoring responsibility, either of themselves or another entity. FTA oversees and administers the program. As the program administrator, FTA is responsible for developing the rules and guidance that state oversight agencies are to use to perform their oversight of rail transit agencies. FTA also is responsible for informing oversight and transit agencies of new program developments, facilitating and informing the transit and oversight agencies of available training through FTA or other organizations, facilitating information sharing among program participants, and providing technical assistance. One avenue FTA uses to provide these services is the annual meeting to which all program participants are invited. FTA also calls special meetings and communicates information to program participants via e-mail when applicable. (See fig. 2 showing roles and responsibilities of participants in the State Safety Oversight program.)

¹⁶A system-safety approach involves the application of technical and managerial skills, to identify, analyze, assess, and control hazards and risks.

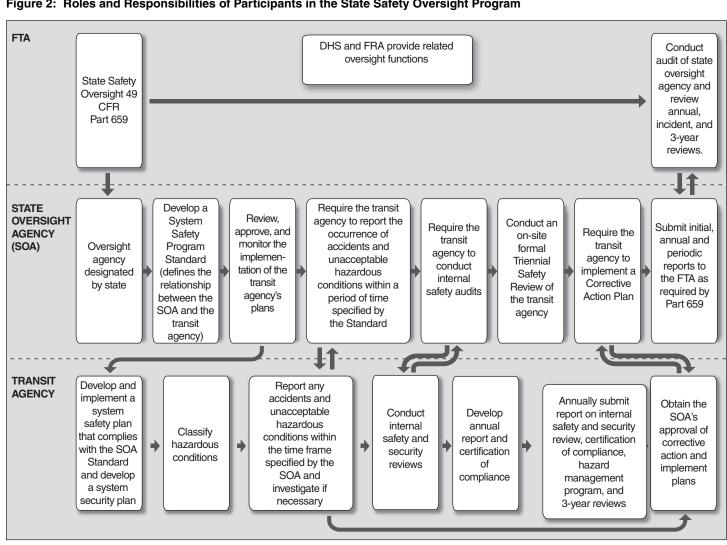


Figure 2: Roles and Responsibilities of Participants in the State Safety Oversight Program

Source: GAO adaptation of State Safety Oversight Program Annual Report 2003, FTA Office of Safety and Security.

FTA officials stated they emphasize that components of a risk-management approach to safety and security, such as hazard analysis and risk-mitigation procedures, are included in the program standard that each state oversight agency issues to the transit agencies they oversee. This is consistent with our position that agencies make risk-based decisions on where their assets can best be used, both in transportation security and safety. However, FTA recognizes that only parts of the State Safety Oversight program are riskbased. The parts of the program that are risk-based are the areas where it believes risk management is most applicable to safety and security. These areas are similar to those in which other transportation modes, such as aviation and pipelines, also use risk-based approaches. Areas that are not risk-based would include such things as requiring minimum standards for all transit agencies in the program, no matter their size or ridership. ¹⁷

While FTA officials stated that FTA does not inspect transit agencies with regard to safety, it is responsible for ensuring that, through audits and reviews of oversight agency reports, state oversight agencies comply with the program requirements. For example, according to the FTA rule, when a state proposes to designate an oversight agency, FTA may review the proposal to ensure the designated agency has the authority to perform the required duties without any apparent conflicts. FTA has recommended in two instances that a state choose a different agency because the oversight agency that the state proposed appeared to be too closely affiliated with the transit agency and did not appear to be independent. In addition, FTA is responsible for reviewing the annual reports oversight agencies submit to (1) ensure they include all the required information (e.g., descriptions of program resources, and causes of accidents and collisions), and (2) look for industry-wide safety and security trends or problems. FTA also has authority, under the FTA rule, to request additional information from oversight agencies at any time. Furthermore, FTA is responsible for performing audits of oversight agencies to ensure they are complying with program requirements and guidance. FTA audits evaluate how well an oversight agency is meeting the requirements of the FTA rule, including whether or not the oversight agency is investigating accidents properly, if it is conducting its safety and security reviews properly, and if it is reporting to FTA all the information that is required. Finally, FTA does not provide funding to states for the operation of their oversight programs. However, states may use FTA Section 5309 (New Starts program) funds—normally used to pay for transit-related capital expenses—to defray the cost of setting up their oversight agency before a transit agency begins operations. Also, FTA officials stated this year that FTA used a portion of the funding originally designated for FTA audits to pay for one person from each oversight agency to attend training on the revisions to the FTA rule, which oversight agencies had to comply with by May 1, 2006.

¹⁷FTA states that, to ensure a minimum standard is met, a focus on universally applied rules is necessary. Therefore, FTA officials stated that they felt it was inappropriate to use a risk-based approach in this area of the program.

State Oversight Agencies Conduct Direct Oversight of Rail Transit Agencies In the State Safety Oversight program, state oversight agencies are directly responsible for overseeing rail transit agencies. According to the FTA rule, states must designate an agency to perform this oversight function at the time FTA enters into a grant agreement for any New Starts project involving a new rail transit system, or before the transit agency applies for funding under FTA's formula program for urbanized areas. States have designated several different types of agencies to serve as oversight agencies. Most frequently—in 17 cases—states have designated their departments of transportation to serve in this role, either due to their expertise on rail transportation, or because state officials believed they had no other agencies with transportation expertise. In three instances—California, Colorado, and Massachusetts—states have designated utilities commissions or regulators to oversee rail transit safety and security. Officials from these states stated that since these bodies already had regulatory and oversight authority over utilities in these states, it was a natural extension of their powers to add rail transit to the list of industries they oversee. In fact, the California Public Utilities Commission (CPUC) has been overseeing railroads and rail transit in that state since 1911. The commission has issued and enforces several "general orders" that rail transit agencies in California must follow or face fines and suspended service. Two states have designated emergency management or public safety departments to oversee their rail transit agencies. Officials in one state, Illinois, have designated two separate oversight agencies—both local transportation funding authorities—to oversee the two rail transit agencies operating in the state. In the Washington, D.C. (District of Columbia), region, the rail transit system runs between two states and the District of Columbia. These states and the District of Columbia established the Tri-State Oversight Committee as the designated oversight agency. 18 Finally, one state, New York, has given its oversight authority to its Public Transportation Safety Board (PTSB). PTSB officials said they have authority similar to the public utilities commissions discussed above, but have no other mission than ensuring and overseeing transit safety in New York. See appendix I for further discussion of multi-state operations. Also, see appendix II for a table showing each oversight agency and the rail transit agencies they oversee.

¹⁸The Tri-State Oversight Committee has six representatives, two each from Maryland, Virginia, and the District of Columbia.

The individual authority each state oversight agency has over transit agencies varies widely. While FTA's rule gives state oversight agencies authority to mandate certain rail safety and security practices as the oversight agencies see fit, it does not give the oversight agencies authority to take enforcement actions, such as fining rail transit agencies or shutting down their operations. However, we found five states where the oversight agencies have some enforcement authority over the rail transit agencies they oversee. In all cases, this was due to the regulatory authority states have granted their oversight agencies. For instance, state utilities commissions may have this authority written into their authorizing legislation. In other instances, states had given this authority to the oversight agency in state legislation. Officials from oversight agencies that have the authority to fine or otherwise punish rail transit agencies all stated that they rarely, if ever, use that authority, but each stated that they believed it gives their actions extra weight and forced transit agencies to acquiesce to the oversight agency more readily than they otherwise might. A majority of oversight agencies, 19 of the 24 with which we spoke, have no such punitive authority, though officials from some oversight agencies stated they may be able to withhold grants their oversight agencies provide to the transit agencies they oversee. 19 Although officials from several of these agencies stated that they believe they would be more effective if they did have enforcement authority, under the current program this authority would be granted by individual states.

While the states have designated a number of different types of agencies with varying authority to oversee transit agencies, FTA has a basic set of rules it requires each oversight agency to follow. In the program, oversight agencies are responsible for the following:

• Developing a program standard that outlines oversight and rail transit agency responsibilities. According to the FTA rule, the program standard "provides guidance to the regulated rail transit properties concerning processes and procedures they must have in place to be in compliance with the State Safety Oversight program." FTA requirements for the program standard are procedural rather than technical. For example, the program standard must include, at a minimum, areas

¹⁹Officials from 16 oversight agencies stated that they provide some form of grant funding to transit agencies they oversee and that they could, potentially, withhold those grants to force a transit agency to take a particular safety action. However, no oversight agency officials stated that they had taken this step.

dealing with the oversight agency's responsibilities, how the program standard will be modified, how the oversight agency will oversee the transit agency's internal safety and security reviews, how the oversight agency will conduct the triennial audits, and requirements for the rail transit agency to report accidents. According to FTA, oversight agencies may choose to develop technical standards, such as requirements for the strength of track, crashworthiness of rail vehicles, or brightness of signals. In addition, the standard must contain sections describing how the oversight agency will investigate accidents, how the rail transit agency will develop a corrective action plan to address investigation and audit findings, and the minimum requirements in the agency's separate safety and security plans. FTA mandates that the transit agency's safety plan must include, among other requirements, a process for identifying, managing, and eliminating hazards. Similarly, FTA mandates that the transit agency's security plan must include, among other requirements, a process for managing threats and vulnerabilities, and a method for conducting internal security reviews.

- Reviewing transit agencies' safety and security plans and annual reports. FTA requires oversight agencies to review and approve these plans and reports of their safety and security activities to ensure they meet the program requirements.
- Conducting safety and security audits of rail transit agencies on at least a triennial basis. FTA requires oversight agency officials to audit the rail transit agencies' implementation of their safety and security plans at least once every 3 years. We found one oversight agency that performed this audit on an annual basis. In addition, we found five others that perform the audit on a continuous basis, auditing the rail transit agency on a portion of their safety and security plans each year. FTA has approved both these alternative auditing schedules.
- Tracking findings from these audits to ensure they are addressed. FTA requires oversight agencies to establish a process for tracking and approving the disposition of recommendations from the triennial audits. Oversight agencies must also have a process for tracking and eliminating hazardous conditions that the transit agency reports to the oversight agency outside the audit process.
- *Investigating accidents*. FTA requires oversight agencies to investigate accidents on the rail system that meet a certain damage or severity threshold and develop a corrective action plan for the causes leading to

the accident. Oversight agencies may hire a contractor or allow the transit agency to conduct the investigation on its behalf.

• Submitting an annual report to FTA. According to the FTA rule, oversight agencies must submit an annual report to FTA detailing their oversight activities, including results of accident investigations and the status of ongoing corrective actions.

Under the FTA rule, rail transit agencies are mainly responsible for meeting the program standards that oversight agencies set out for them. However, the FTA rule also lays out several specific requirements that oversight agencies must require transit agencies to follow, such as developing separate system safety and security plans, performing internal safety and security audits over a 3-year cycle, developing a hazard-management process, and reporting certain accidents to oversight agencies within 2 hours. FTA also requires that these requirements are included in each oversight agency's program standard. The locations and types of transit agencies participating in the program are shown in figure 3.

Boston, MA Buffalo, NY() Detroit, MI A Newark, NJ Jersey City, NJ New York City, NY Trenton, NJ Cleveland, OH 🕦 🕒 Johnstown, PA 🗥 Philadelphia, PA (1) Pittsburgh, PA Baltimore, MD Washington, DC Seattle, WA A Tacoma, WA Portland, OR Minneapolis, MN 🕒 Kenosha, WI T Salt Lake City, UT Sacramento, CA Chicago, IL San Francisco, CA (1) (1) Denver, CO San Jose, CA St. Louis, MO Chattanooga, TN 🗥 Los Angeles, CA Memphis, TN III Atlanta, GA San Diego, CA Dallas, TX 🕒 📊 Little Rock, AR New Orleans, LA Jacksonville, FL A Houston, TX 🕒 Tampa, FL 🔳 Galveston, TX San Juan, Puerto Rico Miami, FL (1) A Heavy Rail Light Rail A Automated Guideway **Trolley** ▲ Cable Car ▲ Inclined Plane

Figure 3: Locations and Types of Rail Transit Agencies Participating in State Safety Oversight Program

Sources: FTA's National Transit Database; MapArt.

Other Federal Agencies Play a Role in Ensuring Rail Transit Safety and Security, but Often Their Roles Are Outside the State Safety Oversight Program In addition to FTA, the state oversight agencies, and the rail transit agencies, other governmental agencies have some role in ensuring the safety and security of rail transit systems. One of these agencies is DHS' TSA. The Aviation and Transportation Security Act (ATSA), ²⁰ passed by Congress in response to the September 11, 2001, terrorist attacks, gave TSA authority for security over all transportation modes, including authority to issue security regulations.²¹ While TSA's most public transportation security duties are its airport screening and aviation related activities, TSA has taken steps to enhance rail transit security. For example, in May 2004, TSA issued security directives to rail transit agencies to ensure all agencies were implementing a consistent baseline of security. Also, TSA has hired 100 rail security inspectors, as authorized by Congress. 22 While the exact responsibilities of the inspectors are still being determined, a TSA official stated that they will monitor and enforce compliance with the security directives by passenger rail agencies, as well as increase security awareness among rail transit agencies, riders, and others. The inspectors have begun outreach activities with rail transit systems aimed at enhancing security in rail and mass transit systems. TSA officials stated their responsibilities encompass the security of other rail systems, including freight rail, which is consistent with ATSA.

In contrast to the enforcement role of TSA, the Office of Grants and Training within DHS' Preparedness Directorate, plays a role in ensuring rail transit security through supporting security initiatives. The Office of Grants and Training (formerly known as the Office of Domestic Preparedness) is the primary federal source of security funding for passenger rail systems, and is the principal component of DHS responsible for preparing the United States for acts of terrorism. In carrying out its mission to prevent, prepare for, and respond to acts of terrorism, the Office of Grants and Training provides training, funds for the purchase of equipment, support for the planning and execution of exercises, technical assistance, and other support to assist states, local jurisdictions (such as municipalities and transit agencies), and the private sector. The Office of Grants and Training

²⁰Pub. L. No. 107-71, 115 Stat. 597 (2001).

 $^{^{21}}$ ATSA initially created TSA within DOT. The Homeland Security Act of 2002, Pub. L. No. 107-296, 116 Stat. 2135 (2002), transferred TSA to DHS.

²²These positions were funded through the DHS Appropriations Act of 2005 and its accompanying conference report, which provided TSA with \$12 million in funding for rail security activities.

has provided over \$320 million to rail transit providers through the Urban Area Security Initiative and Transit Security Grant Program.

In addition to FTA, another DOT agency, FRA, plays a role in ensuring transit agencies operate safely. In general, FRA exercises its jurisdiction over parts of a rail transit system that share track with the general railroad system, or places where a rail transit system and the general railroad system share a connection (e.g., a grade crossing).²³ Rail transit systems that share track or grade crossings—or are subject to FRA regulations for other reasons—may apply to FRA for a waiver from these rules. According to FRA, if a rail transit vehicle were to operate on the same tracks and at the same time as general railroads, FRA would make the rail transit agency operating the vehicle meet the safety standards of the general railroads. This would likely require rail transit agencies to use much sturdier (and more expensive) vehicles, and could be cost-prohibitive for the rail transit agencies. Therefore, 11 rail transit agencies have requested waivers from FRA based on the fact that their trains operate at different times than heavy freight trains, and will not be on the track at the same time, meaning the risk of collision is low or non-existent. According to an FRA official, as of June 2006, FRA granted waivers to 10 of the 11 rail transit agencies that applied for them.²⁴ After granting a waiver, FRA stays in contact with FTA and the relevant transit and oversight agencies to address any safety questions or problems that arise.

NTSB also plays a role in enhancing and ensuring rail transit safety, though it has no formal role in FTA's oversight program. NTSB has authority to investigate accidents involving passenger railroads, including rail transit agencies. Rail transit agencies must report to NTSB, within 2 hours, all accidents involving fatalities, multiple injuries, evacuations, or damage over certain monetary thresholds. NTSB officials stated they generally will investigate only the more serious accidents, such as those involving fatalities or injuries, or those involving recurring safety issues. Often, NTSB accident investigations of rail transit accidents will result in recommendations to federal agencies or rail transit agencies to eliminate the condition that led to the accident. NTSB has no power to enforce its

²³FRA clarified its position on safety jurisdiction over shared track situations in a *Federal Register* posting in 2000. See 65 Fed. Reg. 42529.

²⁴FTA provided documentation showing that FRA told the one rail transit agency that did not receive its waiver that its application was unnecessary—what the agency proposed was already allowed under FRA regulations.

recommendations, but NTSB states that, historically, agencies have implemented over 80 percent of its recommendations. NTSB also maintains expertise on transportation safety across all modes of transport and conducts studies on pressing issues. Rail transit agencies and FTA both stated that they consult NTSB periodically when they have safety questions, in addition to reporting accidents to it.

Transit and Oversight
Agencies Perceive the
Program as
Worthwhile; However,
FTA Does Not Have
Goals or Performance
Measures to Document
the Impact of the State
Safety Oversight
Program on Safety and
Security

The majority of officials from transit and oversight agencies with whom we spoke agreed that the State Safety Oversight program improves safety and security in their organizations. These officials provided illustrations about how the program enhanced safety or security; however, they have limited statistical evidence that the oversight program improved safety or security. FTA has obtained a variety of information on the program from sources such as national transit data, annual reports from oversight agencies, and its own audits of the oversight agencies. FTA has used national transit data and oversight agencies' annual reports to collate information on safety, including information about fatalities and the causes of incidents; FTA last issued a report summarizing this information in 2003. However, this data is not linked to any program goals or performance measures. FTA officials recognize the need for performance measures for its safety and security programs and are taking steps in 2006 to begin to address this need. Finally, although FTA expected to audit the oversight agencies every 3 years, it has not conducted these audits as frequently as it had planned (it has conducted eight since September 2001). However, program officials stated they are committed to getting "back on track" to meet the planned schedule. Ensuring that FTA devotes enough resources to conduct the planned audits, and develops and uses planned performance goals and measures to improve the program, will be important for future assessments of the program.

Transit and Oversight Agencies Describe the Oversight Program as Worthwhile and Valuable

Both transit agency and oversight agency officials state that FTA's State Safety Oversight program is worthwhile and valuable because it helps them maintain and improve safety and security. Of the 37 transit agency officials with whom we spoke, 35 believe the program that oversees their safety and security is worthwhile. Several officials stated that it is important and beneficial to have an independent agency verify their safety and security progress. One transit agency official explained that the oversight agency helps transit officials to identify larger, or systemic, issues. In addition, the program provides support to exert extra influence on a transit agency's

board of directors or senior management to get safety or security improvements implemented faster. Furthermore, officials identified specific examples illustrating how oversight agencies helped improve safety or security. Officials from 15 transit agencies explained that the program helped modify equipment to improve safety and security. For example, one transit agency had problems with train operators failing to stop at red light signals. The oversight agency helped the safety department exert enough influence with the transit agency's senior management to replace all signals with light-emitting diode (LED) signals that were brighter and more visible. Finally, transit agency officials believe that FTA's program is an effective method for overseeing safety and security. Several officials said that having a state or local (rather than national) oversight agency facilitated ongoing safety and security improvements and consistent working relationships with the oversight staff.

In addition to transit agency officials, officials from 23 of the 24 state safety oversight agencies with whom we spoke believed that the State Safety Oversight program is valuable or very valuable for improving transit systems' safety and security. Several officials commented that the program provides an incentive to examine safety and security issues and avoid complacency. It also helps the transit agencies by providing an independent third party, since self oversight is not, in the officials' view, the best way to have an agency identify and resolve its safety and security issues. Furthermore, several officials commented that they believed the current system worked well, and that the program provides consistency and endows the state safety oversight agencies with enough authority to accomplish their tasks. Also, officials said that having the states carry out the program provides ongoing oversight in addition to formal audits, which helps maintain a constant oversight of safety and security issues.

Furthermore, some transit and oversight agency officials stated that, because they were subject to oversight, they believed they saw improved safety statistics for their rail system. For example, CPUC provided safety statistics showing an 87 percent drop in rail transit collisions at the San Francisco Municipal Railway (MUNI) from 1997, when the CPUC became

its oversight agency, to 2005. 25 Although FTA changed its definition of a reportable accident during this time period—making it impossible to determine exactly what impact external oversight had on MUNI safety both MUNI and CPUC staff stated they were confident CPUC's efforts had been a major factor in the reduction in accidents. A MUNI representative estimated that the reduction in accidents was more likely about 15 percent, but stated that CPUC oversight led MUNI to develop a comprehensive safety program, which helped reduce accidents and increase the agency's focus on meeting safety goals. In another example, New York oversight officials stated that, in the late 1970s and early 1980s, fires were prevalent in New York City's transit system. After the New York State Legislature created the PTSB in 1984 to oversee public transportation safety in New York, the PTSB tracked incident numbers, approached the transit agency and, according to oversight and transit agency officials, was able to develop and implement an action plan which heightened the awareness of (and ultimately improved) the situation. Since these efforts occurred several decades ago, the data that might support the officials' statements were not easily accessible today; however, FTA, PTSB, and New York City transit officials all cited this as an early success of state oversight of rail transit.

APTA officials with whom we spoke stated that, although the State Safety Oversight program contains minimum requirements for safety and security, the previous industry-regulated approach encouraged industry officials to surpass minimum standards and continue striving for improved safety and security. However, transit officials with whom we spoke often discussed the benefits of a federal program. For example, a transit agency official explained that a benefit of FTA's rule is that it standardized rail transit safety and security across the country. In addition, officials from 17 transit agencies reported that respective state safety oversight agencies imposed requirements above those required in FTA's requirement. For example,

²⁵Prior to the existence of the FTA State Safety Oversight program, California law dictated that CPUC had oversight authority over rail transit agencies, but exempted municipally operated systems. Because the City of San Francisco operates MUNI, it was not subject to CPUC oversight. However, since 49 CFR 659 required that California designate an agency to oversee all rail transit systems receiving federal funds, the governor of California designated CPUC to oversee MUNI in 1997.

²⁶Prior to the implementation of the State Safety Oversight program, according to APTA, most transit agencies were self-regulated and submitted to occasional APTA-sponsored safety audits as a way of obtaining outside feedback about their safety practices and areas for potential improvement. APTA charged transit agencies for their participation in these audits.

three state safety oversight agencies reported that they require transit agencies under their purview to have an "hours of service" type policy which requires minimum time off duty for train operators to rest. In addition, several oversight agencies have established more stringent reporting and notification requirements than required by FTA. For example, officials from two transit agencies reported that their oversight agencies require them to report accidents occurring in a rail yard, while two others stated that their oversight agencies require notification of any accident involving contact between vehicles, no matter how minor.

FTA Gathers Various Types of Safety Information but Does Not Have the Data to Document the Impact of the Oversight Program on Safety and Security One potential source of information about the State Safety Oversight program's impact on safety and security are data that FTA collects through the annual reports it requires state oversight agencies to submit. The reports include information on many different issues, including program resources, accidents, fatalities, injuries, hazardous conditions, and any corrective actions taken resulting from audits or accident investigations. FTA officials stated they have used the oversight agency information, as well as national transit data, to publish its own annual reports from 1999 to 2003. FTA's reports included ridership data, fatality and injury data, and the results of accident investigations to identify common incident causes. Although these reports may have informed oversight agencies about what safety or security problems existed, the information was not tied to any program goals or performance measures. In addition, it has not issued a report since 2003. Although the reports provide data on transit safety, it is unclear how oversight agency officials use this data. For example, one state safety oversight official with whom we spoke recommended that FTA provide more extensive analysis of the accident data it receives from oversight agencies. He stated that analyses of such data could identify trends and help oversight agencies develop a more cooperative and collegial relationship with each other.

According to program officials, FTA has recognized the need for better information and performance measures for its safety and security programs; also, it has not published a report since 2003 because it has been looking for ways to improve the type of safety and security data it can collect, and how it can use the information to track program performance and progress toward as-yet-undefined goals. FTA's 2006 business plan for its Safety and Security Division includes a goal to continue developing and implementing a data-driven performance analysis and tracking system to help ensure management decisions are informed by data and focused on performance and accountability. As part of these efforts, FTA is working

with a contractor to develop performance measures for the State Safety Oversight program. FTA officials stated that their contractor is working with oversight and transit agencies to identify measures that they use and find useful in tracking the safety and security of their systems. Although it may be difficult to identify such measures—many of the oversight agencies with whom we spoke do not have performance measures, either—this effort could allow FTA to more readily determine areas where the program is having a positive impact on transit safety and security, and areas where more focus is needed.

Another source of information is the audits of the oversight agencies that FTA attempts to conduct every 3 years. Although the audits provide detailed information on specific oversight agencies, FTA has not brought together information from these audits to provide information on the safety and security of transit systems across the country. FTA tracks the deficiencies and areas of concern, and follows up with oversight agency staff to assure that each state safety oversight agency resolves the suggested corrective actions. Furthermore, FTA has not conducted the audits frequently enough to provide a current picture of transit system safety and security, or to identify some challenges that oversight and transit agency officials raised during our interviews with them. FTA has audited each state safety oversight agency that existed prior to 2004 at least once since the program began; two agencies were audited twice. According to the FTA contractor, they piloted the audit program in late 1998 by conducting audits in three states with different legal authorities and a range of differently sized rail transit agencies. Regularly scheduled audits began in 1999. However, FTA largely discontinued the audit program after the September 11, 2001, terrorist attacks and acknowledged that the agency's priorities shifted in the wake of the attacks. FTA has audited 8 of 24 existing oversight agencies since September 2001. However, during that time period, FTA also conducted nine security and safety reviews to evaluate whether new rail transit projects could enter operations safely and securely. In addition, the program had several staffing changes after 2001, causing some oversight and transit officials to state that the program did not seem to be a priority for FTA.²⁷ According to FTA officials, including the Program Manager, who started in February of 2006, FTA is not conducting audits in fiscal year 2006 so it can use the money and time to help states

²⁷FTA's contractor stated that FTA conducted one audit of an oversight agency, at that agency's request, in 2002, and performed several audits of oversight agencies that FTA had not previously audited.

comply with the revised rule; FTA has planned a detailed outreach effort to this end, including a workshop for oversight agency officials to help ensure compliance. FTA plans to return to its triennial audit schedule in fiscal year 2007, with 10 audits scheduled. FTA plans to begin with the states that it has judged to have had the weakest program standards and procedures, based on their initial submission under the new rule.

FTA Faces Challenges in Managing and Implementing the State Safety Oversight Program

Despite the program's popularity with participants, FTA faces challenges in implementing the program's revised rule and continuing to manage the program. First, several oversight agency officials stated they are not confident they have adequate numbers of staff to effectively oversee rail transit system safety and security and they are unsure the current training available to them is sufficient. Also, we found the level of staffing and expertise of oversight agency staff varies widely across the country. A second challenge FTA faces in implementing the program is that many transit and oversight agency personnel are confused about how security issues in the program will be handled, and what agencies will be responsible for what actions, as TSA takes on a greater role in rail transit security.

Many Oversight Agency Officials Are Unsure That Their Staff Are Adequately Trained and That They Have Adequate Numbers of Staff

While a clear majority of both oversight and transit agency officials with whom we spoke endorsed the usefulness of the State Safety Oversight program, many of these same officials stated that they were unsure that they were adequately trained for their duties. Specifically, 18 of 24 oversight agencies with whom we spoke stated they believed additional training would help them provide more efficient and effective safety and security oversight. We found that the level of expertise of oversight agency staff varied widely across the country. For example, we found that 11 of the 24 oversight agencies we examined had oversight staff that had no career or educational background in transit safety or security. Conversely, another 11 oversight agencies required their staff to have certain levels of experience or education. For example, while New York's PTSB requires its staff to have 5 years of experience in transit safety, the Massachusetts Department of Telecommunications and Energy requires its lead oversight staff person to have an engineering degree. According to some oversight agency officials who had no previous transit safety or security background, they had to rely on the transit agency staff they were overseeing to teach them about transit operations, safety, and security. Therefore, it took them several years before they were confident that they knew enough about rail

transit operations to provide effective oversight. These officials stated that if they left their positions, any new staff taking over for them would face a similar challenge.

Most oversight agency staff believe they are doing a good job and are helping transit agencies operate more safely and securely through overseeing their operations, but several cite the lack of a training curriculum for oversight staff as a challenge to their effectiveness. Officials from some of the 18 agencies who stated additional training would be useful cited several examples of how additional training could benefit them. For example, officials from eight oversight agencies stated that the training they had received in transit operations, accident investigations, and other areas was beneficial, but they had not received any training on how to perform specific oversight functions. Thus, they were unsure how to carry out their agencies' primary oversight role. Officials at a majority of oversight agencies (15 of 24) stated that they felt the training that had been made available to them either by FTA, the Transportation Safety Institute (TSI), or the National Transit Institute had been adequate. 28 However, officials from 17 of 24 oversight agencies also stated that they were somewhat unsure of which courses they should take to be effective in their oversight role. For example, several oversight agency personnel stated that, while FTA officials have encouraged oversight agencies' staff to obtain certifications from TSI in transit safety and security and have encouraged oversight agency staff to take selected TSI courses, FTA officials have not developed or recommended a course specifically related to oversight.

Furthermore, although FTA provides training to state oversight agency staff (either on their own or through TSI), and encourages state oversight agencies to seek training opportunities, FTA does not pay staff to travel to these courses. Also, oversight agencies must pay their own tuition and travel expenses for courses not provided by FTA or TSI.²⁹ Officials from 10 of the 24 oversight agencies with whom we spoke cited a lack of funds as one reason why they could not attend training they had hoped to attend.

²⁸TSI is a part of DOT's Research and Innovative Technology Administration. The National Transit Institute, which FTA funds, is affiliated with Rutgers University and dedicated to training employees of the public transportation industry.

²⁹FTA and TSI provide their courses free of charge to transit and oversight agencies but do charge a nominal fee for course books and materials. FTA and TSI also respond to requests to teach courses in field locations, potentially reducing travel costs for participants.

Also, officials from all 24 oversight agencies stated that, if FTA provided some funding for them to travel to training or paid tuition for training they wanted to attend, it would allow the oversight agencies to spend their limited resources on direct oversight activities, such as staff overtime, travel expenses to visit transit agencies, or hiring contractors. Several oversight agency officials also cited the example of other DOT agencies that provide free training or pay for state staff to travel to attend training. For example, 30 states participate in FRA's State Safety Participation Program. These states have inspectors who FRA has certified to enforce FRA safety regulations. FRA pays for their initial and ongoing classroom training and state staff's travel to this training. In addition, the federal agency regulating pipelines, PHMSA, authorizes state-employed inspectors to inspect pipelines in many states. To help defray their costs, PHMSA provides up to 50 percent of a state's expenses in carrying out their pipeline safety program. PHMSA also recently paid for two inspectors from each state to attend training when it instituted a new inspection approach. Officials from both FRA and PHMSA stated that providing funding to states to train their employees helps federal agencies more effectively carry out their enforcement activities, easing the states' burden of paying to enforce federal regulations. For the first time, FTA paid for oversight agencies' personnel to travel to attend a special meeting in June 2006 in St. Louis, where FTA provided technical assistance and shared best practices in meeting the requirements of the revised rule. This instance could provide a model for future funding of training or training-related travel for oversight agency personnel.

FTA officials noted that the agency has provided considerable training in transit safety and security through TSI and through the State Safety Oversight program annual meeting, which includes a discussion of best practices and exchanges of information between oversight agencies. However, FTA officials agree that they have not provided training specifically pertaining to oversight activities, or provided a recommended training curriculum to oversight agencies; officials stated that it would not be difficult to take these steps in the future. Also, FTA officials told us that they considered addressing the lack of consistency in oversight agency staff qualifications when they were revising the FTA rule in 2005. However, they stated they did not have the legal authority to direct states to require certain education, experience, or certifications for oversight agency staff. Also, these officials stated that FTA has not issued any guidance to states about what level of training is appropriate for oversight staff or what level of staffing is appropriate for an oversight agency. However, these officials noted that, despite the lack of formal guidance, FTA checks to ensure

oversight agency personnel are adequately trained during its audits; in five instances, FTA has recommended that oversight agency staff take additional training. FTA officials also stated that FTA could issue informal guidance or recommendations to oversight agencies about the level of training their oversight staff should have.

In addition to concerns about training, oversight agencies were unsure about whether they had sufficient numbers of staff to adequately oversee a transit agency's operations. Specifically, officials at 14 of 24 oversight agencies with whom we spoke stated that more staff would help them do their job more effectively. We spoke with some oversight agency personnel who were highly dedicated to performing oversight, even though they said they had no assistance and their states had limited resources to allocate to the task. Some staff took it upon themselves to stay informed about a transit agency's operations by staying in regular contact with transit agency personnel, attending transit agency safety meetings, and making regular inspections of the system—even though these tasks were not required by their oversight agencies. However, officials from 11 oversight agencies told us they had devoted the equivalent of less than one person working halftime to oversight duties, and, in some cases, described the oversight part of their job as a "collateral duty." Personnel from some of these oversight agencies told us they simply did not have time to perform the kind of active oversight that involved attending transit agency meetings, making spot inspections, and staying in regular contact with transit agency personnel. While in some of these instances, the transit agencies overseen are small, such as small streetcar lines, some of the transit agencies with the highest ridership levels have similar levels of oversight. For example, one state that estimated it devotes 0.1 full-time equivalent (FTE) to oversight program functions is responsible for overseeing a major transit agency that averages nearly 200,000 daily passenger trips. This state supplements its staff time with the services of a contractor, mainly to perform the triennial audits of the transit agency. Also, one state that estimated devoting 0.5 FTE to oversight functions is responsible for overseeing five transit agencies (including two systems not yet in operation) in different cities. The oversight staff in this state reported that it was difficult to maintain active oversight when their responsibilities were so spread out. Furthermore, we found 13 oversight agencies that estimated dedicating less than one fulltime equivalent staff member to the oversight task. This meant that the person (or persons) assigned to the oversight tasks had other duties, in addition to oversight of a transit agency. Table 1 shows the amount of personnel oversight agency representatives estimated their agencies dedicate to oversight responsibilities. (See app. II for information on

estimated FTE and transit system information for each state safety oversight agency and related transit agency).

Table 1: Estimated FTEs Employees Used by Oversight Agencies to Oversee Transit Agency Safety and Security

Estimated FTEs	0.5 or less	0.6–1	1.1–3	3.1–5	Over 5	Total
Number of oversight agencies	11	5	6	1	1	24

Source: GAO analysis of oversight agency interview responses.

Although it is up to states to determine the resources allocated to this program, providing appropriate and continuing training and experience may increase the effectiveness of the limited staff states have to dedicate to this program.

Transit and Oversight Agency Staff Are Uncertain How TSA's Emerging Role in Transit Security Will Affect the Program Another challenge facing the program is how the emergence of TSA and its rail inspectors might affect oversight of transit security. As discussed above, TSA now has full regulatory authority over transportation security across all modes, and TSA officials stated the agency has hired 100 rail inspectors, whose stated mission is to, among other duties, monitor and enforce compliance with rail security directives TSA issued in May 2004. However, of the officials at 24 oversight agencies with whom we spoke, 20 stated they did not have a clear picture of who was responsible for overseeing transit security issues. Similarly, officials at 14 of 37 transit agencies were also unsure of lines of responsibility regarding transit security oversight. Several state oversight agencies were particularly concerned that TSA's rail inspectors would be duplicating their role in overseeing transit security. One oversight agency official stated that he felt transit agencies could begin to experience "audit fatigue" if both TSA and oversight agencies audited transit agencies' security practices. This official stated it would be more efficient if TSA and oversight agency staff audited transit agencies' security practices at the same time. Officials at several transit agencies were also confused about what standards they would be required to meet. For example, while oversight agencies are free to create their own standards, TSA issued rail security directives in May 2004—and could issue future directives or requirements that transit agencies must meet. Security officials at one transit agency specifically voiced concern

that there could be conflicting security requirements and hoped that TSA would coordinate with oversight agencies' requirements and vice versa.

TSA staff reported hearing similar comments from oversight agencies at a meeting they jointly hosted with FTA for oversight agencies in May 2006. FTA program staff and TSA rail inspector staff both stated that they were committed to avoiding duplication in the program and communicating their respective roles to transit and oversight agency officials as soon as possible. However, as TSA is still developing their program, currently there is no formally defined role for TSA in the State Safety Oversight program, and TSA has not determined the roles and responsibilities for their rail inspectors. While the FTA rule discusses requirements for a transit agency's security plan (e.g., a method for conducting internal security reviews and a process for determining security threats and vulnerabilities to a transit agency), and requires oversight agencies to include security performance in their audits of transit agencies, the FTA rule does not discuss TSA's specific role in the program; both TSA and FTA officials stated that exactly how TSA would participate in the program was still to be determined. However, TSA and FTA officials both stated they are committed to working together to ensure inspection activities are coordinated to foster consistency and minimize disruption to rail transit agency operations. Also, a TSA regional manager of rail inspectors with whom we spoke was unsure what the rail inspectors' role would be in relation to the program; in addition, the manager was unsure what the details of the program were, including the identity of the relevant oversight agencies for the region. However, he stated that he was working to learn these details, and that he and his staff had been in touch with transit agency security officials to introduce themselves and gather information.

Furthermore, in May 2006, after we had finished our interviews with transit and oversight agency staff, TSA staff stated that they were engaged in an ongoing dialog with FTA and oversight agencies, to determine how the rail inspectors could best assist oversight agencies in reviewing transit agency security. TSA gave several examples of activities resulting from this coordination. For example, TSA reported that they had designated 26 rail inspectors as liaisons to state oversight agencies. Also, TSA officials stated that they are working with FTA and the oversight agency from California to pilot a coordination approach they could use with oversight agencies across the country. Additionally, the director of the rail inspector program attended a meeting with representatives from almost all oversight agencies to discuss the concept of rail inspectors participating in oversight-agency audits of transit agencies. Finally, TSA is working to bring the 26 TSA rail

inspectors involved in the State Safety Oversight program to the next annual meeting for the program's participants, so that the rail inspectors can learn more about the program and develop a "game plan" for how the inspectors will participate in the program.

Conclusions

While FTA faces several challenges with the State Safety Oversight program, most participants in the program consider it a success at improving rail transit safety and security; nearly all participants can cite anecdotal evidence suggesting the program has had a positive impact. Although FTA collects data on safety and security from transit and oversight agencies, FTA has not developed a framework for demonstrating the impact the program has had on rail transit safety and security. As new leadership takes over administration of the program, this is an opportune time for FTA to determine how to assess the impact of the program, including determining a way to measure the impact of the program, setting performance goals, and developing and providing the means to meet a consistent schedule of auditing oversight agencies.

Second, state oversight agencies have inconsistent training and qualifications for oversight staff across the United States, although it is unclear what impact, if any, this has had on rail transit safety and security. In other federally mandated transportation safety programs where states partner with the federal government to perform oversight duties, the federal government pays for a portion of the training expenses of oversight staff, (or for oversight staff to travel to attend training) because having well-trained state officials makes the federally mandated oversight more efficient and effective. Yet, in this program, FTA relies entirely on the states to determine how to fund their direct oversight of rail transit agencies and does not help defray their training or travel costs. While the program is generally thought of as bringing about positive change, these differing levels of training and qualifications are a cause for concern; it is conceivable that inadequately trained staff, especially staff that have no experience overseeing transit agency safety, might miss safety problems they otherwise would notice, or may be unable to effectively evaluate a transit agency's proposals for resolving existing safety problems (though it is not clear whether either of these have occurred). One way to help ensure that oversight agency staff have at least a basic understanding of how to oversee rail transit operations would be to evaluate the amount of training oversight agency staff have obtained and, subsequently, develop a training curriculum that FTA could recommend to oversight agency personnel. Also, since many oversight agency personnel have little experience

conducting rail transit safety oversight, including the basic tenets of conducting oversight in the training curriculum would help ensure that oversight agency staff did not have to rely on transit agency personnel for advice on conducting oversight. In addition, FTA could review oversight staff qualifications in more detail during its audits of oversight agencies to help ensure oversight staff are adequately trained to perform their duties.

Lastly, many transit and oversight agency staff are concerned that the existence and deployment of TSA's rail inspectors will complicate security oversight. While TSA and FTA are undertaking several efforts to coordinate their activities and determine the roles and responsibilities of the rail inspectors, the official role of the rail inspectors in the State Safety Oversight program remains unclear. Therefore, it is understandable why transit and oversight agency officials fear possible duplication of effort, especially for activities such as reviewing security plans and auditing transit security practices. Also, since TSA and DOT agencies have had some difficulties coordinating their actions in the past, 30 such concern is warranted, though FTA and TSA statements promising to address this issue, and their recent activities in this direction, are a positive step.

Recommendations

In order to assure that FTA devotes an appropriate level of staff resources to the State Safety Oversight program, obtains sufficient information to evaluate the performance of the program, and supports state oversight agencies in adequately training their staff to perform their oversight duties, we recommend that the Secretary of Transportation take the following two actions:

• Direct the Administrator of FTA to take advantage of the opportunity presented by having new program leadership to set short- and long-term goals for the program, along with measures to ensure that the program is making progress toward meeting those goals; develop performance goals for the agency's other approaches for evaluating the impact of this program on safety and security; and develop a plan for maintaining FTA's stated schedule of auditing oversight agencies at least once every 3 years.

³⁰GAO-05-851, GAO-03-263, and GAO-03-843.

• Direct the Administrator of FTA to assess whether oversight agency personnel are receiving adequate amounts of training to perform their activities effectively and, based on the results of this assessment, work with oversight agencies to develop a strategy to address any deficiencies they identify. This strategy should include developing an appropriate training curriculum, including training on conducting oversight for oversight agency staff and guidance to oversight agencies encouraging them to have their staff complete the training curriculum. If FTA determines that it does not have the authority to issue such guidance, it should seek such statutory authority from Congress.

Furthermore, to reduce confusion among transit and oversight agencies about the role of TSA in transit security oversight and reduce the potential duplication of effort that would inconvenience transit agencies, we recommend that the Secretary of Homeland Security direct the Assistant Secretary of TSA to:

- coordinate with the Administrator of FTA to clearly articulate to state oversight agencies and transit agencies the roles and responsibilities TSA develops for its rail inspectors; and
- work with state oversight agencies to coordinate their security audits whenever possible and include FTA in this communication to help ensure effective coordination with these agencies.

Agency Comments

Officials from FTA, TSA, and NTSB provided oral comments on a draft of this report through their respective liaisons. The agencies concurred with the report. Furthermore, FTA and TSA officials stated that they are working to determine how to implement the recommendations. Finally, TSA provided a technical comment which we included in the report.

We are sending copies of this report to interested congressional committees, the Acting Secretary of Transportation, and the Secretary of Homeland Security. We will also make copies available to others upon request. In addition, the report will be available at no charge on the GAO Web site at http://www.gao.gov.

If you or your staff have any questions about this report, please contact me at (202) 512-2834 or siggerudk@gao.gov. Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this report. GAO staff that made major contributions to this report are listed in appendix IV.

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Case Studies of Multi-State Transit Systems

Three rail fixed guideway transit systems in the United States—the Port Authority Transit Corporation (PATCO) in Philadelphia, MetroLink in St. Louis, and the Washington Metropolitan Area Transit Authority (WMATA) in Washington, D.C.—cross state lines. Therefore, these systems require the collaboration of multiple oversight agencies to run the State Safety Oversight program or states can agree that one state will be responsible for oversight of the transit system. Each of these multi-state transit systems has a different structure to handle oversight responsibilities. The oversight programs in Philadelphia and St. Louis have both developed strategies to centralize decision making, streamline collaboration, and respond promptly to safety and security audit findings. In contrast, the Tri-State Oversight Committee (TOC), which serves as the oversight agency in the D.C. area, requires majority decision making by the six committee members of the agency, including at least one member from each jurisdiction, and has experienced difficulty obtaining funding, responding to Federal Transit Administration (FTA) information requests, and ensuring audit findings are addressed.

Multi-State State Safety Oversight Agencies Have Varied Structures and Handle Oversight Responsibilities Differently Each multi-state oversight program varies in structure, and each performs oversight responsibilities differently. In Philadelphia, authority to serve as the oversight agency was delegated to one of the two state agencies—namely, the Pennsylvania Department of Transportation (PennDOT) agreed to allow the New Jersey Department of Transportation to serve as the sole oversight agency for the PATCO heavy rail transit line. MetroLink in St. Louis is subject to oversight from both Illinois (through the St. Clair County Transit District) and Missouri (through the Missouri Department of Transportation); the two organizations share oversight duties. Finally, TOC, which is composed of multiple representatives from each jurisdiction (including Virginia, Maryland, and Washington, D.C.) provides oversight for WMATA.

The PATCO Speedline is a heavy rail line serving about 38,000 riders daily and links Philadelphia to Lindenwold, New Jersey. Most of PATCO's track is in New Jersey, and 9 of the 13 stations are in New Jersey. Until early 2001, safety and security oversight functions were shared by Pennsylvania and New Jersey through the Delaware River Port Authority (DRPA), a regional transportation and economic development agency serving both southeastern Pennsylvania and southern New Jersey. When DRPA implemented organizational and functional changes, DRPA and PATCO leadership no longer believed that DRPA could perform its role as the designated oversight agency without facing conflicting interests. As a

result, Pennsylvania and New Jersey agreed to have the New Jersey Department of Transportation (NJDOT) replace DRPA as the oversight agency. This arrangement allows the oversight agency to take corrective action without seeking additional levels of approval from Pennsylvania. although the oversight agency does keep Pennsylvania informed of its activities. Also, Pennsylvania provides some support to the NJDOT by having PennDOT perform oversight functions for the stations, passageways, and concourses located in Pennsylvania. PennDOT reports any deficiencies or hazardous conditions that may be noted during the performance of oversight directly to New Jersey. Through meetings or other means of communication, the follow-up actions may be performed by the Pennsylvania oversight agency in a supporting role or directly by New Jersey. New Jersey currently devotes two full-time and one part-time staff members to its oversight program, and while these staff members must oversee several transit systems, including PATCO, their sole responsibilities for safety and oversight functions.

The St. Louis MetroLink is a light rail line between Lambert-St. Louis International Airport, in St. Louis, and Scott Air Force Base outside Shiloh, Illinois. Service was initiated in 1993, at which time the system included about 16 miles of track in Missouri and about 1.5 miles of track in Illinois. Because so little track was in Illinois, Illinois officials agreed to allow the Missouri Department of Transportation to provide safety and security oversight for the entire system. However, in 2001, MetroLink opened a 17.4mile extension in Illinois, which roughly equalized the amount of track in both states. Because of this, the states agreed that it was appropriate for Illinois to play a greater role in safety and security oversight, and Illinois designated the St. Clair County Transit District as its oversight agency. St. Clair is one of the few non-state-level agencies to be an oversight agency. The involvement of two separate oversight agencies could create challenges to effective implementation, but the agencies have taken steps to ensure close coordination. First, the Illinois and Missouri oversight agencies have agreed to use only one uniform safety and security standard across the entire MetroLink system. According to area officials, this arrangement creates consistency throughout the system and allows both agencies to perform their oversight functions in a consistent manner. In

¹In the most recent revision to 49 CFR 659, the Rail Fixed Guideway Systems; State Safety Oversight rule governing the State Safety Oversight program, FTA mandated that in areas where transit agencies ran through multiple states, the states coordinate to ensure they use the same program standard for the transit agency to meet. This way one transit agency does not have to meet two separate standards in different parts of the system.

Appendix I Case Studies of Multi-State Transit Systems

addition, the agencies use a single contractor who is responsible for the triennial audit. All other work is performed by the Illinois and Missouri oversight agencies. Finally, staff from the two oversight agencies coordinate very closely and each have centralized leadership. Specifically, there is one employee in Missouri who devotes 90 percent of his time to safety and security oversight activities. Illinois has several employees who devote smaller percentages of their individual time to the program, but the Managing Director is primarily responsible for coordinating with Missouri. MetroLink, in turn, indicated that responding to state safety oversight directives is a priority, and the agency works quickly to implement changes.

WMATA operates a heavy rail system within Washington, D.C. (the District of Columbia), Maryland, and Virginia. The states and the District of Columbia decided to carry out oversight responsibilities through a collaborative organization through the TOC. TOC is composed of six representatives—two each from Maryland, Virginia, and the District of Columbia. All of the representatives have other primary duties, and their activities on TOC are collateral to these other daily duties, as is the case with staff at several other oversight agencies. TOC does not have any dedicated staff, and TOC members have limited rail operational experience. To gain access to additional experience and expertise in rail oversight, TOC contracts with a consultant to provide technical knowledge, perform required audits of WMATA, and ensure that audit recommendations are completed. In addition, TOC funding comes from, and must be approved by, each of the jurisdictions every year. The Washington Council of Governments processes TOC funds and handles its contracting procedures. These issues result in a lengthy process for TOC to receive its yearly funding and process its expenses.

Multi-State Oversight Programs Have Addressed Administrative Challenges in Different Ways The State Safety Oversight programs in Philadelphia and St. Louis have attempted to streamline decision making, while TOC has a more collaborative process. Philadelphia and St. Louis have both developed strategies to centralize decision making and streamline collaboration, albeit through different structures. Because Pennsylvania granted New Jersey the authority to act as the oversight agency for all of PATCO's territory, PATCO only has to interact with one oversight agency's staff. New Jersey also has in-house staff dedicated to the State Safety Oversight program, which helps to ensure continuity, facilitates communication, and provides PATCO with one set of contacts to work with on the implementation of any new safety or security processes. Although St. Louis has two agencies providing safety oversight, both oversight agencies have

made it a priority to ensure that they are providing consistent information to the transit agency, and they are coordinating activities so MetroLink is not burdened by multiple contacts about the same issue. To do this, the Missouri and Illinois representatives stay in close contact with each other. Both oversight agencies stated they have in-house staff dedicated to safety and security oversight, and the agencies have very good working relationships. Oversight agency staff admitted that St. Louis could face challenges in the future if staff turned over in either agency and new employees did not establish a similar working relationship. In addition, officials indicated that, if oversight agency staff had disagreements over safety or security standards, or how to enforce the existing standards, it would be highly problematic. However, officials in the Illinois and Missouri oversight agencies, as well as at MetroLink, thought that the current arrangements have produced one set of standards, good communication, and effective coordination. Both MetroLink and oversight agency staff in St. Louis credited each other with creating an environment where this system of having multiple oversight agencies could work well.

In contrast, TOC has implemented a less streamlined process for making decisions, which, according to FTA and TOC officials, may have contributed to the difficulties it has had in responding to FTA information requests. On June 15, 2005, FTA notified TOC that it would perform TOC's audit in late July 2005. FTA requested information prior to the audit to facilitate the time it spent on-site. TOC did not submit the requested State Safety Oversight program materials despite several FTA requests and an extension by FTA to move the audit to a later date. At the end of August, FTA initiated its audit even though it had not received requested information, but was not able to complete the audit until the end of September, when it received all requested materials. FTA's Final Audit Report to TOC cited 10 areas for improvement and provided TOC 60 days to resolve these issues. According to FTA, TOC resolved one issue within the time period. FTA held a follow-up review with TOC in mid-March to check on the status of the remaining areas for improvement. As of June 2006, FTA was evaluating how many of the remaining audit findings remained open, although FTA stated that TOC had created a detailed set of internal operating procedures to address many of FTA's findings and concerns. In addition, TOC representatives stated that some of the areas for improvement FTA found were complicated issues, such as reviewing WMATA's accident investigation procedures and approving modifications, and could not be addressed within the 60 days FTA initially allowed. TOC staff emphasized that, although WMATA was sometimes slow to respond to TOC audit recommendations or information requests, they were pleased

Appendix I Case Studies of Multi-State Transit Systems

with their relationship with WMATA and that WMATA was responsive to TOC. Similarly, FTA officials stressed that they recognized and appreciated the effort TOC had undertaken in addressing FTA's findings.

TOC staff credited WMATA with helping TOC develop a matrix to track outstanding recommendations and agreeing to meet via conference call on at least a bi-weekly basis to ensure the issues are addressed. Also, TOC members stated that part of the reason they were slow to respond to FTA's initial requests was that TOC had spent all its allocated funds for the year and, consequently, they had to temporarily stop working with the consultant who had conducted its audits of WMATA and maintained their files. According to TOC officials, since the process for acquiring additional funding would require approval from all three jurisdictions represented on TOC, it was not feasible to obtain additional funding quickly. In addition, TOC cannot take any action without a majority of its members, and at least one member from each jurisdiction, approving the action. Reaching such majority agreements can be time consuming since all members of TOC have other primary responsibilities. This is especially a concern when quick decisions are necessary, such as responding to FTA's audit recommendations.

TOC officials cited several challenges in accomplishing their mission, including lack of a dedicated and permanent funding source, the lengthy process required to obtain approval on planning and implementation of corrective actions, and limited staff time. They also stated that they believed TOC and WMATA receive more scrutiny than other transit and oversight agencies, due to their location in Washington, D.C., and proximity to FTA's headquarters staff. To address these challenges, the chair of TOC stated that she planned to spend additional time on overseeing WMATA and was hoping to work to find ways to streamline the administrative and funding processes that TOC must navigate. Hiring a full-time administrator, or designating a TOC member to serve in a full-time capacity, could help solve some of these issues. However, funding this position could be a challenge and the administrator would need to have decision-making authority to be effective and act quickly.

List of State Oversight Agencies and Transit Agencies They Oversee

State	State safety oversight agency (estimated FTE)	Rail transit agency (estimated FTE)	City center served	Type of system	Annual ridership and directional route miles
Single state systems					
Arkansas	Arkansas State Highway and Transportation Department (0.5)	Central Arkansas Transit Authority (0.08)	Little Rock, AR	Trolley	159,458 2.8
California	California Public Utilities Commission (9.6)	Bay Area Rapid Transit (7)	San Francisco, CA	Heavy rail	99,296,028 209
		Los Angeles County Metropolitan Transportation Authority (1.5)	Los Angeles, CA	Heavy rail and light rail	74,242,912 141.6
		San Francisco Municipal Railway (Muni) (7)	San Francisco, CA	Light rail, trolley, and cable car	53,768,895 81.7
		San Diego Trolley, Inc. (0.9)	San Diego, CA	Light rail	29,334,362 96.6
		Sacramento Regional Transit District (N/A)	Sacramento, CA	Light rail	12,008,620 58.4
		Santa Clara Valley Transit Authority (N/A)	San Jose, CA	Light rail	6,780,431 58.4
Colorado	Colorado Public Utilities Commission (1.2)	Denver Regional Transit District (1.25)	Denver, CO	Light rail	11,142,220 31.6
Florida	Florida Department of Transportation (1)	Metro-Dade Transit Authority (N/A)	Miami, FL	Heavy rail and automated guideway	26,479,423 53.5
		Jacksonville Transportation Authority (N/A)	Jacksonville, FL	Automated guideway	736,510 5.4
		Hillsborough Area Regional Transit (0.85)	Tampa, FL	Trolley	565,002 4.8
Georgia	Georgia Department of Transportation (0.1)	Metropolitan Atlanta Rapid Transit Authority (6)	Atlanta, GA	Heavy rail	70,984,053 96.1
Illinois	Regional Transportation Authority (1)	Chicago Transit Authority (11)	Chicago, IL	Heavy rail	186,759,524 206.3
Louisiana	Louisiana Department of Transportation (0.1) ^a	New Orleans Regional Transit Authority (N/A)	New Orleans, LA	Trolley	5,667,952 25.3
Maryland	Maryland Department of Transportation (1.3)	Maryland Transit Administration (5)	Baltimore, MD	Heavy rail and light rail	18,059,117 87

(Continued From P.	State safety oversight agency (estimated FTE)	Rail transit agency (estimated FTE)	City center served	Type of system	Annual ridership and directional route miles
Massachusetts	Massachusetts Department of Telecommunication and Energy (2.67)	Massachusetts Bay Transportation Authority (5.1)	Boston, MA	Heavy rail, light rail, and trolley	215,787,440 127.3
Michigan	Michigan Department of Transportation (0.5)	Detroit Transit Corporation (Detroit People Mover) (1.1)	Detroit, MI	Automated guideway	1,340,646 2.9
Minnesota	Minnesota Department of Public Safety (0.1)	Hiawatha Metro Transit (1-1.5)	Minneapolis, MN	Light rail	7,901,668 24.4
New Jersey	NJDOT (2-3)	New Jersey Transit Newark City Subway (0.5)	Newark, NJ	Light rail	14,312,676 99.9 ^b
		New Jersey Transit Hudson-Bergen Light Rail (N/A)	Jersey City, NJ	Light rail	
		New Jersey Transit River Line (2)	Trenton, NJ	Light rail	
New York	New York Public Transportation Safety Board (3.5)	New York City Transit (15)	New York City, NY	Heavy rail	1,803,536,486 493.8
		Niagara Frontier Transit Authority (0.5)	Buffalo, NY	Light rail	5,373,321 12.4
Ohio	Ohio Department of Transportation (1)	Greater Cleveland Regional Transit Authority (1.2)	Cleveland, OH	Heavy rail and light rail	8,236,840 68.5
Oregon	Oregon Department of	Portland Tri-Met (10)	Portland, OR	Light rail	34,755,147
	Transportation (1.2)	Portland Streetcar (0.5)	Portland, OR	Light rail	92.9 ^b
Pennsylvania	PennDOT (0.5)	Southeastern Pennsylvania Transit Authority (2)	Philadelphia, PA	Heavy rail, light rail, and trolley	113,252,100 141.1
		Port Authority of Allegheny County (0.3)	Pittsburgh, PA	Light rail and inclined plane	8,072,099 45.8
		Cambria County Transit Authority (1)	Johnstown, PA	Inclined plane	86,031 0.3
Puerto Rico	Puerto Rico State Emergency and Disaster Management Agency (3)	Puerto Rico Highway & Transportation Authority Tren Urbano (1.6)	San Juan, Puerto Rico	Heavy rail	2,182,668

(Continued From Prev					A
State	State safety oversight agency (estimated FTE)	Rail transit agency (estimated FTE)	City center served	Type of system	Annual ridership and directional route miles
Tennessee	Tennessee Department of Transportation (0.25)	Chattanooga Area Rapid Transit Authority (N/A)	Chattanooga, TN	Inclined plane	435,780 2
		Memphis Area Transit Authority (0.3)	Memphis, TN	Trolley	1,015,448 10
Texas	Texas Department of Transportation (0.4)	Galveston Island Transit (0.25)	Galveston, TX	Light rail	47,706 4
		Dallas Area Rapid Transit (0.75)	Dallas, TX	Light rail and trolley	17,487,057 87.7
		Metropolitan Transit Authority of Harris County (2)	Houston, TX	Light rail	10,233,638 14.8
Utah	Utah Department of Transportation (0.8)	Utah Transit Authority (1.5)	Salt Lake City, UT	Light rail	13,101,791 37.3
Washington	Washington State Department of Transportation (0.35)	Sound Transit Tacoma Link (N/A)	Tacoma, WA	Light rail	884,895 3.6
		Seattle Center Monorail (0.02)	Seattle, WA	Automated guideway	1,506,240° 1.8
Wisconsin	Wisconsin Department of Transportation (0.3)	Kenosha Transit (0.85)	Kenosha, WI	Trolley	68,209 1.9
Multi-state systems					
Illinois and Missouri	St. Clair County Transit District (0.25-0.5) and Missouri Department of Transportation (0.9)	Bi-State Development Agency (St. Louis Metro) (2)	St. Louis, MO	Light rail	15,648,233 75.8
New Jersey and Pennsylvania	NJDOT (2-3)	PATCO (1)	Philadelphia, PA	Heavy rail	9,362,839 31.5
Maryland, Virginia, and Washington, D.C.	TOC (0.2)	WMATA (1)	Washington, D.C.	Heavy rail	259,430,055 206.6

Source: GAO interviews and National Transit Database.

Notes: FTE data comes from our interviews with oversight agencies and transit agencies. The data do not include contractor staff that assist transit or oversight agencies, though several agencies reported using contractors. Data on ridership is current as of 2005, and includes the total number of passengers boarding the rail system annually (also known as "unlinked passenger trips") as provided by FTA. Directional route miles—the miles of track in each direction over which transportation vehicles travel while carrying passengers—are current as of 2004, and were obtained from data published by FTA in the National Transit Database. The data in this table are presented for background purposes and were not verified. FTA defines trolley operations as "light rail" for statistical purposes. However, to differentiate between vintage trolley operations and modern light rail operations, we have created separate categories for them in this chart. N/A = Not available

^aBecause we were not able to speak with the oversight agency, FTE data was provided by FTA.

^b Annual unlinked passenger trips and directional route miles represent the total for all systems within a transit agency.

Appendix II List of State Oversight Agencies and Transit Agencies They Oversee

°According to agency officials, the ridership data presented in this table represents a year when the monorail was out of service for an extended period and does not reflect the normal use of the system. In prior years the number of annual unlinked passenger trips exceeded 2 million.

Scope and Methodology

To provide Congress with a better understanding of how the Federal Transit Administration (FTA) oversees safety and security in rail transit systems and what is known about the impact of the State Safety Oversight program on rail safety and security, we met with FTA management and consultants to discuss the history, mission, and design of the oversight program. In addition, we discussed system safety and risk management approaches used by FTA, but we did not independently verify that oversight agencies use these approaches. We met with officials from other federal agencies such as the Department of Homeland Security (DHS), the Transportation Security Administration (TSA), and the National Transportation Safety Board (NTSB); we also met with the American Public Transportation Association (APTA), a transit industry association. We met with these organizations to determine how oversight responsibilities are shared and coordinated, and the extent to which duplication of safety and security guidance existed among these agencies. We also spoke with a TSA Local Area Supervisor. To compare other transportation safety and security approaches to the oversight program, we interviewed FRA, APTA, and safety officials from Canadian transit agencies.

In addition to these interviews, we also reviewed key documents, including rules, regulations, procedures, and guidance of the State Safety Oversight program; the triennial audits FTA performs on oversight agencies; documents tracking the performance of corrective action items; and memorandums of agreement between federal agencies to facilitate safety oversight coordination. At the state level, we reviewed annual reports that the oversight agencies provide to FTA. When states were willing to share these documents, we reviewed audits performed by the oversight agencies on transit agencies (40 percent of the states provided these documents) and authorizing legislation, or executive action, creating the state safety oversight agency (more than 80 percent provided the legislation or executive action). To compare the State Safety Oversight program with other transportation safety approaches, we reviewed our past work on pipeline, aviation, motor carriers, and highway safety.

To further our understanding of the design and impact of the program and also to identify challenges facing the program, we conducted semi-structured interviews with oversight and transit agencies. To determine the universe of oversight agencies and rail transit agencies under the State Safety Oversight program, we requested a list from FTA. We compared FTA's list of transit systems to information published by APTA regarding rail systems currently in operation, as well as those that were under

Appendix III Scope and Methodology

development. In two cases, APTA listed a transit agency that had initiated service as "proposed," and we were able to resolve this discrepancy by comparing it to the FTA list and checking the agency's website, which showed that service had been initiated. We contacted all transit and oversight agencies participating in the program that were in operation as of October 2005. This included a total of 25 oversight agencies and 42 rail transit systems. Twenty-four of the twenty-five oversight agencies, and 37 of the 42 rail transit systems, agreed to participate in these interviews. The New Orleans Regional Transit Authority (a transit agency) and Louisiana Department of Transportation (an oversight agency) requested that we exclude them from our review due to the difficulties posed by recovering from Hurricane Katrina, and we agreed to the request. Four additional transit agencies—the Jacksonville Transportation Authority, Chattanooga Area Regional Transportation Authority, Metro-Dade Transit Agency, and Hudson-Bergen Light Rail line—did not participate in our interviews. The semi-structured interview guide included questions concerning issues that could create challenges for the program such as an estimate of the number of FTE employees dedicated to the program, availability of FTA or other federally sponsored safety training to oversight agency employees, state funding schemes to support the program, the workload associated with audit responsibilities, the role of outside contractors to conduct the triennial reviews, employee turnover, and frequency of communication between the transit agencies and federal security agencies.

The information collected from our semi-structured interviews with the oversight and transit agencies may be subject to errors, commonly referred to as nonsampling errors. For example, difficulties in how a particular question is interpreted, the sources of information that are available to interviewees, or how the data are entered into a database or were analyzed, can introduce unwanted variability in the results obtained in these interviews. However, we took steps in the development of the interview questions, the data collection, and the data analysis to minimize these types of errors. For example, social science survey specialists developed the questions used in the interviews in collaboration with our own subject matter experts. Then, the questions were pretested to ensure that they were relevant, clearly stated, and easy to comprehend. When the data were analyzed, a second independent analyst checked all computer programs. Since the interviews were conducted using an electronic interviewing system, our interviewers entered answers obtained from officials directly into the electronic interview instrument. This eliminated the need to have the data keyed into a database by a third party, thus removing an additional source of error.

We also conducted several site visits to further our understanding of the challenges facing the program. We visited 17 transit and 8 oversight agencies in both large and small cities, as well as in states with several rail transit agencies and only one agency; we chose this variety to witness a cross-section of transit agencies and observe the interactions the transit agencies had with their oversight agencies. Complete lists of the transit and oversight agencies we visited are in Table 3 and Table 4, respectively. To determine how the program functions in regions where transit systems cross state boundaries, we visited three systems that crossed state boundaries. To identify how the program may be incorporated into new transit systems, we visited two systems that are in the design or construction phase, and one oversight agency that will eventually oversee a transit agency yet to begin service. We confirmed the accuracy of information presented in the report about state oversight and transit agencies by asking for the agencies to confirm text we sent to them prior to the publication of the report. We conducted our work from August 2005 through June 2006 in accordance with generally accepted government auditing standards.

Table 3: Rail	Transit Agencies	We Visited for	the Purposes of This Re	view

Rail transit agency	Urban area served	Multi-State region	Not yet operating	
Bay Area Rapid Transit (BART)	San Francisco/Oakland, California			
Bi-State Development Agency (MetroLink)	St. Louis, Missouri	Х		
Chicago Transit Authority	Chicago, Illinois			
Kenosha Transit	Kenosha, Wisconsin			
Los Angeles County Metropolitan Transportation Authority (LACMTA)	Los Angeles, California			
Maryland Transit Administration (MTA)	Greater Washington, DC, and Maryland			
New Jersey Transit River Line	Camden, New Jersey			
New York City Transit (NYCT)	New York, New York			
North County Transit District	San Diego/Oceanside, CA		Х	
Port Authority Transit Corporation (PATCO)	Lindenwold, New Jersey and Philadelphia, Pennsylvania	Х		
Regional Public Transportation Authority (Valley Metro)	Phoenix, AZ		Х	
Sacramento Regional Transit District (SRTD)	Sacramento, California			
San Diego Trolley	San Diego, California			
San Francisco Municipal Railway (MUNI)	San Francisco, California			

Appendix III Scope and Methodology

(Continued From Previous Page)				
Rail transit agency	Urban area served	Multi-State region	Not yet operating	
Santa Clara Valley Transportation Authority (SCVTA)	San Jose, California			
Southeastern Pennsylvania Transportation Authority (SEPTA)	Philadelphia, Pennsylvania			
Washington Metropolitan Area Transit Authority (WMATA)	Washington, D.C.	Х		

Source: National Transit Database.

Table 4: State Oversight Agencies We Visited for the Purposes of This Review

State oversight agency	State(s) served	Multi-State region	Not yet operating	
Arizona Department of Transportation	Arizona		Х	
California Public Utilities Commission	California			
Missouri Department of Transportation	Missouri	X		
New Jersey Department of Transportation	New Jersey	X		
Oregon Department of Transportation	Oregon			
Regional Transportation Authority (RTA)	Illinois			
St. Clair County Transit District (SCCTD)	Illinois	X		
Tri-State Oversight Committee (TOC)	District of Columbia, Maryland, Virginia	X		

Source: GAO.

GAO Contact and Staff Acknowledgments

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