



Transit is a Terrorist Target

The following article was authored by the Mineta Transportation Institute's Brian Michael Jenkins, Director of the Mineta National Transportation Safety and Security Center, and Bruce R. Butterworth, a Mineta Research Associate and former Director of Operations at FAA.

San Jose, CA, May 31, 2016 – An excellent article by Alan Levin in the May 16, 2016 *Bloomberg* magazine, “Terror Stalks Commuters as Foiled Plots Show Transit is Target,” makes the point that transportation holds an enduring lure for terror groups.¹ Research carried out over the past twenty years by the Mineta Transportation Institute (MTI) supports this conclusion and points to some worrisome trends not mentioned in the piece.

Unquestionably, terrorists remain obsessed with attacking commercial airlines, evidenced by the bombing of a Russian airliner in Egypt last October. (We are still not certain what brought down the EgyptAir Flight 804 between Paris and Cairo on May 19, 2016 but terrorist sabotage is high on the list of possible causes.)

Security measures make airliners hard targets, and over the years, the number of attempted hijackings and bombings gradually has declined—though the public areas of airports remain vulnerable. In contrast, public surface transportation—trains, metros, subways, buses—offer terrorists easy access and crowds of people, making them especially attractive to terrorists seeking high body counts. That helps explain why terrorist attacks on surface transportation targets have increased worldwide.

Using the Global Terrorist Database (GTD) maintained by the National Consortium for the Study of Terrorist and Responses to Terrorism (START) at the University of Maryland, the *Bloomberg* article showed that terrorists operating in western countries continue to target both aviation and surface transportation. The database maintained by the Mineta Transportation Institute (MTI), which addresses only surface transportation, adds further detail to the *Bloomberg* piece.

The good news, as MTI noted in its recently published analysis of attacks in Western Europe and North America between 1970 and the end of 2015, only about 11% of attacks in the world occur in Western Europe, Canada and the United States.² Since 1970, there have been only 22 attacks in Canada and the United States against passenger trains and buses (along with another 31 attacks against freight trains and transportation infrastructure such as roads and tracks.; only four of these attacks caused fatalities.

The most lethal attack in the United States was the December 7, 1993 shooting rampage by Colin Ferguson, a mentally disturbed 36 year-old male. Ferguson killed six people and wounded another nineteen in a Long Island Rail Road commuter train. MTI has pointed

¹ Alan Levin, “Terror Stalks Commuters as Foiled Plots Show Transit is the Target,” *Bloomberg*, May 16, 2016. <http://www.bloomberg.com/news/articles/2016-05-16/terror-stalks-commuters-as-foiled-plots-show-transit-is-target>

² Brian Michael Jenkins and Bruce R. Butterworth, [Long-Term Trends in Attacks on Public Surface Transportation in Europe and North America](#), San Jose, CA: Mineta Transportation Institute, January 2016.

out that deranged attackers can be deadly. For example, a single person attempting suicide by arson on a South Korean subway train killed 198, the third most deadly attack against any transportation target in the world since 1970.

The bad news is that surface transportation targets continue to appear in terrorist plots, indicating that trains and buses are clearly in the terrorists' playbooks. The March 22, 2016 attack on the Brussels metro was tragic, but no surprise.

The MTI database also shows for Western Europe and North America that bombings are the most common tactic and the most lethal. While bombings comprise 67% of all the attacks, they caused 95% of the fatalities; those in enclosed environments like subway trains and enclosed stations comprised 13% of the bombings, but caused 71% of the fatalities. Over time, high lethality attacks have increased in Western Countries, especially the March 11, 2004 Madrid bombings that killed 191 and the July 7, 2005 London bombings that killed 52. And worldwide the trend is even more spectacular: attacks with 25 or more fatalities on buses, trains (and passenger ferries) grew from only four between 1975-1985 to 39 between 2005-2015.

Suicide attacks comprise a small but increasing proportion of the total number of attacks, and are usually a more lethal tactic (but not always so). In Europe, Jihadist attacks are becoming more lethal than non-jihadist attacks. The Jihadist worldview – that their violence is sanctioned by God--loosens any self-imposed constraints and drives them to seek high body counts. Eleven Jihadist attacks—a small fraction of the total—caused 50% of the fatalities. This is mainly because of the Madrid and London attacks, to which the March 22, 2016 attack on the Brussels Metro must now be added.

However, there are some assertions in the *Bloomberg* article with which we would disagree, for one, that “Nobody is really getting attention to the number of attacks.” For years MTI has been calling attention to the large number and growing lethality of attacks, pointing out that between 9/11 and the end of 2015, fatalities caused by attacks on surface transportation killing 25 or more were the equivalent of nine airplane hull losses. The comparable number of attacks against airliners and the airports that serve them is around two hull losses, a stunning comparison. These disturbing trends have been the subject of Congressional testimony.³

The federal government primarily relies on the transit operators to maintain good security, but the Transportation Security Administration (TSA) has devoted increasing attention to the unique challenges of surface transportation security and provides program oversight, supports research and training, disseminates threat and security guidance to transportation system owners and operators, and fields prevention and response teams to assist in protecting commuters. TSA has a unit dedicated specifically to the analysis of terrorist attacks on surface transportation systems. The Government Accountability Office has also repeatedly addressed this issue. Recently, Congressman Eric Swalwell and [66 other members of Congress](#) called for increased funding for the Transit Security

³ Brian Michael Jenkins, “The Terrorist Threat to Surface Transportation,” *Testimony submitted at the request of the Senate Homeland Security and Commerce Committees*, June, 2011.

Grant Program, which directly supports surface transportation security infrastructure. More is needed.

The transit industry itself has also been proactive, and implemented selective screening for example – a practice MTI endorsed nearly eight years ago in a 2007 report titled [*Selective Screening of Rail Passengers*](#). But having to operate within an open system imposes constraints not faced in commercial aviation, which has long used the kind of queues that would shut down mass public transit, even before security screening was imposed on it.

The article also fails to mention something very important that MTI research has found.

Low lethality attacks aren't just a matter of luck and attacker ineptitude, or because some attackers do not want to kill but instead to cause disruption. There is another side to this, as MTI has often said in its reports.

In Western Europe, alert individuals – officials, employees or passengers – have detected and stopped 11% of bomb attacks against buses and trains in Western Europe since 1970, and 14% of bomb attacks against infrastructure targets such as railroad tracks. The comparable figures in the United States and Canada are 18% and 20%.

Security measures can and do often work, but the challenge remains. Public Surface transportation is an attractive terrorist target. Attacks can result in significant fatalities. Continued efforts are needed to analyze patterns and decide how to most cost effectively reduce that risk. But authorities have not been asleep at the switch, a conclusion that detracts from, rather than adds to, the importance of that conclusion.

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ABOUT THE MINETA TRANSPORTATION INSTITUTE

The Mineta Transportation Institute (MTI) conducts research, education, and information transfer programs regarding surface transportation policy and management issues, especially related to transit. Congress established MTI in 1991 as part of the Intermodal Surface Transportation Efficiency Act. MTI won national redesignation competitions in 2002, 2006 and 2012. The Institute is funded by the US Department of Transportation, the US Department of Homeland Security, the California Department of Transportation, and public and private grants. The internationally respected members of the MTI Board of Trustees represent all major surface transportation modes. MTI, the lead institute for the nine university Mineta National Transit Research Consortium, is affiliated with San Jose (CA) State University's College of Business. Visit transweb.sjsu.edu.

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