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## **Mineta Transportation Institute Releases Two Research Reports about Terrorist Attacks against Surface Transportation around the World**

**San Jose, Calif., April 14, 2010** – The [Mineta Transportation Institute](#) (MTI) has released two research reports detailing data on terrorist attacks and serious crimes committed against surface transportation targets throughout the world. The first report, [\*Explosives and Incendiaries Used in Terrorist Attacks on Public Surface Transportation: A Preliminary Empirical Analysis\*](#), covers attacks on trains, buses, and highway targets. The second, [\*Terrorist Attacks on Public Bus Transportation: A Preliminary Empirical Analysis\*](#), covers attacks on buses, bus stations, and bus stops. Both were written by Brian Michael Jenkins and Bruce Butterworth, experts in transportation security.

For the report on explosives and incendiaries, data include the frequency and lethality with which trains, buses, and highway targets are attacked when explosives and incendiaries are used; and the relationship between fatalities and injuries and attacks against those targets. In addition to providing similar information, the public bus report also includes data about how often buses are attacked relative to other surface transportation targets, first with all weapons and then with only explosive and incendiary devices; the relative lethality of bus attacks; and the distribution of those attacks.

The data are drawn from MTI's proprietary database of attacks on public surface transportation, which is continuously updated as new attacks occur and more information on previously recorded attacks becomes available.

This unique database is developed from existing lists and media accounts, augmented by local sources, providing detailed information on targets, attack methods, and the ways in which bombs and incendiaries are placed to kill passengers on public trains and buses and to destroy transportation infrastructure. It helps government policy makers and transportation managers understand not only what and how terrorists most often attack, but more important, which of their attacks are most deadly, and where their "return on investment" is greatest. Therefore, the data can help government authorities and transit operators design the most effective security countermeasures.

For example, the database indicates how many devices are delivered by suicide bombers, where other bombs are placed, how many times more than one bomb is used, and when any bombs were timed to kill first responders. The latest version of the database now under construction will also show how often police, security guards, drivers and employees, and passengers detect bombs beforehand and prevent attacks; and how often bombs are placed in trash bins, in leave-behind bags, or in lockers and toilets of stations. These are important data for those developing security regulations, procedures, guidance and training.

Because of its great detail, the database has already yielded some surprising results. For example, suicide bombers, particularly when attacking trains, are not the most lethal way of delivering a bomb, and assaults with automatic weapons and land mines have been used with greater lethality for many targets than IEDs placed inside a target. These kinds of results are provided in the two reports.

"The data presented here are drawn from the MTI database of attacks on public surface transportation, to which additional incidents are added either as they occur or as they are culled from existing collections that do not focus specifically on transportation security," said Mr. Jenkins. "On November 12, 2009, the database contained 1,384 attacks. Over the next three months, the database

grew to 1,648 attacks, an average of 88 attacks a month. MTI is currently incorporating hundreds of attacks from the 1,700 transportation-attack entries in a chronology maintained by the RAND Corporation, which graciously provided the data to MTI. We will shortly have a set of over 2,250 attacks to work with”

The reports are produced by the Mineta Transportation Institute’s National Transportation Security Center of Excellence (MTI/NTSCOE) for the Science and Technology Directorate of the Department of Homeland Security (DHS). Final reports, with updated figures and expanded information, will be peer-reviewed and published in the coming months.

## **ABOUT THE AUTHORS**

### **BRIAN MICHAEL JENKINS, PRINCIPAL INVESTIGATOR**

Mr. Jenkins is an international authority on terrorism and sophisticated crime. He directs MTI’s research on protecting surface transportation against terrorist attacks. He is also a senior advisor to the president of RAND. From 1989-98, Mr. Jenkins was deputy chairman of Kroll Associates, an international investigative and consulting firm. Before that, he was chairman of RAND’s Political Science Department, where he also directed research on political violence.

He has a BA in fine arts and an MA in history, both from UCLA. He studied in Mexico and Guatemala, where he was a Fulbright Fellow and received a fellowship from the Organization of American States. Mr. Jenkins was a paratrooper and a captain in the Green Berets, serving in Vietnam and the Dominican Republic. He authored several articles, reports and books, including *International Terrorism: A New Mode of Conflict* and *Will Terrorists Go Nuclear?*

### **BRUCE R. BUTTERWORTH**

Mr. Butterworth has had a distinguished government career, working at congressional, senior policy, and operational levels. With Brian Michael Jenkins he co-authored *Selective Screening of Rail Passengers* (MTI Report 06-07), published by the Mineta Transportation Institute in February 2007. He also co-authored a May 2007 study, *Keeping Bombs Off Planes: Securing Air Cargo, Aviations Soft Underbelly* with P.J. Crowley, senior fellow and director of Homeland Security at the Center for American Progress. Mr. Butterworth was awarded an MS degree from the London School of Economics in 1974 and a BA degree from the University of the Pacific in 1972.

## **ABOUT THE MINETA TRANSPORTATION INSTITUTE:**

The [Mineta Transportation Institute](#) (MTI) was established by Congress in 1991 as part of the Intermodal Surface Transportation Efficiency Act (ISTEA) and was reauthorized under TEA-21 and again under SAFETEA-LU. The institute is funded by Congress through the US DOT’s Research and Innovative Technology Administration, by the California Legislature through the Department of Transportation (Caltrans), and by other public and private grants and donations, including the U.S. Department of Homeland Security. The US DOT twice selected MTI as a national “Center of Excellence” following nationwide competitions.

The Institute has a Board of Trustees whose internationally-respected members represent all major surface transportation modes. MTI’s focus on policy and management resulted from a broad assessment of the industry’s unmet needs and led directly to choosing the San José State University College of Business as the Institute’s home. MTI conducts research, education, and information and technology transfer focusing on multi-modal surface transportation policy and management issues. Visit [www.transweb.sjsu.edu](http://www.transweb.sjsu.edu)