

## Guest Viewpoint: Developing Railroad Security

By Charles H. White Jr.

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There are roughly 140,000 miles of active track in the national freight rail network comprised of the Class I's and about 600 short line railroads; 23,000 miles of track used for rail passengers; 7,100 miles of urban rail transit systems; 165,000 miles of bus routes; and more than 4 million miles of interstate, national highway and other roads open to the trucking industry within America's surface transportation system.<sup>1</sup> Within the surface transportation sector, rail traffic — both passenger and freight — presents the most lucrative and vulnerable target to terrorists. Almost two million loads of hazardous materials or chemicals are transported by rail each year. As shown by recent tragic events in London, Madrid and Mumbai (Bombay), rail traffic is increasingly a target of choice for organized and careful terrorists.

The Transportation Security Administration (TSA) states that it fully understands the threat posed by an attack on hazardous materials or chemicals in transit: "An airborne hazard from an attack against a chemical facility or toxic chemicals in transit is among the most serious risks facing America's highest threat areas."<sup>2</sup> Yet, at the same time the budget requested for TSA tells a different story. The President's proposed budget includes \$5 billion for aviation security and only \$41.4 million for surface transportation security, which, of course, covers much more than the freight rail system. Equally telling, there are more than 40,000 TSA personnel dedicated to aviation, and only about 100 dedicated to the sprawling surface transportation sector outlined above.

### Policy Shortcomings

Is there anything wrong with this proposed budget and asset allocation? Indeed — there is. However, for purposes of this article, only the most glaring policy shortcomings that impact chemical shippers will be explored:

**The imbalance between the aviation and surface modes.** In terms of transport security expenditures (the real measure of commitment) the government's approach is imbalanced.<sup>3</sup> The airlines have been on a kind of federal life support since 9/11. But if this commitment comes out of a relatively finite set of funds available for overall transport security, it comes with a high cost to the other modes and the shipping community dependent on them. The biggest impact has been on the private sector rail industry, which, unlike the truckers, builds and maintains its own infrastructure. The railroads have been largely left to carry their own security burdens without much federal support. Chemical shippers by rail obviously have a stake in TSA's current policy, which greatly favors aviation over the surface modes.

**The relative neglect of freight transport security.** While a hijacked airliner is an effective bomb, so is a rail car loaded with widely available chlorine. Detonation of a chlorine tank car in a populated area would have disastrous results. Indeed, al Qaeda is turning to makeshift chlorine bombs as improvised WMDs.<sup>4</sup> The various municipal

attempts now in litigation to force rerouting of hazardous material rail traffic away from highly populated areas has only begun the calculus of risk balancing — trading longer exposure through circuitous routing against local exposure. This policy dialog calls for careful analysis rather than a rush to super "NIMBY" cases which may collectively result in a highly inefficient, jerry-built network of forced rerouting patterns. Chemical shippers, as important stakeholders, need to be at the table in this public policy discussion. They also need to urge TSA to pay more attention to freight transport security beyond the ports. Dangerous lading does not only come in from overseas; it moves daily in huge quantities over our surface modes.

**The failure to recognize the intermodal nature of our freight transport system.** Supply and logistics experts understand the interconnected and coordinated nature of America's intermodal surface freight transport system. Indeed, its intermodal nature is a necessary prerequisite in making supply chain management a powerful new management tool. Unfortunately, the government, through Homeland Security and TSA, has yet to grasp the concept as shown by its security funding priorities. This has left the truckers and railroads to develop their own separate security technologies and approaches. In addition to being dangerous, it is also wasteful of limited resources. Leading industry users of the transport system, with much at stake in security (like chemical shippers), must take a leading role in advocating for a system/intermodal approach to transportation security.

**The failure to assist the railroads at a level commensurate with their needs, risks and vulnerabilities.** America's private sector railroads, unlike the airlines and truckers, build, own and maintain their infrastructures. This is massively expensive. The rail industry is among, if not the most, capital intensive of America's industries. The president of the Association of American Railroads has shown that the Class I roads have invested almost 50 percent of their operating revenue on infrastructure and operating equipment over the last quarter century. The rail industry's asset base necessary to produce a dollar of revenue is more than twice the average of all other industries.<sup>5</sup> Moreover, enormous traffic increases are predicted for a rail industry approaching or already at capacity limits.<sup>6</sup> The infrastructure investment necessary to meet this demand leaves little or no financial ability to undertake significant security projects. While being lavish with the airline industry, the government has largely left the railroads to themselves. Given the terrorists' "discovery" of chemicals for bomb materials, and the increasing tempo of attacks on the world's railroads, TSA's allocation of security funding cannot be allowed to continue.

### **A New Rail Security Regime**

Just as last year's aborted Dubai port deal shifted the public's security focus from the airlines to the ports, the increasing attacks on the world's rail systems — along with the realization that potential domestic improvised "WMDs" move in great volume over our rail system — has finally prompted Congress to act. Presently, two important pieces of security legislation are pending. Unfortunately, legislation embodying the 9/11 Commission's recommendations has included a veto-guaranteeing provision allowing the unionization of the TSA aviation workers. This will undoubtedly cause further revision and delay.

Perhaps holding more immediate promise for rail security enhancement is the just announced "Rail and Public Transportation Security Act of 2007," H.R. 1269, 110 Cong. 1st Sess.<sup>7</sup> While it is too early to predict the exact content of the Rail Security

Act, now just entering the legislative process, we can say that it holds great potential to assist the private sector railroads, using an 80 percent to 20 percent contribution formula to develop hard security-enhancing projects (that is, those involving physical and technological augmentations to the railroads' present largely procedure-based security systems).

The time is now for chemical shippers, as important stakeholders in this area, to accept the railroads' invitation for greater public-private partnership in security; to join the dialog on forced rerouting of chemical traffic moving by rail; and to engage in the legislative process to both advance their industry's interests — and, more important, further the public interest in making America's rail system as safe and secure as possible.

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<sup>1</sup> Bureau of Transportation Statistics, U.S. Department of Transportation, Pocket Guide to Transportation, 2007.

<sup>2</sup> Kip Hawley, Asst. Secretary TSA, before the Subcommittee of Homeland Security, Committee on Appropriations, U.S. House of Representatives re the President's Budget for 2008, p.8.

<sup>3</sup> For instance, the federal government spends about \$9 to protect each airline passenger annually; it spends about 1 penny to keep each train or transit passenger safe.

<sup>4</sup> On March 17, news reports indicated that over 350 Iraqis were injured in truck borne chlorine tank explosions. Chlorine, of course, was a widely used gas weapon in World War I.

<sup>5</sup> Hamberger, E, "Public-Private Partnerships Address Rail Transportation Challenges," Journal of Transportation Law, Logistics and Policy, Vol. 72, No.2 (2005), pg. 218

<sup>6</sup> The Department of Transportation predicts that rail traffic will grow by 50% by 2020. Freight Analysis Framework, 2002.

<sup>7</sup> In introducing the Bill, Chairman Oberstar stated; "Tragically, transit and rail systems have long been popular targets of terrorist attacks worldwide. From 1991 to 2001, 42 percent of all terrorist incidents were carried out on rail systems or buses. Recent tragic events show that these threats continue."

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