

Study #2002-3/26

**INTERNATIONAL AND NATIONAL
TERRORIST THREATS
TO SURFACE TRANSPORTATION**

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CSIS Study #2002-3/26
4 March 2003

THE TERRORIST THREAT TO SURFACE TRANSPORTATION

Executive Summary

Surface transportation presents a degree of vulnerability to terrorist attacks

and could also affect the global networks and economies to which surface transportation systems are connected.

According to statistics compiled by the San Jose-based Mineta Transportation Institute, between 1920 and 2000, 66 percent of the attacks against surface transportation globally were intended to kill and 37 percent actually caused fatalities (23 percent of them caused ten or more), which is double the rate for terrorist attacks in general. While relatively sparse between 1920 and 1975, attacks against surface transportation significantly increased over the past 27 years. The methods used to attack surface transportation targets, while varying widely over the years, have remained concentrated on bombings and arson (used 63 percent of the time), which are the most lethal forms of conventional attack.

Twenty-seven percent of the 900 attacks against surface transportation compiled between 1920 and 2000 occurred in Western Europe, North America and Japan. Only nine percent of these incidents, however, involved fatalities, suggesting that attacks against advanced democracies during that period were primarily aimed at disrupting surface transportation systems and alarming the public at large, rather than causing multiple casualties. Countries which have suffered the most fatalities as a result of attacks on surface transportation are India, Pakistan, Algeria, Cambodia, and Sri Lanka (all over 180), while Israel has suffered the most attacks on surface transportation systems during that period.

Responsible for the attacks of 11 September 2001, the Al Qaida network is a source of preoccupation because of its threats of violence 'anywhere in the world' against the United States and its allies, including Canada. On 12 November 2002, Osama Bin Laden issued a public statement which specifically targeted Canada for the first time for its collaboration with the United States in attempting to dismantle Al Qaida.

To date, Canada has been spared major attacks on its surface transportation systems.

Al Qaida's declared intent to hit the United States and its allies, including Canada, is a cause for concern.

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I. Introduction

1. The New York-based Council on Foreign Relations Task Force recently concluded that surface and sea modes of transportation present a degree of vulnerability to terrorist attacks.

and could also have an impact on the global networks and economies to which surface and sea modes of transportation are connected.

Given the potential economic and social losses from terrorist attacks on surface transportation, this Study offers insights about the threats to surface transportation.

II. Threats to Surface Transportation

3. The majority of international terrorist attacks involve at least one of the many different modes of transportation.³ Of these, surface transportation has especially been targeted⁴ because of the high psychological, social and/or economic impact an attack might generate. The characteristics usually ascribed to surface transportation systems illustrate their relative vulnerability to being targeted or used by terrorists:

- They are open and accessible to ensure that large volumes of goods and people are moved efficiently, conveniently and expeditiously;

³ Reporting indicates that 'attacks against transportation targets increased from 20 percent of all violent attacks in 1991 to nearly 40 percent in 1998.' BOYD, Annabelle and SULLIVAN, John P. (2000). 'Emergency Preparedness for Transit Terrorism,' *TR News* 208 (May-June), 13.

⁴ According to rough estimates from the US Department of Transportation, 92 percent of the international terrorist attacks against modes of transportation target surface transportation.

- They are extensive and ubiquitous, with large physical infrastructures, assets and fixed facilities, such as terminals and maintenance bays, many of them unguarded or unattended;
- They emphasize efficiency and competitiveness, often to the detriment of costly security measures;
- They are owned, operated, used and overseen by various public or private bodies, making the coordination of security measures and emergency responses difficult when more than one body is involved; and
- They are intertwined with society and the global economy by virtue of their local, national and international delivery and carrying functions.⁵

4. Statistics compiled⁶ by the San Jose-based Mineta Transportation Institute indicate that between 1920 and 2000, 66 percent of the attacks against surface transportation (on average five a month) globally were intended to kill and 37 percent actually caused fatalities, which is double the rate for terrorist attacks in general. While relatively sparse between 1920 and 1975, attacks against surface transportation significantly increased over the past 27 years. The frequency of attacks against specific surface transportation targets is indicated in Table 1.

Table 1. Surface Transportation Targets, 1920-2000

Means of transportation	Frequency (percent) (1920-2000)	Frequency (percent) July 1997-Dec. 2000
buses	32	41
subways and trains	26	22
subway and train stations	12	10
rail	8	8
tourist buses	7	5
bus terminals	7	8
bridges and tunnels	5	1
school buses	1	-
other	2	5

⁵ See TRANSPORTATION RESEARCH BOARD (2002). *Deterrence, Protection, and Preparation*, Special Report 270, Washington, D.C.: Transportation Research Board of the National Academies, 12-14.

⁶ This is a representative rather than comprehensive compilation. It includes 900 major attacks (including 14 before 1970 and 195 from July 1997 to December 2000) against surface transportation from guerrillas or terrorists and other significant incidents of serious crime.

5. The methods used to reach these targets during the same period varied widely, but remained concentrated on bombings and arson (used 63 percent of the time),⁷ which have proved to be the most lethal forms of attack. Secondary tactics used by terrorists to hit surface transportation targets and the frequency of their use are indicated in Table 2.

Table 2. Secondary Methods of Attack Against Surface Transportation and Frequency of Use, 1920-2000

Methods of Attack	Frequency of use (percent) 1920-2000	Frequency of use (percent) July 1997-Dec 2000
ambushes and assaults	11	14
standoff attacks where shots were fired	9	7
hijackings and hostage situations	5	5
mechanical sabotage	5	4
bomb threats	4	4
grenades or bombs thrown	4	2
other	1	3

6. Twenty-seven percent of the 900 attacks compiled by the Mineta Institute between 1920 and 2000 occurred in Western Europe, North America and Japan. Only nine percent of these incidents, however, involved fatalities, suggesting that attacks against advanced democracies during that period were primarily aimed at disrupting surface transportation systems and alarming the public at large, rather than causing multiple casualties. Countries which have suffered the most fatalities as a result of attacks on surface transportation are India, Pakistan, Algeria, Cambodia, and Sri Lanka (all over 180), while Israel has suffered the most attacks on surface transportation systems during that period. Of all the attacks on surface transportation with fatalities (37 percent of all attacks), 23 percent of them caused ten fatalities or more.

7. Major terrorist attacks against surface transportation might have inspired disturbed individuals to carry out copycat attacks elsewhere. A recent post-9/11 example of this is the attack against a Greyhound bus in the United States, which resulted in six deaths.⁸ Surface transportation is also facing difficult problems of a criminal nature, including 'cargo theft, violations of export controls, narcotics- and migrant-smuggling,'⁹ and more common problems such as the fraudulent use of commercial drivers' licenses and hazardous

⁷ This proportion remained about the same (at 60 percent) for the period July 1997 to December 2000.

⁸ The attack was carried out by a deranged individual wielding a sharp instrument who slashed the driver's throat, causing a crash that killed him and five passengers.

⁹ COUNCIL ON FOREIGN RELATIONS (CFR) (2002). *America Still Unprepared*, p. 17. It is worth noting that criminals take advantage of inspection systems using X-Ray rather than Gamma-Ray for detection, because "when cargo and contraband are of similar densities, contraband detection" by the former "is very difficult." LEWIS, Brian (2002), *Port Security: Container Inspection Technology*, Georgia Institute of Technology, School of Industrial and Systems Engineering, 1.

materials (HAZMAT) endorsements.¹⁰ Buses and large trucks are attractive to terrorists for reasons similar as those favoured by criminals (their cargo capacity and the ease with which they can be acquired), as well as their easy access to population centres and critical infrastructure sites.

9. Passenger trains and subways are vulnerable to terrorist attacks.

Public transit systems in several major cities, including London, Paris, Tokyo, New York and Jerusalem, have been targeted by terrorists over the years. The following examples highlight the multifaceted ways by which these systems were attacked or threatened:

- United Kingdom.* The vulnerabilities associated with public transit were particularly exploited by the Provisional Irish Republican Army (PIRA) in Great Britain, which, after scattered attacks throughout the 1960s and 1970s, methodically targeted rail lines, stations and trains between 1991 and 1998. During that period, 41 improvised explosive devices detonated causing three deaths and injuries to 115 individuals. The economic costs—one hoax in February 1991 cost an estimated £49 million—of these attacks was compounded by the cost of the measures taken as a result of 6,762 bomb threats (although fewer than two percent were taken seriously) and the inspection of 9,525 suspicious items.¹² The most memorable attacks against the bus and rail systems occurred in 1996, when a bomb on a double-decker bus killed one and injured eight passengers near Trafalgar Square, and a bomb under a railway bridge in the Docklands killed two and injured more than a hundred people. Casualties overall were not very high as a result of all these attacks, but could have been had it not been, in part, for effective security measures and responses.

¹⁰ After 9/11, a Department of Motor Vehicles official in the United States was prosecuted for having illegally sold 18 HAZMAT permits to suspicious individuals.

¹² WHEAT, Peter (1999). 'Control of Public Space,' paper presented at the APTA 1999 Rapid Transit Conference, 2.

- France.* Surface transportation systems were attacked 22 times by terrorists between 1970 and 1995. In 1995, Algerian terrorists embarked on a new campaign to punish France for its support of the Algerian government and targeted surface transportation systems four times, killing seven and injuring 80 people in a single attack against a train near the St. Michel station in Paris on 23 July 1995. The three other incidents involved the explosion of a bomb in a train coach, another at the entrance to a Metro station, and one being discovered on the tracks of the TGV (*train à grande vitesse*—high-speed train) linking Paris to Lyon. For several weeks after the St. Michel attack, there were about 50 interruptions of passenger service a week because of bomb alerts and the discovery of suspicious packages. After a 15-month hiatus caused by France's *Opération Vigipirate*, which successfully curtailed the Algerian terrorist network, surface transportation was hit again on 4 December 1996. That day, a bomb exploded in a regional train station in Paris, killing two (a Moroccan and a Canadian, both French nationals) and injuring 86 people, including a Canadian.
- Japan.* In March 1995, Aum Shinrikyo religious extremists released sarin (a nerve gas) in the Tokyo subway system, killing 12 and forcing 5,500 to seek medical care. This attack was not well executed (accomplished by puncturing bags containing sarin with umbrellas),

According to Argonne and Sandia National Laboratories scientists, "the release of a biological agent in a subway could lead to the exposure of more than 100,000 people, counting those in the subway and those in the city above."¹³ The psychological impact of the attack was considerable, with fear turning into impatience towards the authorities. Additionally, the attack was followed by at least seven other attacks involving chemicals, numerous copycats, false alarms and hoax threats, perpetrated or threatened by disturbed individuals or criminals. The technical incompetence of the perpetrators and luck prevented a bigger tragedy from happening.

- United States.* In July 1997, the police in New York City arrested three individuals who were assembling pipe bombs, one of whom, Gazi Ibrahim Abu Mezer, was connected to Canada. Abu Mezer had reportedly made the bombs and provided information to the others on how they could be detonated or disarmed. A Canadian refugee claimant known to have resided in Toronto and Vancouver, Abu Mezer said that the bombs were to be used against the New York City subway. Abu Mezer, who had been charged for criminal offenses in Canada (use of a stolen credit card and assault with intent to resist arrest; sexual assault) and caught several times illegally crossing the Canada-US border,

¹³ POLICASTRO, Dr. Antony J. and GORDON, Dr. Sasanna P. (1999). "The Use of Technology in Preparing Subway Systems for Chemical/Biological Terrorism," paper presented at the APTA 1999 Rapid Transit Conference, 1.

- *Israel.* Over the years, Israeli buses were attacked in several ways: bombs were hidden or strapped to a suicide bomber before exploding; car-bombs were used against school buses; small-arm fire was opened; firebombs were hurled; buses were hijacked and bombs detonated at bus stations. Over the last six months, four major attacks against the bus system were noted:
 - (1) On 16 July, Palestinian militants detonated an explosive device and assaulted a bus in the West Bank, killing eight and injuring over 20 people;
 - (2) On 4 August, the Islamic Resistance Movement (Hamas) detonated a bomb at the front of a bus, killing ten and injuring over 40 soldiers;
 - (3) On 21 October, Islamic Jihad detonated a car-bomb near a bus, killing eight and injuring 45 people; and

III. Post-9/11 Situation

10. Since the terrorist attacks of 11 September 2001, advanced democracies involved in the global coalition against terrorism have received a wide range of threats of varying degrees of credibility and specificity.

Responsible for the attacks of 11 September 2001, the Al Qaida network is source of preoccupation because of its threats of violence 'anywhere in the world' against the United States and its allies, including Canada. On 12 November 2002, Osama Bin Laden issued a public statement which specifically targeted Canada for the first time for its support of the US. The statement contained a clear warning that civilians will be targeted and attacked in the foreseeable future.

12. Since 11 September 2001, the surface transportation systems of many countries have been threatened or targeted by terrorists. The most prominent developments include:

- *United States.* US authorities warned the truck industry to pay attention to suspect behaviour with regards to the transport of chemicals, radioactive waste, biological agents and other hazardous materials. This warning was further substantiated by

the FBI (Federal Bureau of Investigation) arrest in mid-September 2001 of individuals allegedly linked to Al Qaida who had shown an interest in the trucking industry. One of them, Nabil Almarabh,¹⁹ had just obtained a license to transport HAZMAT. The following month, the FBI revealed that it was looking at the whereabouts of about 30 individuals of Arab descent who had obtained a similar license. These individuals had attended a driving school near Denver in small groups over the preceding two years. They paid cash for the qualifying course, spoke little English and none looked for work after qualifying for the license. The use by terrorists of large commercial vehicles transporting HAZMAT was of concern because Al Qaida had used trucks and suicide drivers to hit the US Embassies in Kenya and Tanzania in 1998 and the Khobar Towers in Saudi Arabia in 1996.

- *Pakistan.* A suicide bomber attacked a bus outside the Sheraton Hotel in Karachi on 8 May 2002. The bomb was detonated in a car parked close to a bus. At least 12 people, including nine French nationals, were killed and 20 injured. Al Qaida was thought responsible.

• *United Kingdom.* On 9 November 2002, British authorities arrested three North African individuals and charged them with possession of fake passports and other documents under anti-terror legislation. The media speculated that the three alleged Al Qaida-linked individuals were planning a cyanide gas attack on London's subway system.

¹⁹ A US judge later sentenced Almarabh, a former Toronto resident, to eight months in jail for conspiring to get into the United States illegally. Almarabh is still in jail, however, reportedly awaiting deportation to Syria.

IV. Canadian Implications

13. Surface transportation systems in Canada are highly developed and critical to our economic strength. Although Canada has a relatively modest number of railroads tracks (65,403 km) and roads (901,903 km; 35 percent paved) relative to its size (the US has far more; Australia less), they are far more spread out than in most countries, especially because they offer so many points of access to urban as well as non-urban, isolated areas. Trucks and buses (3,694,125 in 1998) are extensively used for moving goods and passengers within Canada and to the United States and are similarly vulnerable due to the ease with which they could be isolated in urban and non-urban areas. Surface transportation systems in Canada, therefore, suffer from the same vulnerabilities as those of other countries.

Given these characteristics, it is interesting to note that Canada has historically been spared major attacks on its surface transportation systems.

14. The last noteworthy incident in the National Capital was in April 1989, when a distraught individual commandeered a Greyhound bus from Montreal and drove it onto the front lawn of Parliament Hill in Ottawa. Armed with an handgun, the individual eventually surrendered and no one was seriously injured. he was concerned about Lebanon and violence in the Middle East.

In Montreal, a 1998 bomb threat against the subway was particularly unnerving. In March, a group calling itself the *Front islamique mondial* (World Islamic Front)¹⁶ issued a threatening note and two communiqués indicating that bombs had been placed on three subway lines and that they would be detonated between 8 PM and 10 PM on 4 March unless the communiqués were made public. The bombs were described as being remotely controlled and containing a toxic chemical agent.

it had signed a number of communiqués in the past, both abroad and in Canada, in support of the Algerian cause. Eventually, no bombs were found and the subway system was reopened. Overall, terrorist incidents involving surface transportation in Canada have been isolated and statistically rare. Threats and hoaxes, however, are relatively frequent and of a delinquent or criminal nature.

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¹⁶ The name 'World Islamic Front' (WIF) is often used to refer to Islamic extremist groups under the banner of Osama Bin Laden's 'The World Islamic Front for Jihad Against The Jews and Crusaders.'

16. Of course, given the prevalence of attacks against surface transportation in countries such as India, Pakistan, Algeria, Cambodia, Sri Lanka and Israel, Canadians travelling or working in these countries' urban or rural areas could be unintended victims of terrorist attacks.

V. Outlook

¹⁷ For instance, on 13 July 2002, an unidentified assailant threw a grenade at a bus full of tourists visiting a historical site in the North-Western Frontier province, wounding 12 people. It was the fifth attack against Western targets in Pakistan since 11 September 2001.

19. Surface transportation systems in Canada's urban or rural areas could be targets to terrorists, just as they have been and still are in so many other countries.

as Al Qaida.
declared intent to hit the United States and its allies, including Canada, there remains a threat to surface transportation systems in Canada.

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References

- AMERICAN PUBLIC TRANSPORTATION ASSOCIATION (APTA) (2002). Press Release (24 October). Accessed at http://www.apta.com/services/safety/foi_10_24.htm on 29 November 2002.
- BLUM, Justin and EGGEN, Dan (2001). 'Crop-Dusters Thought to Interest Suspects,' *The Washington Post*, 24 September, A1.
- BOYD, Annabelle (n.d.). 'Transit Terrorism Preparedness,' a presentation by the Boyd, Caton & Grant Transportation Group, Inc. Accessed at http://www.nas.edu/trb/publications/security/transit_terrorism.pdf on 29 November 2002.
- BOYD, Annabelle and SULLIVAN, John P. (2000). 'Emergency Preparedness for Transit Terrorism,' *TR News* 208 (May-June), 12-17, 41.
- CLAPP, Joseph M. (2001). Statement of Joseph M. Clapp, Administrator, Federal Motor Carrier Safety Administration, before the U.S. Senate Subcommittee on Surface Transportation and Merchant Marine, U.S. Senate Committee on Commerce, Science, and Transportation, 10 October. Accessed at <http://commerce.senate.gov/hearings/101001Clapp.pdf> on 29 November 2002.
- COUNCIL ON FOREIGN RELATIONS (CFR) (2002). *America Still Unprepared—America Still in Danger*. Report of an Independent Task Force co-chaired by Gary HART and Warren B. RUDMAN.
- FLYNN, Stephen E. (2000). 'Transportation Security: Agenda for the 21st Century,' *TR News*, 211 (November-December), 3-7.
- JENKINS, Brian Michael and GERSTEN, Larry N. (2001). *Protecting Public Surface Transportation Against Terrorism and Serious Crime: Continuing Research on Best Security Practices*, MTI Report 01-07, San Jose, CA: Norman Y. Mineta International Institute for Surface Transportation Policy Studies.
- JENKINS, Brian Michael (2001). *Protecting Public Surface Transportation Against Terrorism and Serious Crime: An Executive Overview*, MTI Report 01-14, San Jose, CA: Norman Y. Mineta International Institute for Surface Transportation Policy Studies.
- JENKINS, Brian Michael (1997). *Protecting Surface Transportation Systems and Patrons From Terrorist Activities. Case Studies of Best Practices and a Chronology of Attacks*, IISTPS Report 97-4, San Jose, CA: Norman Y. Mineta International Institute for Surface Transportation Policy Studies.
- JOHNSON, Trixie (2001). Testimony of Trixie Johnson, Research Director, Mineta Transportation Institute, before the Committee on Governmental Affairs (13 December). Accessed at http://www.senate.gov/gov_affairs/121301johnson.html on 29 November 2002.
- IISTPS (2001). *National Transportation Security Summit, Washington, D.C., October 30, 2001*, MTI Report S-01-02, San Jose, CA: Norman Y. Mineta International Institute for Surface Transportation Policy Studies.

IISTPS (1996/2001). *Terrorism in Surface Transportation: A Symposium*, IISTPS Report 96-1, San Jose, CA: Norman Y. Mineta International Institute for Surface Transportation Policy Studies (reprinted in 2001).

KULYK, Walter (2001). 'Surface Transportation Security: Vulnerabilities and Developing Solutions,' U.S. Department of Transportation, Federal Transit Administration, PowerPoint presentation. Accessed at <http://www.fta.dot.gov/research/safe/pubs/sursec/sursec.ppt> on 29 November 2002.

LEWIS, Brian (2002). *Port Security: Container Inspection Technology*, Georgia Institute of Technology, School of Industrial and Systems Engineering.

LUEDTKE, James and WHITE III, Chelsea C. (2002). *HAZMAT Transportation and Security: Survey and Directions for Future Research*, Atlanta, GA: Georgia Institute of Technology, Department of Industrial and Systems Engineering (1 August).

NEVADA, STATE OF (2001). *Risky Transit - The Federal Government's Risky and Unnecessary Plan to Ship Spent Nuclear Fuel and Highly Radioactive Waste on the Nation's Highways and Rail Roads*, A Report by The Nevada Agency for Nuclear Projects. Accessed at <http://www.state.nv.us/nucwaste/news2001/nr11313.pdf> on 29 November 2002.

NEVADA, STATE OF (n.d.). 'Terrorism Considerations in the Transportation of Spent Nuclear Fuel and High-Level Radioactive Waste,' *Fact Sheet*, Nuclear Waste Project Office. Accessed at <http://www.state.nv.us/nucwaste/yucca/terract.htm> on 2 December 2002.

NIEVES, Evelyn and REVKIN, Andrew C. (2001). 'Urgent Efforts To Prevent Thefts of Trucks for Use as Bombs,' *The New York Times* (18 November).

POLICASTRO, Dr. Antony J. and GORDON, Dr. Sasanna P. (1999). 'The Use of Technology in Preparing Subway Systems for Chemical/Biological Terrorism,' paper presented at the APTA 1999 Rapid Transit Conference. Accessed at <http://www.apta.com/info/online/policastro.pdf> on 29 November 2002.

STUDD, Helen (2002). 'Ikea security steps up after bombs hit Dutch shops,' *The Times* (5 December).

TRANSPORTATION RESEARCH BOARD (2002). *Deterrence, Protection, and Preparation*, Special Report 270, Washington, D.C.: Transportation Research Board of the National Academies. Accessed at <http://www.TRB.org> on 29 November 2002.

UNITED STATES (2002). *Enhancing Security of Hazardous Materials Shipments Against Acts of Terrorism or Sabotage Using RSPA's Risk Management Self-Evaluation Framework (RMSEF)*, Revision 1, Washington, D.C.: U.S. Department of Transportation, Research and Special Programs Administration. Accessed at <http://hazmat.dot.gov/risk.htm> on 29 November 2002.

WHENT, Peter (1999). 'Control of Public Space,' paper presented at the APTA 1999 Rapid Transit Conference, p. 2. Accessed at <http://www.apta.com/info/online/whent.pdf> on 29 November 2002.