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## **Passenger Rail Security: Overview of Issues**

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# Passenger Rail Security: Overview of Issues

## Summary

The July 2006 bombings of passenger trains in Mumbai again demonstrated the vulnerability of passenger rail systems to terrorist attack. The number of riders and access points make it impractical to subject all rail passengers to the type of screening airline passengers undergo. Nevertheless, steps can be taken to reduce the risks of an attack.

The 9/11 Commission called for a systematic analysis of transportation assets, the risks to those assets, and the costs and benefits of different approaches to defending those assets; the Commission also called for homeland security assistance to be distributed based on these assessments of risks and vulnerabilities, rather than according to population.

The Intelligence Reform and Terrorism Prevention Act of 2004 (P.L. 108-458) did not directly address passenger rail security, but did direct the Department of Homeland Security (DHS) to create a national strategy for transportation security. This plan would identify national transportation assets, set risk-based priorities for their protection, assign responsibilities for their protection, and recommend appropriate levels and sources of funding for these efforts. DHS delivered a classified report on a “National Strategy for Transportation Security” to Congress in September 2005.

The House-passed version of the FY2007 appropriations bill (H.R. 5441) for the DHS provided \$200 million for grants for freight rail, passenger rail, and transit security; the Senate-passed version provided \$150 million, the same amount provided in FY2006 and FY2005. The House-passed DHS authorization bill (H.R. 1817) provides no specific requirements for passenger rail security; it would require DHS to work with stakeholders and public officials to develop best security practices for public transportation. Several other bills have been introduced that would increase federal responsibility for passenger rail security.

A key challenge facing Congress is balancing the desire for and cost of increased rail passenger security with the impacts of security measures on the operating efficiency of passenger rail systems, with the potential costs that could be incurred in the event of one or more attacks, and with the costs and benefits of other options for promoting homeland security. Some argue for greatly increased federal funding to help secure passenger rail systems against terrorist attack. Others argue that passenger rail systems are not only inherently vulnerable targets for terrorist attack, and thus difficult to defend, but also are only one among many groups of potential terrorist targets (e.g., schools, shopping malls, etc). Attempting to defend each of these groups of potential targets would cost billions of dollars, and the security measures may not only be of unproved effectiveness but may also interfere with the way these institutions operate, imposing many indirect costs on society. Some argue that greater overall security can be achieved at less cost by focusing federal security spending on anti-terrorist activities of national defense, intelligence, and law-enforcement organizations, reducing the threat of terrorism to all homeland activities. This report will be updated as warranted.

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# Passenger Rail Security: Overview of Issues

In the current atmosphere of heightened concern about terrorism, the bombings of passenger trains in Mumbai, India on July 11, 2006, following the bombings of London subway trains on July 7, 2005, and the attempt to repeat those bombings on July 21, reaffirmed congressional interest in reducing the risk of attacks against passenger rail operations in the United States. The 9/11 Commission characterized the federal emphasis on aviation security spending as “fight[ing] the last war,” noting that “opportunities to do harm are as great, or greater, in maritime or surface transportation.”<sup>1</sup> This report summarizes the challenges of securing passenger rail systems, options for making decisions about security funding, industry requests for funding, and legislative initiatives. It does not address the security of freight rail operations. However, since some passenger rail operations use the same track and facilities as freight rail, these topics cannot be completely separated.

## Passenger Rail Systems Are Inherently Vulnerable

Passenger rail service takes four forms: heavy rail (e.g., subway systems like Washington D.C.’s Metro), commuter rail (e.g., Maryland’s MARC and Virginia’s Virginia Railway Express [VRE] trains), light rail (e.g., Dallas’ DART) — these all fall under the category of public transit — and intercity passenger rail (Amtrak). These forms share certain characteristics that make them vulnerable to attack: they make scheduled stops along fixed routes; their operations depend on people having quick and easy access to stations and trains; and the number of access points and volume of ridership make it impractical to subject all rail passengers to the type of screening that airline passengers undergo. As the 9/11 Commission noted in its final report, “Surface transportation systems such as railroads and mass transit remain hard to protect because they are so accessible and extensive.”<sup>2</sup>

In light of that vulnerability, the casualty rate for terrorist attacks on passenger rail facilities is lower than might be expected. According to an estimate based on a database of terrorist incidents maintained by the RAND Corporation and the Oklahoma City Memorial Institute to Prevent Terrorism, there were a total of 181 terrorist attacks on trains and rail-related targets such as stations *worldwide* between 1998-2003, an average of 30 per year.<sup>3</sup> These incidents resulted in a total of 431 deaths. One attack — a derailment of a train followed by attacks on the surviving

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<sup>1</sup> *The 9/11 Commission Report: Final Report of the National Commission on Terrorist Attacks Upon the United States*, New York: W. W. Norton, 2004, p. 391.

<sup>2</sup> *The 9/11 Commission Report*, 2004, p. 391.

<sup>3</sup> These numbers do not include the 2004 Madrid bombing, which killed 191 people.

passengers, in Angola — accounted for 252 of these deaths.<sup>4</sup> There were no attacks recorded in the United States. Of course, this does not mean there will not be attacks in the United States in the future.

## **What Security Measures Have Been Taken for Passenger Rail?**

On May 20, 2004, the Department of Homeland Security issued security directives for passenger rail systems.<sup>5</sup> These directives have not been made public, but according to reports, largely reflect actions already taken by many rail systems.<sup>6</sup> These include removing or hardening trash containers on boarding platforms that could be used to hide bombs, increasing the presence of security officers, using video surveillance in and around stations, conducting random inspections of passengers and baggage (sometimes with the help of bomb-sniffing dogs), and encouraging riders to look for suspicious activity.

With limited options for preventing an attack, transit agencies have focused on minimizing the harm from an attack (this is referred to as “consequence management”). Consequence management efforts include vulnerability assessments, emergency planning, emergency response training and drilling of transit personnel, ideally in coordination with first responders, as well as purchase of communication and safety equipment. The federal government has assisted many of these efforts with funding and expertise.<sup>7</sup> These actions also help agencies prepare for natural disasters, criminal activity, and other potential disruptions to their operations.

## **Industry Security Spending and Funding Requests**

The passenger rail community says that it has made security improvements, but is constrained by the limits of available funding; thus its primary security issue is finding a way to pay for additional security improvements. The transit industry (which includes bus-only systems as well as rail systems, but does not include Amtrak) reports that it has spent over \$2 billion on security activities since 9/11<sup>8</sup>; the industry has requested \$5.2 billion in federal security-related capital investment (for protection of infrastructure and vehicles, enhancing evacuation capabilities, and improving emergency response) over three years and \$800 million annually in

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<sup>4</sup> Cited by Jack Riley, Director of RAND Public Safety and Justice, in testimony before the Senate Committee on Commerce, Science, and Transportation, March 23, 2004.

<sup>5</sup> United States Department of Homeland Security Press Office, “Department of Homeland Security Announces New Measures to Expand Security for Rail Passengers,” May 20, 2004.

<sup>6</sup> Peter Whoriskey, “U.S. Issues Anti-Terror Regulations for Rail Systems,” *Washington Post*, May 21, 2004, p. B1.

<sup>7</sup> United States General Accounting Office, *Rail Security: Some Actions Taken to Enhance Passenger and Freight Rail Security, but Significant Challenges Remain*, GAO-04-598T, pp. 11-14.

<sup>8</sup> William W. Millar, President, American Public Transportation Association, testimony before the Subcommittee On Economic Security, Infrastructure Protection, and Cybersecurity, House Homeland Security Committee, September 7, 2005.

ongoing operating and maintenance expenditures — a total of \$7.6 billion over three years, or just over \$2.5 billion annually.<sup>9</sup> It is not clear how much of the requested funding is for securing passenger rail operations versus securing bus operations; for the transit industry, passenger rail operations represented 67% of total capital costs and 32% of total operating costs in FY2002.<sup>10</sup> Amtrak has identified \$110 million in one-time costs and \$10 million-\$12 million annually in ongoing costs for security activities.<sup>11</sup>

The federal government provided \$65 million in security grants to transit agencies in FY2003,<sup>12</sup> \$50 million in FY2004,<sup>13</sup> and \$150 million for security grants for intercity passenger rail, freight rail, and transit in both FY2005<sup>14</sup> and FY2006<sup>15</sup> — a total of \$415 million over four years (in FY2002 the federal government also made one-time appropriations of \$100 million to Amtrak and \$39 million to the Washington Metropolitan Area Transit Authority for security expenses<sup>16</sup>). The industry's request for \$7.6 billion in security funding over three years is over 20 times more than Congress has provided over the past three years. Given the size of the passenger rail community's requested funding, it is likely that policy makers will want to evaluate the potential effectiveness of the industry's proposed spending, as well as consider the role of local and state governments in funding security improvements for transit agencies. In addition, policy makers might consider the other funding needs of the transit community, such as the need for increased spending to accommodate increasing demands for transit service.

There is a general consensus among security experts that passenger rail systems are inherently vulnerable, and thus virtually impossible to defend against attack, due to the very nature of their design and operations. The recent record of passenger rail attacks worldwide — 181 attacks over a period of six years, resulting in 431 deaths (252 of which were caused by one attack) — suggests both the relative frequency of such attacks and the relatively low mortality of most attacks. Congress has indirectly acted to increase the security of passenger rail operations (and many other activities of daily life) in recent years by providing additional funding for anti-terrorist activities of national defense, intelligence and law-enforcement organizations, as well as increased funding for broader homeland security activities.

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<sup>9</sup> American Public Transportation Association, *Survey of United States Transit System Security Needs and Funding Priorities: Summary of Findings*, April 2004, p. 1.

<sup>10</sup> American Public Transportation Association, *2004 Public Transportation Factbook*.

<sup>11</sup> These include security improvements to its largest stations and its tunnels, backup communications and control capacity, and adding the capability to track train movements outside the Northeast Corridor. Testimony of E. R. Frazier, Sr., Amtrak Chief of Police and Security, before the Senate Committee on Commerce, Science, and Transportation, March 23, 2004.

<sup>12</sup> In the FY2003 Emergency Wartime Supplemental Appropriations Act, P.L. 108-11.

<sup>13</sup> In the FY2004 DHS Appropriations Act, P.L. 108-90.

<sup>14</sup> In the FY2005 DHS Appropriations Act, P.L. 108-334.

<sup>15</sup> In the FY2006 DHS Appropriations Act, P.L. 109-90.

<sup>16</sup> In the FY2002 Department of Defense Appropriations Act, P.L. 107-117

The ability of the passenger rail community to fund desired security improvements out of its own resources is limited: both the transit industry and Amtrak operate at a deficit and require government assistance to cover their costs. However transit agencies also receive a significant amount of funding from local and state governments. One issue is whether the federal government should have the primary responsibility for funding security improvements for transit agencies, or whether that responsibility should be shared with local and state governments. The federal government has generally considered security a responsibility of the transit agency and the local community. Advocates of federal responsibility for security funding argue that, since the greatest current concern is chiefly about attacks from foreign terrorists, the federal government should bear responsibility for providing security funding in its role of providing national defense. Also, they argue that the economic difficulties faced by state and local governments limit their ability to assist transit agencies with additional security funding. Advocates of a local responsibility for funding security improvements argue that the federal government is exercising its national defense responsibility through funding national defense efforts, that taxpayers all over the country should not be required to pay for security improvements to a relatively small number of transit agencies located in large metropolitan areas, and that since local and state governments are concerned with the security of the metropolitan areas in which these transit agencies operate, it makes sense for these governments to be involved in securing the transit agencies as well. Moreover, many of the security measures that passenger rail organizations may employ have other benefits to the systems, often in reducing other types of threat to passengers (for example, from ordinary criminal activity and accidents) that are considered to be chiefly local responsibilities. Finally, having the local community take responsibility for funding the security improvements can help in evaluating the cost-effectiveness of proposed security improvements, as the local community would have the opportunity to decide what security improvements seem worth paying for.

Congress may also consider the benefit of increased funding for the security of the passenger rail community against the other funding needs of the community. The Federal Transit Administration (FTA) has estimated that the transit industry requires significant increases in capital spending (in the range of \$3 billion to \$8 billion annually) merely to keep pace with rising demand; the industry is looking to the federal government to help meet that need by increasing capital funding for transit. The DOT Office of the Inspector General has testified that Amtrak requires additional resources merely to return its system to a state of good repair and thus reduce the risk of a serious accident.<sup>17</sup> In an environment where federal domestic spending is likely to be severely constrained, policymakers may wish to evaluate the overall value of providing additional funding to increase passenger rail and transit services versus additional funding for securing passenger rail systems, funding which may be of questionable value in improving their security.

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<sup>17</sup> Mark R. Dayton, Senior Economist, Office of Inspector General, United States Department of Transportation, *Intercity Passenger Rail and Amtrak*, CC-2006-026, March 16, 2006.

## Risk Management

One approach that could be used for assessing the level of funding needed and how to allocate it is threat-based risk management. The Government Accountability Office (GAO)<sup>18</sup> and the 9/11 Commission<sup>19</sup> recommended the use of threat-based risk management to guide security actions, and the Homeland Security Act of 2002 (P.L. 107-296) directed that this approach be used for protecting key resources and critical infrastructure assets. The Transportation Security Administration (TSA) is using this approach to guide its security efforts.<sup>20</sup>

Threat-based risk management may be conceptualized as an equation: Vulnerability + Threat + Criticality = Risk.<sup>21</sup> ‘Vulnerability’ refers to ways a system may be open to attack; ‘Threat’ refers to the likelihood of an attack on a system; ‘Criticality’ refers to the potential consequences of an attack; and ‘Risk’ results from the combination of vulnerability, threat, and criticality. One implication of this equation is that, while a passenger rail system may be vulnerable to attack, the risk to the system may nevertheless be low if no threat is apparent, or if the vulnerability is in an area where the consequences of an attack would be limited. Another implication is that there are several ways to manage the risk to passenger rail. One way is to make changes in the passenger rail systems to lower their vulnerability to attack (e.g., hiring more police officers, introducing random screening of passengers and bags, installing security cameras); another is to reduce the potential consequences of an attack (e.g., through coordinated emergency response training exercises with local first responders); and yet another is to make changes elsewhere that reduce threats to those systems (e.g., putting more money into intelligence and law enforcement to combat terrorism).

As the above equation indicates, a formal risk assessment results from the combination of several studies: vulnerability assessments, threat assessments, and criticality assessments. Each of these component studies has limitations. The vulnerability of a system to attack, and the criticality of the system in the event of an attack, must be assessed on the basis of assumptions about what sorts of attacks might be attempted and a weighing of the impact of different types of consequences (e.g., injuries and deaths, economic disruption, environmental degradation, symbolic impact). The level of threat to a system is the sort of knowledge typically acquired

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<sup>18</sup> GAO, *Transportation Security: Federal Action Needed to Help Address Security Challenges*, GAO-03-843, June 2003, p. 51; *Rail Security: Some Actions Taken to Enhance Passenger and Freight Rail Security, but Significant Challenges Remain*, GAO-04-598T, p. 14.

<sup>19</sup> *The 9/11 Commission Report*, pp. 391, 396.

<sup>20</sup> Stephen McHale, Deputy Administrator, Transportation Security Administration, Testimony before the Subcommittee on Infrastructure and Border Security, House Select Committee on Homeland Security, May 12, 2004.

<sup>21</sup> For more discussion of risk management, see CRS Report RL32561, *Risk Management and Critical Infrastructure Protection: Assessing, Integrating, and Managing Threat, Vulnerabilities and Consequences*, by John Moteff; and Carl A. Roper, *Risk Management for Security Professionals*, Butterworth-Heinemann, 1999.

by intelligence and law enforcement agencies and will likely change over time as new information comes to light. Thus a risk assessment is an estimate, based on several other estimates, and does not provide unambiguous guidance to prioritizing security efforts. As well, producing these estimates necessarily involves decisions that policy-makers may wish to review.

Moreover, using risk assessments of individual transit facilities to produce a overall risk management strategy for a group of facilities introduces an additional set of challenges. GAO published a review of the progress made by a few DHS entities in applying risk management techniques to homeland security activities.<sup>22</sup> In the report, GAO notes that there is little experience with using a risk management approach to deal with terrorism.<sup>23</sup> GAO found that the agency that had made the most progress, the Coast Guard, while able to prioritize infrastructure according to risk within individual seaports, was not yet able to prioritize infrastructure or compare risks among different seaports.<sup>24</sup>

As a result of the Homeland Security Act of 2002 (P.L. 107-296), the Information Analysis and Infrastructure Protection Directorate of the Department of Homeland Security has been working for some time on risk assessments of key resources and critical infrastructure assets of the United States, in order to prepare a National Plan for Critical Infrastructure and Key Resources Protection, which was due to Congress at the end of calendar year 2004 (but has not yet been completed). The Intelligence Reform and Terrorism Prevention Act of 2004 (P.L. 108-458) directs DHS, working jointly with DOT, to develop “risk-based priorities across all transportation modes” for protecting transportation assets, “the most appropriate, practical, and cost-effective means of defending those assets,” and a national transportation strategic plan that defines “the agreed upon roles and missions of Federal, state, regional, and local authorities.” This national transportation strategic plan, and the security plans for each transportation mode that are also required, were due to Congress by April 1, 2005. Due to the sensitive nature of some of this information, the act provides that classified information shall be provided to the appropriate congressional committees separately. DHS sent a classified report to Congress on September 9, 2005 on a “National Strategy for Transportation Security.”

The result of the National Strategy and the security plans for each mode should be something along the lines of what the 9/11 Commission stated that the Transportation Security Administration should be able to provide for Congress: identification of the “the array of potential terrorist attacks, the layers of security in place, and the reliability provided by each layer,” as well as recommendations to improve weak individual layers.<sup>25</sup> With the aid of this information, Congress can

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<sup>22</sup> GAO, *Risk Management: Further Refinements Needed to Assess Risks and Prioritize Protective Measures at Ports and Other Critical Infrastructure*, GAO-06-91, December 2005.

<sup>23</sup> *Ibid*, p. 3.

<sup>24</sup> *Ibid*, p. 41.

<sup>25</sup> *The 9/11 Commission Report*, p. 392. In its *Final Report on the 9/11 Commission* (continued...)

better evaluate the security funding requests of various groups in light of the relative risks to each group and the relative effectiveness (including cost-effectiveness) of security strategies. Whether these plans will enable Congress to achieve the goal it set in the Intelligence Reform and Terrorism Prevention Act of 2004 — that the protection of transportation assets should be prioritized according to relative risk, and that funding for transportation security should be distributed according to assessments of relative risk and vulnerability — is unclear. While there may be some general measures that can be used to assess the relative risk to transportation assets in different locations,<sup>26</sup> the task of prioritizing the protection of transportation assets in different locations and across different modes faces many challenges.<sup>27</sup>

## Evaluating Security Funding Requests

There are no comprehensive studies by independent sources of passenger rail security needs and costs. Since 9/11, individual transit agencies have undertaken vulnerability and criticality assessments, often with the assistance of technical teams provided by FTA and TSA, but few agencies have done complete risk assessments, and until now the individual agency assessments have not been combined to produce a larger picture. For that matter, it is not clear if the assessments that have been done have used similar methods, so that they would be comparable. The transit community's security funding request appears to be based largely on the self-perceived needs of individual agencies rather than a comprehensive risk management analysis of the transit community. The National Transportation Security Strategy and the passenger rail- and mass-transit-related modal security plans mentioned above may help Congress in evaluating the transit community's \$7.6 billion security funding request.

As mentioned above, those plans will not be conclusive; their intent is to provide some guidance to policy-makers, but the plans will be based on studies which include decisions (e.g., which assets are critical, what kinds of threats are considered, what consequences are considered and how they are weighed in relation to each other) that policy-makers may wish to review. In the meantime, Members may wish to consider factors that may have influenced the size of the transit community's security request. Transit agencies have limited knowledge of the level of risk to their system, and so may be inclined to imagine the worst; the consequences of an attack on a system could be disastrous; and in the aftermath of an attack, a transit agency whose ambitions for security were less than 'state-of-the-art' could

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<sup>25</sup> (...continued)

*Recommendations* (published December 5, 2005), the Commission gave the Administration a grade of "C-" for the National Strategy on Transportation Security, noting that "[W]hile the strategy reportedly outlines broad objectives, this first version lacks the necessary detail to make it an effective management tool."

<sup>26</sup> RAND notes that . Henry H. Willis, Andrew R. Morral, Terence K. Kelly, Jamison Jo Medby, *Estimating Terrorism Risk*, RAND Center for Terrorism Risk Management Policy, 2005, p. 22.

<sup>27</sup> GAO, *Risk Management: Further Refinements Needed to Assess Risks and Prioritize Protective Measures at Ports and Other Critical Infrastructure*, GAO-06-91, December 2005.

face harsh criticism from its community — though that criticism could be deflected toward the federal government (and Congress) if the agency could claim that it had received much less security funding than it had requested.

From the congressional perspective, providing additional security funding for transit agencies may not be the best way to increase the security of those systems. There are several ways to reduce risks: by reducing threats, by reducing vulnerabilities, and by reducing consequences. The range of options available to transit agencies are largely limited to the latter two approaches, but Congress has the option of promoting the security of transit agencies and other homeland organizations by providing increased funding to agencies that combat terrorism directly, such as the military, intelligence, and law enforcement agencies. Given limited resources, strategies that reduce the risk to many categories of assets may be more cost-effective than strategies that focus on individual categories of assets.

As Congress considers this trade-off — providing more funding for passenger rail systems to improve their security versus more funding for intelligence and law-enforcement agencies to improve the security of the nation as a whole, including passenger rail systems — in evaluating how much to spend on passenger rail security, one option for consideration is that of requiring a significant local match for any security grants provided for transit agencies. That would encourage transit agencies and their communities to evaluate the cost and potential benefit of the various security options available to them, and to take greater responsibility for the trade-off decisions that are made on the local level.

Another issue is deciding how to distribute funding for security within the passenger rail community. Congress faces the perennial conflict between efficiency and equity: whether to try to direct funding to where it might have the greatest impact (by some measure of risk), or whether to try to equalize the amount of funding every recipient gets (by some measure of equity). The equity approach would largely ignore risk management considerations and potentially lead to a less than efficient allocation of resources, from the standpoint of security. In its final report, the 9/11 Commission recommended that “Homeland security assistance should be based strictly on an assessment of risks and vulnerabilities...Congress should not use this money as a pork barrel.”<sup>28</sup> The Commission’s recommendation included the proposal that community security needs be evaluated according to benchmarks that would be developed by a panel of security experts. TSA is still preparing the passenger rail security plan, and other transportation mode-specific plans, that would help inform risk-based allocations of federal security funding. In the meantime, grants to help transit systems improve their security have been provided through the FY2003, FY2004, FY2005, and FY2006 DHS appropriations acts.<sup>29</sup> DHS has not made explicit the criteria by which it determines the grant amounts, but the allocations appear to be based on a combination of threat-based risk management criteria as well as a general distribution to most major transit systems in the United States.

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<sup>28</sup> *The 9/11 Commission Report*, p. 396.

<sup>29</sup> P.L. 108-11 (the FY2003 Emergency Wartime Supplemental Appropriations Act), P.L. 108-90, P.L. 108-334, and P.L. 109-90, respectively.

In FY2003, the first year of its transit security grant program, DHS' Office of Domestic Preparedness provided \$65 million to 20 transit agencies in 14 urban areas. In FY2005, the Office of State and Local Government Coordination and Participation (the successor to the Office of Domestic Preparedness) provided \$108 million to 25 urban areas, listing 46 transit agencies in those areas as eligible to receive funding from those grants. The amounts of the grants vary; those areas with the largest rail ridership received the largest grants (see **Table 1**). New York City transit systems (defined, for the purposes of this grant program, as including New Jersey Transit and the commuter rail service of the Connecticut Department of Transportation) account for nearly 60% of all U.S. transit passenger rail trips, in an urban area that has already been the target of repeated terrorist attacks. New York City transit systems received 50% (\$32.4 million) of the total grant funding in FY2003, but 35% (\$37.6 million) of the total grant funding in FY2005. Meanwhile, urban areas whose share of U.S. rail ridership is relatively small, and whose rail transit systems are not generally thought of as likely targets for terrorist attacks, such as Buffalo, Dallas, Houston, Jacksonville, Memphis, Miami, Minneapolis, New Orleans, Pittsburgh, Sacramento, and St. Louis, received transit security grant funding (8% of the total funding — \$8.5 million) in FY2005.

**Table 1. Share of FY2003-FY2006 DHS Transit Security Grant Funding Going to Top Six Urban Areas by Passenger Rail Ridership**

Urban Area	Share of U.S. Total Passenger Rail Ridership (FY2002)	Share of Total DHS Transit Security Grant Funds (FY2003-FY2006)
New York City <sup>a</sup>	58%	40%
Washington, D.C. <sup>b</sup>	8%	10%
Boston	8%	8%
Chicago	7%	10%
San Francisco <sup>c</sup>	4%	7%
Philadelphia	4%	7%

**Source:** American Public Transportation Association, *2004 Public Transportation Factbook*, Tables 108-111, 130, 133, 136; Department of Homeland Security, *Total Transit Security Grant Program: FY 2003-FY 2006 Funding by Urban Area* [[http://www.dhs.gov/interweb/assetlibrary/GandT\\_FY2006TransitGrantProgramGraphs.pdf](http://www.dhs.gov/interweb/assetlibrary/GandT_FY2006TransitGrantProgramGraphs.pdf)].

**Note:** DHS transit security grant funding total excludes funding to Amtrak and freight rail systems; with rescissions, total is \$387 million.

- a. The New York City urban area eligible rail systems include the New York Metro Transit Authority, the Port Authority of New York and New Jersey, New Jersey Transit, and the commuter rail operation of the Connecticut Department of Transportation.
- b. The Washington, D.C. urban area eligible rail systems include the Washington Metropolitan Area Transit Authority and the commuter rail operations of Maryland (MARC) and Virginia (VRE). DHS calculations of funding to the Washington, D.C. urban area include funding for Baltimore.
- c. The San Francisco urban area eligible rail systems include BART, the Municipal Railway, the Altamont Commuter Rail Authority, and the light rail operations of the Santa Clara Valley Transit Authority.

## Security Involves Trade-Offs

As noted above, with a worldwide average of 30 terrorist attacks on passenger rail annually in recent years, the likelihood of a terrorist attack on any particular rail station is low — but the impact of an attack on a station in the United States (in lives lost and public reaction) could be high. Congress faces the challenge of determining how much responsibility the federal government should assume for the security desires of local passenger rail systems, how much funding the federal government can provide for passenger rail security in light of other homeland security needs and other transportation needs, and then determining how that security funding should be distributed within the passenger rail community.

Security efforts involve tradeoffs in money and time. One key policy issue is where to strike the balance between the desire for security and the efficient operation of the rail systems; another is striking the balance between the cost of security efforts in passenger rail and other federal priorities, including security efforts in other areas. Some observers, noting that the number of potential terrorist targets in the United States — such as passenger rail trains — is virtually limitless, question the value of efforts to make these targets more secure. They argue that many such efforts are not cost-effective, given that if one set of targets — for example, trains — is made more secure, terrorists might simply shift to softer targets such as buses or shopping malls. Moreover, these security efforts impose a variety of costs on the public, in money, time, inconvenience, and limitations on personal freedoms. These observers argue that a more effective strategy is to increase funding for efforts to disrupt the terrorist groups that are the source of these threats (e.g., funding for intelligence and law enforcement agencies) and for efforts to respond to any attacks (e.g., funding for first responders).<sup>30</sup> Others argue — though rarely in print — that the government and other entities should take visible actions intended to increase the security of people's daily activities even if the value of those actions is uncertain, because it is important for Americans' sense of security that the federal government and other organizations be perceived as doing something to make them safer. But such actions involve trade-offs too, and one of the trade-offs is that resources may be applied to activities with limited security value that might otherwise be applied to activities with greater security value.

## Legislation in the 109<sup>th</sup> Congress

Legislation has been introduced in the 109<sup>th</sup> Congress dealing with passenger rail security. These bills implicitly raise the following issues:

- how much federal control there should be over passenger rail security?
- how much federal responsibility — particularly financial responsibility — there should be for passenger rail security?
- how much funding should be directed toward passenger rail security as opposed to other homeland security efforts?

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<sup>30</sup> Jennifer Barrett, "An Enormous Waste of Money," *Newsweek* Web Exclusive, March 17, 2004, [<http://www.msnbc.msn.com/id/4549661/>], viewed July 8, 2004.

- how should the range of potential security activities for the passenger rail sector be prioritized?
- how should security funding be allocated among the passenger rail service providers?

Passenger rail security bills that have been introduced include H.R. 153 (Menendez), H.R. 1109 (Lynch), H.R. 2351 (Oberstar), Title IV of S. 12 (Biden), and S. 1052 (Young). These bills are very similar in two respects; they would increase the responsibility of the federal government for passenger rail security, and increase the funding available for passenger rail security. These bills are also similar to S. 2273 (108<sup>th</sup> Congress), which was passed by the Senate near the end of the 108<sup>th</sup> Congress, but was not acted on by House. More specifically, these bills:

- direct DHS to conduct a rail transportation vulnerability assessment, prepare a security plan, and provide prioritized recommendations to Congress on improving rail transportation security;
- authorize funding for fire and life-safety improvements to Northeast Corridor tunnels in New York City, Baltimore, and Washington, D.C.<sup>31</sup>; and
- direct DHS to conduct a research and development program to improve rail transportation security.

In addition, most of the bills include provisions to:

- have DHS create a freight and passenger rail security improvement grant program to provide grants to freight rail companies and Amtrak for security improvements;
- have GAO study foreign rail transport security programs;<sup>32</sup>
- require DHS to execute a memorandum of agreement with the Department of Transportation governing their roles in addressing railroad transportation security;
- require DHS to study the feasibility of screening rail passengers, baggage, and cargo<sup>33</sup>; and
- require Amtrak to develop a plan to assist the families of passengers involved in rail accidents; and protect rail security whistleblowers.

A bill requiring DHS to conduct a vulnerability assessment of public transportation systems, H.R. 1116 (Millender-McDonald), has also been introduced. These bills have been referred to the committees of jurisdiction; S. 1052 was ordered to be reported with a substitute amendment.

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<sup>31</sup> H.R. 1109 includes funding for improvements to the Back Bay tunnels in Boston.

<sup>32</sup> GAO is already in the process of reviewing the security practices used by foreign rail systems. *Transportation Security: Systematic Planning Needed to Optimize Resources*, GAO-05-357T, p. 21.

<sup>33</sup> TSA conducted a three-part pilot screening project during the period May - August 2004 (the Transit and Rail Inspection Pilot, or TRIP) focused on screening intercity rail passengers and baggage.

Legislation dealing with the authorization of, and appropriations for, the Department of Homeland Security also has implications for passenger rail security. H.R. 1817, DHS's authorization legislation, would require DHS to work with public transportation stakeholders and public officials to develop best security practices for securing public transportation. The bill does not provide any authorizations specifically for transportation security; the chairman of the authorizing committee noted during 2005 that the thus-far brief existence of both the authorizing committee and DHS itself had not allowed for detailed work on many issues, and that DHS's new secretary was reviewing the structure and functions of the department. As a result, the committee would hear the results of the review before proceeding with additional authorization legislation.<sup>34</sup> H.R. 1817 was passed by the House on May 18, 2005.

The House-passed version of the FY2007 appropriations bill for DHS (H.R. 5441) would provide \$13.2 million to hire additional federal rail security inspectors and deploy canine teams (as part of \$37 million for the surface transportation security activities of the Transportation Security Administration; H.Rept. 109-476) and \$200 million for grants for intercity passenger rail, freight rail, and public transportation security (as part of \$2.5 billion in state and local discretionary grants administered by the Office of State and Local Government Coordination and Preparedness). The Senate-passed version of the FY2007 appropriations bill would also provide \$13.2 million for rail inspectors and canine teams, and \$150 million for transit and rail security grants, the same amount provided for grants in FY2006 and FY2005.

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<sup>34</sup> Representative Christopher Cox, *Congressional Record*, May 18, 2005, pp. H3455-3456.