

# Executive Memorandum

No. 1021  
February 23, 2007



Published by The Heritage Foundation

## Rail Security Requires Patience, Not Pork or More Regulation

*James Jay Carafano, Ph.D.*

When the leadership of the House Homeland Security Committee outlined the priorities for this year, beefing up security for freight and passenger rail stood at the top of its agenda. This was a poor choice. Rather than requiring action from Congress, rail security is one area in which legislators should show restraint and patience.

The federal government has only recently completed a national vulnerability assessment of the rail system, issued additional regulations, developed new law enforcement support teams, and allocated millions for rail security training, planning, and exercises. Instead of throwing more money and laws at the problem, Members of Congress should focus on their oversight responsibility, ensuring that these programs are being implemented efficiently and effectively.

**Dealing with the Danger du Jour.** After the terrorist railroad bombings in London and Madrid, Congress fixated on addressing the vulnerabilities of the American rail system. Focusing myopically on specific threats, such as a terrorist attack on a U.S. train, is a grave mistake. America is a vast nation with millions of people and trillions of dollars of infrastructure.

Not everything can be “hardened” to the point that terrorists will be deterred, and hardening one target to the exclusion of everything else will not

stop terrorists. This is the irrefutable finding of “Breaching the Fortress Wall: Understanding Terrorist Efforts to Overcome Defensive Technologies,” a recent study by the RAND Corporation, a nonprofit, non-partisan research institution. Lead author Brian Jackson observed:

- 
- The U.S. rail system cannot be made invulnerable.
  - The best way to prevent a terrorist attack is by stopping terrorists before they can strike, not by spending scarce resources to build a “fortress wall” around a few potential targets.
- 

The most important point we found is that terrorist organizations keep changing their strategies in order to remain effective, and we have to design our defense capabilities to adapt. If we don't, we risk spending our

resources building the equivalent of a fortress wall that won't actually provide much protection once terrorists have found a way over, under, through or around it.

Throwing more money and rules at rail security is a good example of a bad idea: buying into the notion that building a “fortress wall” will make us safer.

---

This paper, in its entirety, can be found at:  
[www.heritage.org/research/homelanddefense/em1021.cfm](http://www.heritage.org/research/homelanddefense/em1021.cfm)

Produced by the Douglas and Sarah Allison  
Center for Foreign Policy Studies  
of the  
Kathryn and Shelby Cullom Davis  
Institute for International Studies

Published by The Heritage Foundation  
214 Massachusetts Avenue, NE  
Washington, DC 20002-4999  
(202) 546-4400 • [heritage.org](http://heritage.org)

Nothing written here is to be construed as necessarily reflecting the views of The Heritage Foundation or as an attempt to aid or hinder the passage of any bill before Congress.

Rather than stopping terrorists, overly investing in rail security will simply waste scarce homeland security dollars and resources. In addition, imposing unnecessary restrictions on the rail industry will make it less competitive and less efficient, which will mean higher prices on the many goods and services that are moved by rail.

**Understanding the Vulnerabilities.** Much of the misplaced emphasis on further beefing up rail security can be justified only by ignoring reality. Here are the facts:

*Fact #1: The rail system cannot be made invulnerable.* The United States has over 140,000 miles of rail track and millions of freight and passenger railcars. Trying to protect everything would be extremely difficult and expensive. The system's greatest vulnerabilities are cars containing lethal hazardous materials and crowded commuter cars and stations. Even if these vulnerabilities could be completely addressed, a determined terrorist could still attack the U.S. rail system. If such an attack did occur, Americans would still be greatly unsettled, fixating on why expensive security failed rather than on how security protected more tempting targets.

*Fact #2: The risks are modest.* While trains move over 1.2 million containers of hazardous material, less than 10 percent carry chemicals that could immediately endanger large numbers of people under any conditions. True, in some scenarios, a terrorist attack could put thousands at risk. For example, a catastrophic rupture of a chlorine container (less than 1 percent of total cargo) could sicken and kill thousands. However, such a catastrophe would require perfect conditions: a stationary car, ideal temperature and wind to spread the gas, no alerts or evacuation after the incident, a terrorist who knows exactly when and where to attack and how to breach the container with exactly the right amount of explosives to release the gas quickly without consuming the gas in the explosion.

Terrorists would find building and driving a truck bomb into a city center much easier and more dependable. Of course, they might be willing to accept less than perfect results and attack a train anyway, but the effects of such a strike would be no different from the effects of a normal hazardous material incident. These are risks Americans live with every day. While U.S. rail and mass transit have

commendable safety records, they are not perfect. Derailments, industrial accidents, and even malicious acts happen. While these events are tragic, hazardous material teams and emergency responders are trained to deal with them, and most emergency professionals would argue that transporting extremely hazardous materials by train is far safer than transporting them by truck. Train accidents are less common, and isolating and managing the scene of a train accident is usually easier.

Since its establishment, the Department of Homeland Security (DHS) has moved deliberately to adopt measures to improve rail security, including issuing new regulations to freight carriers, providing homeland security grants for training, conducting risk assessments, and undertaking planning, exercises, and inspections. In addition, the department has developed and trained assets within the DHS that can be deployed to high-risk areas when the threat warrants additional security. These measures address the most practical, common-sense initiatives that can be employed to reduce risks.

The other major risk is to mass transit systems. Again, the most effective means to counter this danger is common-sense security and policing measures. Federal homeland security grants for rail security (over \$573 million for this year alone) are designed specifically to address these needs. This includes developing countermeasures similar to those employed throughout Europe after the Madrid and London bombings.

**Securing the Nation.** The best way to prevent a terrorist attack is to stop terrorists before they can strike. This requires good counterterrorism and intelligence programs, and that is where the federal government should focus its efforts. Regarding infrastructure like rail and mass transit systems, government and the private sector should continue to work together to take reasonable precautions that enhance public safety and security. Meanwhile, Congress should focus less on doing more and more on providing oversight of ongoing programs.

—James Jay Carafano, Ph.D., is Assistant Director of the Kathryn and Shelby Cullom Davis Institute for International Studies and Senior Research Fellow for National Security and Homeland Security in the Douglas and Sarah Allison Center for Foreign Policy Studies at The Heritage Foundation.