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MASS TRANSIT

Challenges in Securing Transit Systems

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GAO-02-1075T

Mr. Chairman and Members of the Subcommittee:

We appreciate the opportunity to speak with you today about mass transit safety and security in the United States. Over a year has passed since the terrorist attacks of September 11, 2001, realigned our national priorities. While most of the early attention following the September 11 terrorist attacks focused on airport security, emphasis on the other modes of transportation has since grown. Moreover, terrorist events around the world have shown that mass transit systems, like other modes of transportation, are often targets of attack. For example, roughly one-third of terrorist attacks worldwide target transportation systems, and transit systems are the mode most commonly attacked.[1] In May 2002, the Department of Transportation issued a terrorist threat advisory to the transit industry indicating that subway systems were a possible target and that the industry should remain in a heightened state of alert.

Addressing transit safety and security concerns is complicated by the nature and scope of transit in the United States. About 6,000 agencies provide transit services, such as buses, subways, ferries, and light rail in the United States. Each workday, about 14 million Americans ride on some form of transit. Because the effectiveness of transit systems depends on their accessibility, security measures common in aviation are difficult to apply. Furthermore, government agencies at the federal, state, and local levels and private companies share responsibility for transit safety and security and are involved in making transit decisions.

As you requested, my testimony today focuses on (1) challenges in securing mass transit systems, (2) steps transit agencies have taken to enhance safety and security, and (3) the federal role in transit safety and security. My comments are based on our ongoing work for the full committee and a body of work GAO has undertaken since September 11, 2001, on homeland security and combating terrorism.[2] For our ongoing work, we conducted

[1]Congressional Research Service, *Transportation Issues in the 107th Congress*, (Washington, D.C.: July 16, 2002).

[2]See "Related GAO Products" at the end of this testimony.

10 site visits at transit agencies across the country and surveyed about 200 transit agencies, among other things.[3]

Summary

Transit agencies face significant challenges in making their systems secure. Certain characteristics make them both vulnerable and difficult to secure. For example, the high ridership of some transit agencies makes them attractive targets for terrorists but also makes certain security measures, like metal detectors, impractical. Another challenge is funding identified security enhancements. Although some security improvements, such as locking bus doors at night, have little or no cost, most improvements require substantial funding. For example, one transit agency estimated that an intrusion alarm and closed circuit television system for only one of its portals would cost approximately $250,000. According to our preliminary survey results and our interviews with transit agency officials, insufficient funding is the most significant challenge in making their transit systems as safe and secure as possible. Funding security improvements is problematic for a number of reasons including tight budget environments, competing budget priorities, and the prohibition on transit agencies that serve areas with populations of 200,000 or more from using federal urbanized area formula funds for operating expenses. In addition, coordination among all transit stakeholders can also pose challenges. Through our discussions with transit agency and local government officials and our preliminary survey results, we have found substantial coordination on emergency planning among transit agencies and local governments; however, transit agencies did report some challenges, such as limited awareness of terrorist threats to transit, in coordinating with local governments.

Despite the formidable challenges in securing transit systems, transit agencies have taken a number of steps to improve the security of their systems. Transit agencies we visited were implementing strategies to improve both safety and security prior to September 11; however, the events of September 11 elevated the importance of security-related activities. As a result, the transit agencies we visited implemented new security initiatives or increased the frequency of existing activities since last September. For example, many agencies assessed vulnerabilities, provided additional training on emergency preparedness, revised emergency plans, and conducted multiple emergency drills.

[3]For more information about our ongoing work, see "Scope and Methodology" at the end of this testimony.

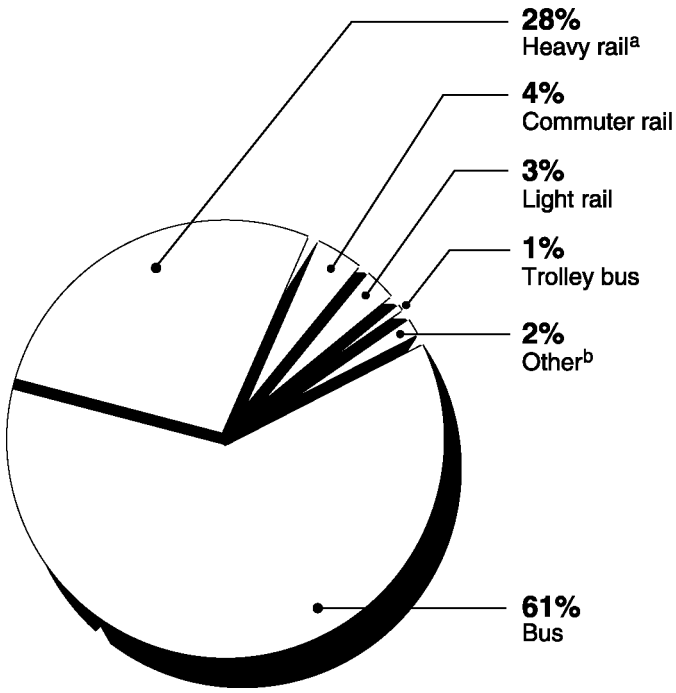
The federal government's role in transit security is evolving. For example, although the Federal Transit Administration (FTA) has limited authority to oversee and regulate transit security, it launched a multipart security initiative and increased funding for its safety and security activities since September 11. In addition, the Aviation and Transportation Security Act created the Transportation Security Administration (TSA) within the Department of Transportation and gave it responsibility for transit security; however, TSA has yet to assume full responsibility for the security of any transportation mode other than aviation. TSA and FTA are currently developing a memorandum of understanding that will define each agency's roles and responsibilities for transit security. Although most of the transit agencies we visited said FTA's security initiative has been useful, they would like the federal government to provide more assistance to support transit security, such as more information, help in obtaining security clearances, increased funding, and more security-related research and development. In considering the federal government's role in funding transit safety and security initiatives, several issues will need to be addressed, including (1) developing federal funding criteria, (2) determining the roles of stakeholders in funding transit security, and (3) selecting the appropriate federal policy instruments to deliver assistance that may be deemed necessary by policymakers (e.g., grants, tax incentives, etc.).

Background

In 2000, mass transit systems provided over 9 billion passenger trips and employed about 350,000 people.[4] The nation's transit systems include all multiple-occupancy-vehicle services designed to transport customers on local and regional routes, such as bus, trolley bus, commuter rail, vanpool, ferry boat, and light rail services, and are valued at a trillion dollars. As figure 1 shows, buses are the most utilized form of transit, providing almost two-thirds of all passenger trips.

[4]Data are preliminary.

Figure 1: Ridership by Transit Mode, 2000



Note: Data are preliminary. Percentages do not add to 100 percent due to rounding.

[a]Heavy rail is a transit mode that is an electric railway with the capacity for a heavy volume of traffic. It is characterized by high speed and rapid acceleration passenger rail cars operating singly or in multi-car trains on fixed rails; separate rights-of-way from which all other vehicular and foot traffic are excluded; sophisticated signaling; and high platform loading. Most subway systems are considered heavy rail.

[b]Other includes a variety of transit modes such as ferryboat, vanpool, and demand response (i.e., paratransit).

Source: American Public Transportation Association.

A number of organizations are involved in the delivery of transit services in the United States including federal, state, and local governments and the private sector. In particular:

- **FTA** provides financial assistance to transit agencies to plan and develop new transit systems and operate, maintain, and improve existing systems. FTA is responsible for ensuring that the recipients of federal transit funds follow federal mandates and administrative requirements. FTA's Office of Safety and Security is the agency's focal

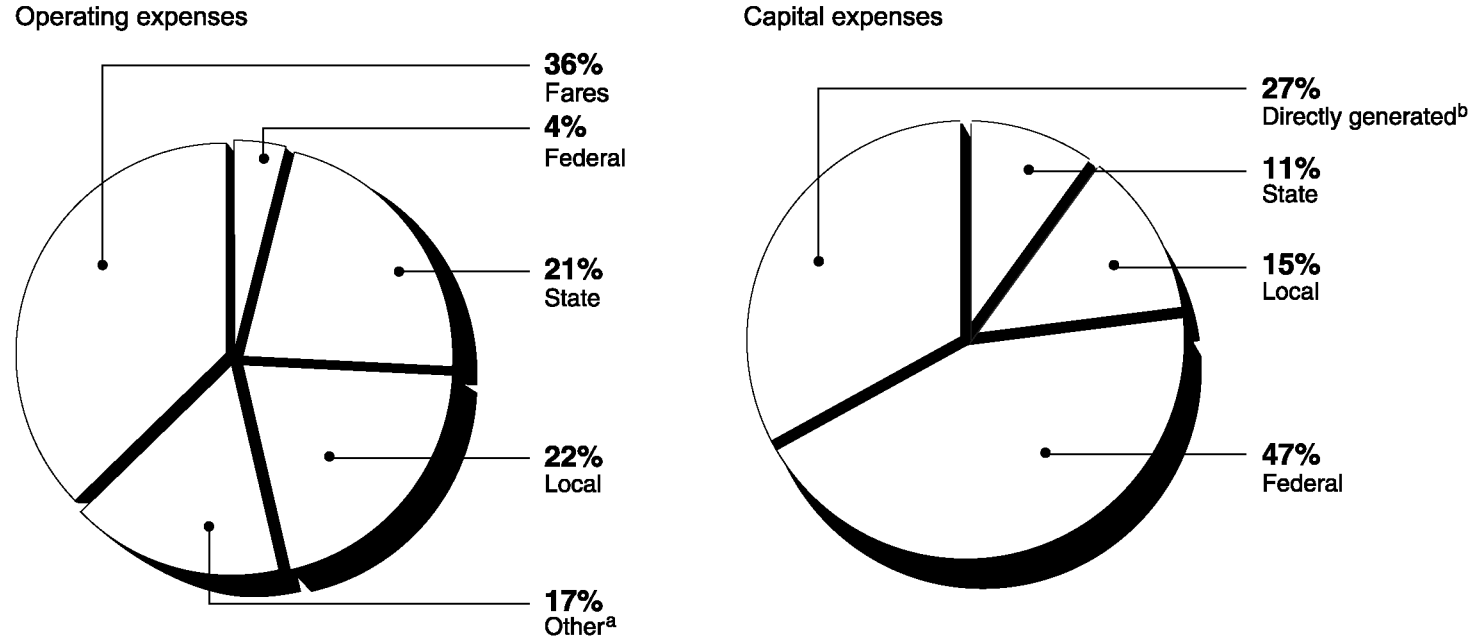
point for transit safety (freedom from unintentional danger) and security (freedom from intentional danger).

- **State and local governments** also provide a significant amount of funding for transit services. As figure 2 shows, state and local governments provide funding for over 40 percent of transit agencies' operating expenses and about a quarter of their capital expenses. According to statute, states are also responsible for establishing State Safety Oversight Agencies to oversee the safety of rail systems of transit agencies.[5]

- **Transit agencies**, which can be public or private entities, are responsible for administering and managing transit activities and services. Transit agencies can directly operate transit service or contract for all or part of the total transit service provided. About 6,000 agencies provide transit services in the United States, and the majority of these agencies provide more than one mode of service. Although all levels of government are involved in transit security, the primary responsibility for securing transit systems rests with the transit agencies.

[5]49 U.S.C. Sec. 5330.

Figure 2: Sources of Funding for Transit Operating and Capital Expenses, 2000



Note: Data are preliminary.

[a]Other includes taxes levied directly by transit agencies and other dedicated funds, such as tolls and advertising.

[b]Directly generated expenses include nongovernmental funding, subsidies from the nontransit sectors of a transit agency's operations, taxes levied directly by a transit agency, and bridge and tunnel tolls.

Source: American Public Transportation Association.

Legislation also affects transit services, including transit safety and security. In particular, the Transportation Equity Act for the 21st Century (TEA-21) is the legislation authorizing current federal transit programs.[6] TEA-21 authorized about $36 billion for federal transit programs from fiscal year 1998 through fiscal year 2003. The largest federal transit program is the urbanized area formula grant program, which accounts for almost one-half of TEA-21's total authorizations for all transit programs. The urbanized area formula grant program provides federal funds to urbanized areas (jurisdictions with populations of 50,000 or more) for transit capital investments, operating expenses, and transportation-related planning.

[6]P.L. No. 105-178 (1998).

However, TEA-21 prohibits transit agencies that serve urbanized areas with populations of 200,000 or more from using urbanized area formula funding for operating expenses. Recipients of urbanized area formula funds are also required to spend at least 1 percent of these funds to improve the security of existing or planned mass transportation systems unless the transit agencies certify that such expenses are unnecessary.[7] Additionally, the Aviation and Transportation Security Act created TSA within the Department of Transportation and gave it responsibility for the security of all transportation modes, including transit.[8] The act also assigns regulatory authority to TSA for all transportation modes.

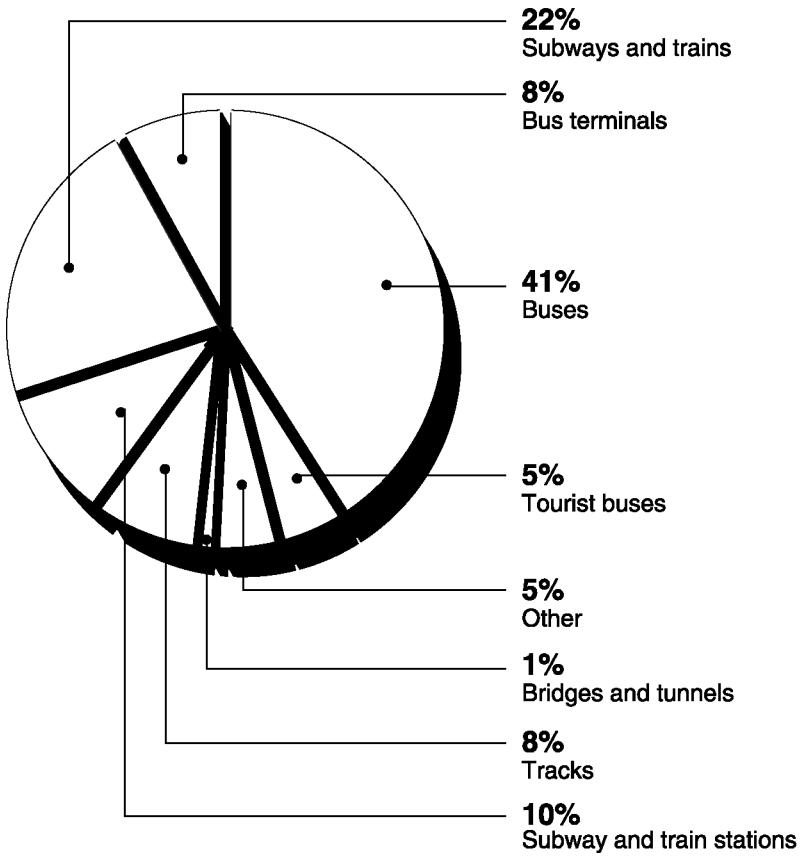
Throughout the world, public surface transportation systems have been the target of terrorist attacks. For example, the first large-scale terrorist use of a chemical weapon occurred in 1995 on the Toyko subway system. In this attack, a terrorist group released sarin gas on a subway train, killing 11 people and injuring about 5,500. In addition, according to the Mineta Transportation Institute,[9] surface transportation systems were the target of more than 195 terrorist attacks from 1997 through 2000. As figure 3 illustrates, buses were the most common target during this period.

[7]49 U.S.C. Sec. 5307 (d)(1)(J)(i) and (ii).

[8]P.L. No. 107–71, 115 Stat. 597 (2001).

[9]The Mineta Transportation Institute was established by Congress as part of the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA). The Mineta Transportation Institute focuses on international surface transportation policy issues as related to three primary responsibilities: research, education, and technology transfer.

Figure 3: Targets of Attacks on Public Surface Transportation Systems Worldwide, 1997 to 2000



Source: Based on information from the Mineta Transportation Institute.

Transit Agencies Face Challenges in Making Transit Systems Secure

Transit agencies face significant challenges in making their systems secure. Certain characteristics of transit systems, such as their high ridership and open access, make them both vulnerable to attack and difficult to secure. The high costs of transit security improvements, coupled with tight budgets, competing needs, and a restriction on using federal funds for operating expenses in large urban areas also creates a challenge for transit agencies. Moreover, because of the numerous stakeholders involved in transit security, effective coordination can become a problem.

Characteristics of Transit Systems Pose Security Challenges

According to transit officials and transit security experts, certain characteristics of transit systems make them inherently vulnerable to terrorist attacks and difficult to secure. By design, transit systems are open (i.e., have multiple access points and, in some cases, no barriers) so that they can move large numbers of people quickly. However, the openness of transit systems can leave them vulnerable because transit officials cannot monitor or control who enters or leaves the systems. In addition, other characteristics of some transit systems—high ridership, expensive infrastructure, economic importance, and location (e.g., large metropolitan areas or tourist destinations)—also make them potentially attractive targets. Moreover, some of these characteristics make transit agencies difficult to secure. For example, the number of riders that pass through a transit system—especially during peak hours—make some security measures, such as metal detectors, impractical. In addition, the multiple access points along extended routes make the costs of securing each location prohibitive.

Further complicating transit security is the need for transit agencies to balance security concerns with accessibility, convenience, and affordability. Because transit riders often could choose another means of transportation, such as a personal automobile, transit agencies must compete for riders. To remain competitive, transit agencies must offer convenient, inexpensive, and quality service. Therefore, security measures that limit accessibility, cause delays, increase fares, or otherwise cause inconvenience could push people away from transit and back into their cars. Our discussions with transit agency officials and our preliminary survey results indicate that striking the right balance between security and these other needs is difficult. For example, a number of survey respondents reported that balancing riders' need for accessibility with security measures is a significant barrier to making their transit systems as safe and secure as possible.

Funding Security Improvements Is A Key Challenge

Funding security improvements is a key challenge for transit agencies. Our preliminary survey results and our interviews with transit agency officials indicate that insufficient funding is the most significant challenge in making their systems as safe and secure as possible. Moreover, our preliminary survey results indicate that the most common reason for not addressing items identified as needing attention through safety and security assessments is insufficient funding. Factors contributing to funding challenges include high security costs, tight budgets, competing

budget priorities, and a prohibition on transit agencies in large urban areas from using FTA funds for operating expenses.

Transit security investments can be quite expensive. While some security improvements are inexpensive, such as removing trashcans from subway platforms, most require substantial funding. For example, one transit agency estimated that an intrusion alarm and closed circuit television system for only one of its portals would cost approximately $250,000. According to our preliminary survey results, the top three safety and security funding priorities of transit agencies are enhanced communication systems, surveillance equipment, and additional training. The transit agencies we visited have identified or are identifying needed security improvements, such as upgraded communication systems, additional fencing, surveillance equipment, and redundant or mobile command centers. Of the 10 transit agencies we visited, 8 agencies had developed cost estimates of their identified improvements. The total estimated cost of the identified security improvements at the 8 agencies is about $711 million. The total cost of all needed transit security improvements throughout the country is unknown; however, given the scope of the nation's transit systems and the cost estimate for 8 agencies, it could easily amount to billions of dollars.

Transit agency officials told us that they are facing tight budgets, which make it more difficult for these agencies to pay for expensive security improvements. According to most of the agencies we visited, the weakened economy has negatively affected their revenue base by lowering both ridership and/or tax revenues dedicated to transit. In particular, 8 agencies we visited reported that ridership has dropped this year, primarily because of the slow economy. The decreased ridership levels have lowered fare box revenue. In addition, state and local sales taxes, which provide revenue for many transit agencies, have declined with the stalled economy and reduced the transit agencies' revenue, according to a number of transit agency officials.

Other competing funding needs also present a challenge for transit agencies. Given the tight budget environment, transit agencies must make difficult trade-offs between security investments and other needs, such as service expansion and equipment upgrades. For example, an official at one transit agency stated that budget shortfalls and expenditures for security improvements have delayed some needed capital projects and reduced the budgets for all departments—except the safety and security budget. Similarly, an official at another agency reported that his agency is funding

security improvements with money that was budgeted for nonsecurity projects. According to our preliminary survey results, a number of agencies view balancing safety and security priorities against other priorities as a significant challenge in making their systems as safe and secure as possible.

Another reported challenge in funding some security improvements is a statutory limitation on using FTA funds for operating expenses. Specifically, TEA-21 prohibits transit agencies in large urbanized areas from using urbanized formula funding for most operating expenses. This prohibition limits many agencies' ability to use FTA funds for some security-related expenses, such as salaries for additional security personnel and training. For example, officials from a number of agencies said this prohibition was a significant barrier to funding needed security improvements. However, several agency officials noted that the elimination of this prohibition would be helpful only if additional funding were also provided.

Coordination Is Key to Transit Security but Presents Challenges

Coordination among all stakeholders is integral to enhancing transit security, but it can create additional challenges. Numerous stakeholders are involved in decisions that affect transit security, such as decisions about its operations and funding. For example, states are responsible for establishing agencies that oversee the safety of transit systems with rail. As we have noted in previous reports, coordination among all levels of government and the private sector is critical to homeland security efforts, and a lack of coordination can create problems, such as duplication of effort.[10] In addition, the national strategy for homeland security recognizes the challenges associated with intergovernmental coordination but emphasizes the need for such coordination. According to our discussions with transit agency and local government officials and our preliminary survey results, coordination on emergency planning is generally taking place between transit agencies and local governments despite some challenges, but appears to be minimal between transit agencies and governments at the regional, state, and federal levels.

According to our site visits and preliminary survey results, transit agencies and local governments are coordinating their emergency planning efforts.

[10]See "Related GAO Products" at the end of this testimony.

Our preliminary survey results indicate that the majority of transit agencies have directly coordinated emergency planning at the local level and believe they have been sufficiently integrated into their local government's emergency plans. Likewise, 9 of the 10 transit agencies we visited said they are well integrated into their local government's emergency planning. Officials from these 9 transit agencies noted that their agencies are included in their local government's emergency planning activities, such as emergency drills, tabletop exercises, planning meetings, and task forces. For example, when Minneapolis held an emergency drill that simulated a biological attack on the city, Metro Transit transported "victims" to hospitals, even taking some victims to out-of-state hospitals because the local hospitals were at capacity. Transit agency and local government officials said their past experiences with weather emergencies and/or special events, like Super Bowl celebrations, helped establish their good working relationships. According to the officials, these past experiences have demonstrated the types of support services transit agencies can provide during emergencies, including evacuation, triage centers, victim transport and shelters. However, officials said these working relationships are usually informal and undocumented. For example, the majority of the transit agencies we visited did not have a memorandum of understanding with their local government.

Although transit agencies are generally active participants in emergency planning at the local level, they nevertheless face some coordination challenges. According to our preliminary survey results, among the most significant challenges in coordinating emergency planning at the local level are insufficient funding, limited awareness of terrorist threats to transit, lack of coordination among various local agencies, and lack of time. Similar concerns were often raised during our meetings with transit agencies. For example, one agency official noted that his agency operates in over 40 jurisdictions and that coordinating with all of these local governments is very time consuming.

In contrast to coordination at the local level, coordination among transit agencies and governments at the regional, state, and federal levels on emergency planning appears to be minimal. Most of the transit agencies we visited reported limited coordination with governments outside of their local governments. In addition, our preliminary survey results indicate that the majority of survey respondents have not directly coordinated emergency planning at the regional, state, or federal levels. As we have reported in past reports on homeland security, lack of coordination among stakeholders could result in communication problems, duplication, and

fragmentation. Without coordination, transit agencies and governments also miss opportunities to systematically identify the unique resources and capacities that each can provide in emergencies.

Transit Agencies Are Taking Steps to Secure Systems

Prior to September 11, all 10 transit agencies we visited were implementing measures to enhance transit safety and security, such as revising emergency plans and training employees on emergency preparedness. Transit agency officials often noted that the 1995 sarin gas attack on the Tokyo subway system or their agency's experiences during natural disasters had served as catalysts for focusing on safety and security. Although safety and security were both priorities, the events of September 11 elevated the importance of security.

Since September 11, transit agencies we visited have taken steps to further improve transit safety and security. All of the transit agencies we visited have been operating at a heightened state of security since last September. According to officials from the agencies we visited, their agencies have also initiated a number of safety and security measures, including:

- **Vulnerability assessments:** External or internal vulnerability assessments have been conducted. The purpose of these assessments is to identify potential vulnerabilities and corrective actions or needed security improvements. Improved communication systems, more controlled access to facilities, and additional training are some of the needs identified in the assessments of the agencies we visited.

- **Fast-track security improvements**: Security improvements planned or in process prior to September 11, were moved up on the agenda or finished early. For example, one agency, which was putting alarms on access points to the subway ventilation system before September 11, completed the process early.

- **Immediate, inexpensive security improvements**: Agencies implemented immediate and inexpensive security improvements. Removing bike lockers and trashcans from populated areas, locking underground restrooms, and closing bus doors at night are among the immediate and inexpensive improvements that agencies have made.

- **Intensified security presence:** Many agencies have increased the number of police or security personnel who patrol their systems. Surveillance equipment, alarms, or security personnel have been placed

at access points to subway tunnels, bus yards, and other nonpublic places. Employees have also been required to wear identification cards or bright colored vests for increased visibility.

- **Increased emergency drills:** Many agencies have increased the frequency of emergency drilling—both full-scale drills and tabletop exercises. For example, one agency we visited has conducted four drills since September 11. Agencies stressed the importance of emergency drilling as a means to test their emergency plans, identify problems, and develop corrective actions.

- **Revised emergency plans:** Agencies reviewed their emergency plans to determine what changes, if any, needed to be made. Some agencies updated their emergency plans to include terrorist incident protocols and response plans.

- **Additional training:** Agencies participated in and conducted additional training on antiterrorism. For example, all 10 of the agencies we visited had participated in the antiterrorism seminars sponsored by FTA or the American Public Transportation Association. In addition, one agency's police force has received training on al Queda attack behavior patterns.

Federal Government's Role in Transit Security Is Evolving

The federal government's role in transit security is evolving. For example, FTA has expanded its role in transit security since September 11 by launching a multipart security initiative and increasing the funding for its safety and security activities. In addition, the Aviation and Transportation Security Act gave TSA responsibility for transit security; however, TSA's role and responsibilities have not yet been defined. Although the transit agencies we visited were generally pleased with FTA's assistance since September 11, they would like the federal government to provide more assistance, including providing more information and funding. As the federal government's role in transit safety and security initiatives evolves, policymakers will need to address several issues, including (1) federal funding criteria, (2) the roles of stakeholders in funding transit security, and (3) the appropriate federal policy instrument to deliver assistance deemed appropriate.

FTA Has Limited Authority but Has Initiated a Variety of Transit Safety and Security Activities

FTA has limited authority to regulate and oversee safety and security at transit agencies. According to statute, FTA cannot regulate safety and security operations at transit agencies.[11] However, FTA may 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 its grant-making authority. Specifically, FTA or legislation may stipulate conditions of grants, such as certain safety and security requirements, and FTA may withhold funds for noncompliance with the conditions of a grant.[12] For example, transit agencies must spend 1 percent of their urbanized area formula funds on security improvements.[13] FTA is to verify that agencies comply with this requirement and may withhold funding if it finds agencies that are not in compliance.[14] FTA officials stated that FTA's authority to sponsor nonregulatory activities and to stipulate the conditions of grants is sufficient for the safety and security work they need to accomplish.[15]

Despite its limited authority, FTA established a number of safety and security programs prior to September 11. For example, FTA offered voluntary security assessments, sponsored training at the Transportation Safety Institute, issued written guidelines to improve emergency response planning, and partially funded a chemical detection demonstration project, called PROTECT, at the Washington Metropolitan Area Transit Authority. Although FTA maintained both safety and security programs prior to September 11, its primary focus was on the safety rather than the security programs. This focus changed after September 11.

[11]49 U.S.C. sec. 5324(c).

[12]49 U.S.C. sec. 5324(c) and 49 U.S.C. sec. 5327(c)(2).

[13]49 U.S.C. sec. 5307 (d)(1)(J)(i) and (ii).

[14]According to FTA officials, FTA verifies that agencies spend at least 1 percent of their urbanized area formula funds on security improvements during its triennial review. FTA's triennial review is a full review and evaluation of grantees' performance in carrying out projects, including specific references to compliance with statutory and administration requirements.

[15]FTA also has authority to enter into "other agreements" with transit agencies to introduce innovative methods for safety and security on negotiated terms and conditions more favorable to nonfederal participants than are authorized under FTA contracts, grants, or cooperative agreements under 49 U.S.C. sec. 5312(d), and FTA may work with other federal agencies in developing defenses and responses to terrorist incidents.

In response to the terrorist attacks on September 11, FTA launched a multipart transit security initiative last fall. The initiative includes security assessments, planning, drilling, training, and technology:

- **Security assessments:** FTA deployed teams to assess security at 36 transit agencies. FTA chose the 36 agencies on the basis of their ridership, vulnerability, and the potential consequences of an attack.[16] Each assessment is to include a threat and vulnerability analysis, an evaluation of security and emergency plans, and a focused review of the agency's unified command structure with external emergency responders. FTA plans to extend the assessments to additional agencies after the first 36 assessments are complete.

- **Emergency response planning:** FTA is providing technical assistance to the top 60 transit agencies on security and emergency plans, and emergency response drills.

- **Emergency response drills:** FTA offered transit agencies grants (up to $50,000) for organizing and conducting emergency preparedness drills. According to FTA officials, FTA has awarded $3.4 million to over 80 transit agencies through these grants.

- **Security training:** FTA is offering free emergency preparedness and security training to transit agencies through its Connecting Communities Forums. These forums are being offered throughout the country and are designed to bring together small and medium-sized transit agency personnel with their local emergency responders, like local fire and police. The purpose of the forums is to give the participants a better understanding of the roles played by transit agencies and emergency responders and allow the participants to begin developing the plans, tools, and relationships necessary to respond effectively in an emergency. In addition, FTA is working with the National Transit Institute and the Transportation Safety Institute to expand safety and security course offerings. For example, the National Transit Institute is now offering a security awareness course to front line transit employees free of charge.

[16] A professional team of antiterrorism, transit operations, and emergency response experts conducts each assessment.

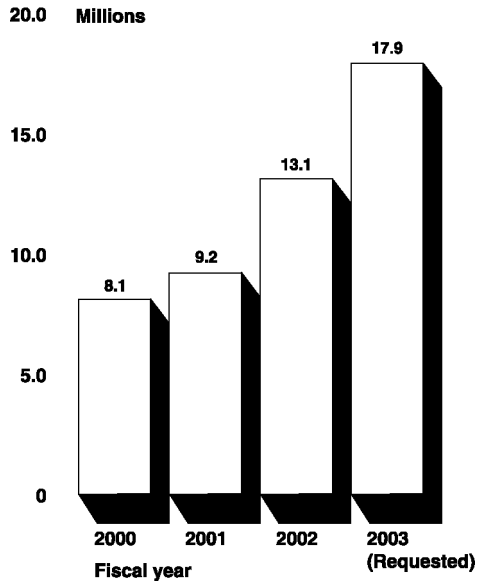
- **Research and development:** FTA increased the funding of its safety- and security-related technology research and has accelerated the deployment of the PROTECT system.

FTA also increased the funding of its safety and security activities after the attacks of September 11. For example, FTA reprioritized fiscal year 2002 funds from its other programs to its safety and security activities after the attacks. In addition, the Department of Defense and Emergency Supplemental Appropriations Act of 2002 (DOD supplemental) provided $23.5 million for (1) the replacement of buses and kiosks in New York destroyed in the terrorist attacks, (2) emergency response drills, (3) security training for transit operators, and (4) the acceleration and expansion of chemical detection technology for transit stations.[17] Specifically, $4.8 million of the DOD supplemental was provided for new buses and kiosks in New York and $4 million was allocated to the continued development of chemical detection technology. FTA used the remainder of the DOD supplemental to fund its multipart security initiative. Finally, FTA sought additional funding for its safety and security activities in its fiscal year 2003 budget request. As figure 4 shows, if FTA receives the amount of funding it requested for fiscal year 2003, its funding of safety and security activities will have increased over 100 percent from fiscal year 2000 through fiscal year 2003—increasing from $8.1 million to $17.9 million.[18]

[17]Department of Defense and Emergency Supplemental Appropriations for Recovery from and Response to Terrorist Attacks on the United States Act 2002 (P.L. 107-117, H.R. Conference Report 107-350). The DOD supplemental also provided $39.1 million to the Washington Metropolitan Area Transit Authority for region-wide security requirements, including $5 million for protective clothing and breathing apparatus, $2.2 million for completion of the fiber optic network project, $15 million for a chemical emergency sensor program and $16.9 million for increased employee and facility security. On August 2, 2002, the president signed into law the 2002 Supplemental Appropriations Act for Further Recovery From and Response To Terrorist Attacks on the United States (P.L.107-206, H.R. 4775), which set aside $15 million for grants to enhance security for intercity bus operations.

[18]Includes FTA's funding of its safety and security activities and oversight.

Figure 4: Funding of FTA's Safety and Security Activities, 2000 to 2003



Note: Data include FTA's funding of its safety and security activities and oversight.

Source: GAO's analysis of FTA budget data.

TSA's Role In Transit Security Has Yet to Be Defined

TSA is responsible for the security of all modes of transportation, including transit. The Aviation and Transportation Security Act created TSA within the Department of Transportation and defined its primary responsibility as ensuring security in all modes of transportation. The act also provides TSA regulatory authority over transit security, which FTA currently does not possess. Since its creation last November, TSA has primarily focused on improving aviation security in order to meet the deadlines established in the Aviation and Transportation Security Act.[19] As a result, TSA has not yet assumed full responsibility for security in other modes of transportation, such as transit.

TSA's role in transit security is evolving. For transit security, the Aviation and Transportation Security Act does not specify TSA's role and

[19]For more information on TSA's role in aviation security, see: U.S. General Accounting Office. *Aviation Security: Transportation Security Administration Faces Immediate and Long-Term Challenges*. GAO-02-971T. Washington, D.C.: July 25, 2002.

responsibilities as it did for aviation security. For example, the act does not set deadlines for TSA to implement certain transit security requirements. Similarly, although the President's National Strategy for Homeland Security states that the federal government will work with the private sector to upgrade security in all modes of transportation and utilize existing modal relationships and systems to implement unified, national standards for transportation security, it does not outline TSA's or the proposed Department of Homeland Security's role in transit security.[20] The strategy only states that TSA is responsible for securing our nation's transportation systems and that under the President's proposal TSA will become part of the Department of Homeland Security.

To help define its role in transit security, TSA is currently working with FTA to develop a memorandum of understanding. The memorandum of understanding will define the roles and responsibilities of each agency in transit security. TSA and FTA officials expect the memorandum of understanding to be completed by mid-September. According to a TSA official, the memorandum of understanding between FTA and TSA would likely remain intact if TSA moves to the proposed Department of Homeland Security, although the final decision would be up to the new Secretary of Homeland Security.

Transit Agencies Said the Federal Government Should Provide More Information and Assistance

The transit agencies we visited were generally pleased with the assistance FTA has provided since September 11. However, officials from these agencies said the federal government could do more in helping them secure their transit systems. They suggested, for example, that the federal government provide additional information on a number of issues; help with security clearances; supply increased funding for security improvements; and invest more in security-related research and development.

Officials from the transit agencies we visited reported a need for the federal government to disseminate additional information on topics ranging from available federal grants to appropriate security levels for individual agencies. A recurring theme was for the federal government to establish a clearinghouse or similar mechanism that maintains and disseminates the

[20]The strategy states that the proposed Department of Homeland Security will coordinate closely with the Department of Transportation, which will remain responsible for transportation safety.

identified information. Specifically, officials expressed a need for the federal government to provide additional information on the following topics:

- **Federal grants:** Officials from several transit agencies stated that information on available grants that can be used for transit safety and security improvements would be useful, noting that it is challenging and time consuming to locate these grants. For example, an assistant general manager stated that she spends too much of her time searching the internet for grants available for transit.

- **Cutting-edge technology:** Officials from a number of agencies said the federal government should provide information on the latest security technologies. For example, officials from one agency said this is needed because they have been bombarded by vendors selling security technology since September 11; however, the officials said they were unsure about the quality of the products, whether the products were needed, or whether the products would be outdated next year.

- **Best practices:** A number of officials said that information on transit security best practices would be beneficial. According to FTA officials, the assessments of the 36 transit agencies are helping them identify best practices and FTA plans to develop a mechanism to share such practices with the transit industry.

- **Intelligence:** Transit officials from a number of agencies stated that the federal government should provide additional information on threats to their transit agencies or cities. Officials also commented that "real time" information on attacks against other transit agencies would be useful. According to an FTA official, FTA is currently developing a system to share timely intelligence with transit agencies.

- **Level of security:** Transit officials from a few agencies told us that it would be helpful for the federal government to provide information on the appropriate level of security for their agencies. For example, officials at one agency questioned whether they needed to continue to post guards—24 hours a day, 7 days a week—at the entrance and exit of their tunnel, a practice instituted when the Department of Transportation issued a threat advisory to the transit industry in May 2002. Similarly, our preliminary survey results indicate that uncertainty about what level of security is appropriate is a challenge for transit agencies.

- **Decontamination practices:** Several transit agency officials stated that they need information on decontamination protocols. For example, one agency official noted that information is needed on how to determine if the system is "clean" after a chemical or biological attack.

A number of transit officials also expressed a need for the federal government to help them obtain security clearances. As we have reported in our previous work on homeland security, the lack of security clearances among state and local officials has been reported as a barrier to obtaining critical intelligence information. The inability to receive any classified threat information could hamper agencies' emergency preparedness capability. This was illustrated by an incident at one of the transit agencies we visited. In this incident, a bomb threat was made against a major building in the transit agency's city. However, because the transit agency officials did not have necessary security clearances, the FBI did not inform them of this threat until about 40 minutes before the agency was requested to help evacuate the building. According to transit agency officials, the lack of advance notice negatively affected their agency's ability to respond. Fortunately, in this case, the threat was not carried out. Proposed legislation (H.R 3483) provides that the Attorney General expeditiously grant security clearances to governors who apply for them and to state and local officials who participate in federal counterterrorism working groups or regional task forces.[21]

Officials from the transit agencies we visited also said additional federal funding is needed. As noted earlier, many of the transit agencies we visited are experiencing tightened budget environments, which makes it more difficult to fund safety and security needs. Moreover, according to our preliminary survey results, insufficient funding is the most significant obstacle agencies face in trying to make their systems more safe and secure. Congress has already made additional funding available for transit security purposes—about $24 million through the fiscal year 2002 DOD supplemental. The majority of this amount—about $18 million—funded FTA's multipart security initiative.

[21]According to the Department of Transportation, the Aviation and Transportation Security Act gives TSA the authority to disclose sensitive security information to approved officials from federal, state, and local governments and the private sector on a "need to know" basis, even if the officials do not have clearances.

On a similar note, officials from several of the agencies we met with said the federal government should be investing more in security-related research and development. Agency officials noted that individual transit agencies do not have the resources to devote to research and development. Moreover, the officials said this is an appropriate role for the federal government, since the products of research and development endeavors will likely benefit the entire transit community, not just individual agencies. Currently, FTA's Office of Technology is the agency's focal point for research and development and is responsible for identifying and supporting technological innovations, including safety and security innovations. According to FTA documents, the Office of Technology's obligations for safety and security technologies have increased from $680,000 in fiscal year 2000 to an estimated $1.1 million in fiscal year 2002. FTA's fiscal year 2003 budget request includes about $4.2 million for the Office of Technology's safety and security technologies, representing a 272 percent increase from fiscal year 2002.

Critical Decisions Remain About Federal Government's Role in Funding Transit Security Improvements

Important funding decisions for transit safety and security initiatives remain. As discussed earlier, some transit security enhancements are expensive, and transit agencies have limited funds to pay for these improvements. Consequently, the federal government will likely be viewed as a source of funding for at least some of these improvements. These improvements join the growing list of security initiatives competing for federal assistance. In considering the federal government's role in funding transit safety and security initiatives, policymakers will need to address several issues. These issues include developing federal funding criteria, determining the roles of stakeholders in funding transit security, and selecting the appropriate federal policy instrument to deliver assistance.

Because requests for federal dollars for transit security improvements may exceed available resources, criteria for distributing federal funds will also be needed. The total cost of all the needed transit security improvements throughout the country is unknown. However, given the size of the nation's transit systems, it could easily cost billions of dollars. Transit agency officials we met with identified a number of possible federal funding criteria that could be used to distribute federal funding, including ridership levels, the population of the city the transit agency serves, identified vulnerabilities of the agency, potential for mass casualties, and assets of the agency (e.g., tunnels and bridges). In general, the transit agency officials we spoke to believed the funding criteria should direct federal dollars to agencies that are most at risk and/or most vulnerable to a terrorist attack.

The identified criteria are in line with using a risk management approach—a systematic process to analyze threats, vulnerabilities, and the criticality (or relative importance) of assets to better support key decisions linking resources with prioritized efforts for results. We have advocated using a risk management approach to guide federal programs and responses to better prepare against terrorism and other threats and to better direct finite national resources to areas of highest priority.[22] FTA has not developed criteria or an approach to distribute federal funds for transit security improvements.

The roles of stakeholders in funding transit safety and security will also need to be established. Because all levels of government and the private sector are concerned about transit safety and security, it may be difficult to determine who should finance security activities. Given the importance of transit to our nation's economic infrastructure, some have argued that the federal government should pay for protective measures for transit. Transit officials we spoke with said that the federal government should provide additional funding for security needs. In contrast, some of the benefits of transit systems, such as employment and reduced congestion, remain within the locality or region. In addition, private companies that own transit systems could directly benefit from security measures because steps designed to thwart terrorists could also prevent others from stealing goods or causing other kinds of economic damage.

Another important consideration is the design of policy instruments to deliver assistance. Our previous work on federal programs suggests that the choice and design of policy instruments have important consequences for performance and accountability. The federal government has a variety of policy tools, including grants, loan guarantees, tax incentives, and partnerships, to motivate or mandate other lower levels of government or the private sector to help address security concerns. The choice and design of policy tools can enhance the government's capacity to (1) target the areas of highest risk to better ensure that scarce federal resources address the most pressing needs, (2) promote shared responsibilities by all parties, and (3) track and assess progress toward achieving national goals. Regardless of the tool selected, however, specific safeguards and clear

[22]U.S. General Accounting Office. *Homeland Security: A Risk Management Approach Can Guide Preparedness Efforts*. GAO-02-208T. Washington, D.C.: October 31, 2001; and U.S. General Accounting Office. *Combating Terrorism: Threat and Risk Assessments Can Help Prioritize and Target Program Investments.* GAO/NSIAD-98-74. Washington, D.C.: April 9, 1998.

accountability requirements, such as establishing the terms and conditions of federal participation, are needed to protect federal interests.

Observations

In conclusion, Mr. Chairman, securing the nation's transit system is not a short-term or easy task. Many challenges must be overcome. FTA and the transit agencies we visited have made a good start in enhancing transit security, but more work is needed. Transit agencies' calls for increased funding join the list of competing claims for federal dollars and difficult trade-offs will have to be made to ensure that finite resources are directed to the areas of highest priority. Next year's reauthorization of TEA-21 provides an opportunity to examine the federal government's role in funding transit security improvements. Because requests for federal assistance will probably exceed available resources, criteria will be needed for determining which transit security improvements merit federal funds. In addition, the federal government could take additional actions to assist transit agencies as they press forward with their security improvements, such as providing additional information on security matters and removing the prohibition on using urbanized area formula funds for operating expenses. We will continue to monitor these issues for the committee and expect to issue our final report in January 2003, which may include recommendations on actions that the federal government and/or the other transit stakeholders can take to improve transit security.

Scope and Methodology

To address our objectives, we visited 10 transit agencies across the country, including the Bay Area Rapid Transit in Oakland; Municipal Railway in San Francisco; Metropolitan Transportation Authority in Los Angeles; Regional Transportation District in Denver; Metro Transit in Minneapolis; Chicago Transit Authority in Chicago; Capital Metro in Austin; New York City Transit in New York; Central Florida Regional Transit Authority in Orlando; and Washington Metropolitan Area Transit Authority in the District of Columbia. We selected these agencies because they represent different geographical areas and operate transit systems of different sizes and modes. During our site visits, we interviewed key officials from the transit agencies and the respective cities' government and reviewed the transit agencies' emergency plans. In addition, we surveyed a random sample (about 200) of all transit agencies throughout the nation that are eligible to

receive federal urbanized area formula funds[23] to obtain additional information on safety and security issues. To date, we have a response rate of over 70 percent. We are currently analyzing our survey results; therefore,survey data presented in this statement are preliminary.[24] Additionally, we analyzed FTA budget data, safety and security documents, and applicable statutes and regulations. We also reviewed research on terrorism and attended transit security forums sponsored by the American Public Transportation Association and FTA. Finally, we interviewed FTA, TSA, and Department of Transportation officials and representatives from the American Pubic Transportation Association, National Governors Association, the Mineta Transportation Institute, RAND, the University of California at Los Angeles, and the Amalgamated Transit Union.

We conducted our review from May 2002 through September 2002 in accordance with generally accepted government auditing standards.

This concludes my prepared statement. I would be pleased to respond to any questions you or other Members of the Committee may have.

For information about this testimony, please contact Peter Guerrero, Director, Physical Infrastructure Issues, on (202) 512-2834. Individuals making key contributions to this testimony included Karin Bolwahnn, Nikki Clowers, Michelle Dresben, Elizabeth Eisenstadt, Michele Fejfar, Susan Fleming, David Hooper, Wyatt Hundrup, Hiroshi Ishikawa, and Sara Ann Moessbauer.

[23]The urbanized area formula program provides federal funds to urbanized areas (jurisdictions with populations of 50,000 or more) for transit capital investments, operating expenses, and transportation-related planning.

[24]We plan to issue our written report, including complete survey results, to the full committee in January 2003.

Related GAO Products

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