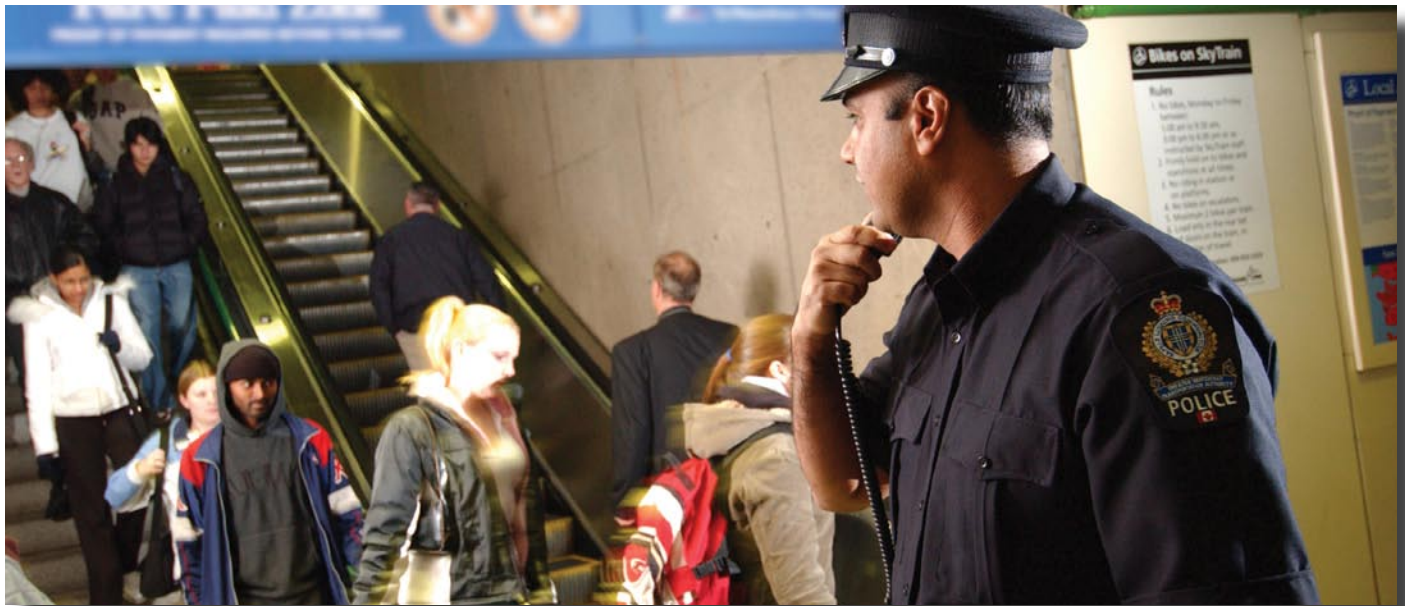


# TRANSIT SAFETY AND SECURITY



Greater Vancouver Transportation Authority

*Greater Vancouver Transportation Authority Police Service officers patrol SkyTrain stations*

Canada's public transit systems take safety and security very seriously. At stake are the health and welfare of their 45,000 employees, 22 million service area residents and 1.7 billion annual riders. Bearing in mind that transit operations—which can involve hundreds of fully-loaded vehicles—are complex and far from risk-free, the stellar safety and security record of Canadian transit systems is even more remarkable.

Transit's most important role in public safety may be to offer millions of Canadians an alternative to car travel: data from urban areas in the 1990s showed that the fatality risk for car occupants was 20 times higher than for transit passengers over the same distance (see Figure 1).<sup>4</sup> Transit systems also provide “eyes on the street,” and many transit vehicle operators have been cited for their role in spotting and aiding citizens in distress—from lost

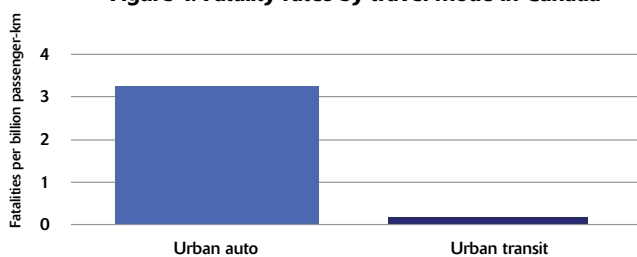
children to crash victims. Very often, transit vehicles are among the first arrivals when buildings must be evacuated in dark or cold weather, or when a large number of casualties need to be transported to hospitals.

## Ensuring safe and secure transit operations

In recent years, enhanced effort and innovation by transit systems have improved safety for customers and staff. Employee training and public education have helped everyone to prevent incidents. More frequent and visible patrols have discouraged crime and increased passengers' sense of security. Special “night stop” programs allow passengers to be dropped off along a route wherever they feel safe, not just at regular stops. Partnerships with local police and community groups have led to comprehensive crime-reduction efforts in and around transit facilities.

Technological advances have made advanced safety and security measures accessible to even smaller transit systems. For example, an automated vehicle location system lets supervisors for Guelph Transit (Ontario) track the precise location of each bus, and offers drivers an alarm button to alert the communications centre and open a radio channel so staff can hear what is happening. Many other systems across the country are using closed-circuit video monitoring to detect and record incidents at transit stations and even inside vehicles.

**Figure 1. Fatality rates by travel mode in Canada**





City of Ottawa

*The City of Ottawa's new Transit Special Constables at their swearing-in ceremony*

To discourage threats and deal with incidents that occur, some transit systems are enhancing the legal powers of security personnel. Greater Vancouver, Toronto and Ottawa are among the communities that have granted police powers to specially trained staff. Those officers now have broader powers of arrest and are able to enforce the Criminal Code as well as laws related to trespassing, liquor licensing and controlled substances.

### **Federal leadership in transit security**

The tragic terrorist attacks on public transportation in London and Madrid demonstrated that bus and rail systems are not immune to security threats. In response, Canada has seen unprecedented government and industry efforts to examine security and emergency preparedness in transit systems across the country.

Since 2004, Transport Canada has encouraged urban transit and passenger rail operators to share information and best practices. It has worked with them to complete a strategic risk assessment, and is now leading the development of voluntary codes of practice for transit security. The federal government is also investing directly in urban transit, passenger rail and ferry security through the following measures.

**Transit-Secure.** This \$80-million contribution program supports security measures by urban transit and passenger rail operators. The first round of funding was announced in November 2006 and included up to \$37 million to help transit systems in Canada's six major metropolitan areas (Vancouver, Edmonton, Calgary, Toronto, Ottawa-Gatineau and Montreal) conduct risk assessments, develop security plans, create employee training and public awareness programs, and upgrade security equipment such as access control technology and lighting. The second round of Transit-Secure funding was announced in April 2007 and included up to \$2 million to support risk assessments and comprehensive security planning by smaller communities in British Columbia (BC Transit partners outside Greater Vancouver), Alberta (Lethbridge and Red Deer), Saskatchewan (Regina and Saskatoon), Manitoba (Winnipeg), Ontario (Brampton, Hamilton, Mississauga, Sarnia, Windsor, Waterloo Region and York Region), Quebec (Laval) and Nova Scotia (Halifax).

**Urban transit emergency preparedness.** Transport Canada, Public Safety Canada and key local stakeholders are carrying out complex inter-jurisdictional activities in Vancouver, Toronto and Montreal. These table-top, command post and full-scale live exercises help government officials, infrastructure owner-operators, first responders and law enforcement agencies prepare for their emergency roles.

**Leadership and coordination.** Transport Canada is building its capacity to lead and support urban transit and passenger rail security planning, information sharing, incident tracking and analysis, technology research and development, and international and intergovernmental coordination.

**Ferry security.** Along with domestic ferry operators, transit systems that operate ferry services are eligible for funding to enhance facility and vessel security under Transport Canada's Marine Security Contribution Program.

**Public Safety Portfolio Task Force.** Public Safety Canada is leading a task force to enhance intelligence, risk analysis, law enforcement, emergency management and security protocols. On transit security issues, the task force is consulting with government and law enforcement agencies to assess intelligence and policing technology needs, identify necessary infrastructure support, and strengthen security awareness activities.

### **Looking to the future**

Maximizing the safety and security of public transit in Canada will involve many stakeholders in a process of ongoing improvement. CUTA conference sessions will continue to examine best practices and emerging issues, and federal initiatives in partnership creation, capacity building and financial investment will reap rewards for years to come. First and foremost, however, individual transit systems are the key to long-term success. Their local knowledge, operational understanding and on-the-ground resources make them natural leaders in the fight to protect the health and welfare of their customers, staff and communities.

## Province of Alberta

**Calgary Transit.** More than 300 closed-circuit cameras at CTrain stations are monitored around the clock, and trained staff quickly dispatch Protective Service officers, transit supervisors and police, ambulance or fire services when needed. Transit-Secure funding from Transport Canada will allow Calgary Transit to add more cameras and harden two garages with fencing, access controls, video monitoring and guard facilities.

**Red Deer Transit.** The City of Red Deer's Transit Division serves a community of 80,000, employs 95 staff and operates 43 buses. It has initiated a security review to assess access control, surveillance and intrusion detection needs on buses and at facilities. The review will recommend immediate priorities and a phased approach to future improvements, and will also evaluate the risks of inaction.

**Edmonton Transit System (ETS).** A \$2.25-million contribution by Transit-Secure is helping ETS improve safety and security. Initiatives include a comprehensive threat vulnerability risk assessment, video monitoring system upgrades, and a comprehensive public awareness campaign modelled after the Transit Watch program from the National Transit Institute in the United States. Over 1,700 ETS operations, administrative and maintenance employees have attended a two-hour training session on terrorism awareness, recognition and response. This instruction on dealing with dangerous and suspicious activities enabled the integration of all ETS staff into the "Security is Everyone's Responsibility" mandate.



City of edmonton

*Edmonton Transit System security staff*

## Greater Toronto Area

**Toronto Transit Commission (TTC).** Security is a major challenge for the largest transit system in Canada, which carried 445 million passengers on 2,500 vehicles in 2006. The TTC reviewed anti-terrorism security weaknesses and identified potential mitigation measures in 2006, and was awarded \$1.5 million in Transit-Secure funding to support a terrorism-specific risk and vulnerability assessment, enhanced property security and access controls, and a surface vehicle broadcast messaging system. Future initiatives could include enhanced visual monitoring technology for subway stations and high-risk surface vehicle routes.

**Mississauga Transit.** Security staff meet regularly with Peel Regional Police to share information and discuss issues of joint concern. The system has initiated major safety and security enhancements including a new Transit Security Unit of eight officers, with one around-the-clock team dedicated to the Mississauga City Centre transit terminal and another acting as a mobile response unit. It has also been awarded Transit-Secure funding to conduct a risk and vulnerability assessment, and to develop plans that will prevent or lessen the impact of potential terrorist attacks.

**York Region Transit.** York Region Transit has initiated several safety and security initiatives including the installation of video monitoring systems in 150 buses and three terminals. It is expanding its computer-aided dispatch and automated vehicle location system, including a covert emergency microphone, to more than 100 buses in addition to the 86 rapid transit buses already equipped. With Transit-Secure funding, the system is also undertaking a risk assessment and security plan.



Toronto Transit Commission

## National Capital Region

**OC Transpo and Société de transport de l'Outaouais.** Together, these systems were awarded Transit-Secure funding to develop an enhanced security plan for the National Capital Region based on a gap analysis and a detailed threat, vulnerability and risk analysis. They will also develop threat awareness training for staff and related customer campaigns.

In previous initiatives, OC Transpo employees were given educational materials based on those developed by the U.S. National Transit Institute and London Underground, and received police training on terrorist indicators and bomb threat response. A parallel customer campaign encouraged passengers to identify and report suspicious items, persons or activities, and used shelter posters, interior bus cards and brochures based on those developed by New York's Metropolitan Transit Authority.



*Bus shelter poster promoting customer awareness of possible security threats*

OC Transpo/City of Ottawa

## Province of British Columbia

### Greater Vancouver Transportation Authority (TransLink).

The Greater Vancouver Transportation Authority Police Service works closely with regional policing agencies and the community. In the Collingwood neighbourhood, the Service works with the Community Policing Centre and Vancouver Police Department to enhance safety and security of the transit system and the community. An Outreach Office at the Broadway SkyTrain Station improves public access to police and community policing volunteers, and enhances services for local residents and transit users. The Service also participates in community events, provides crime prevention and safety talks, and meets with local businesses to understand and address their crime and safety concerns.

To address broader security needs, TransLink has completed an assessment of hazards, risks and vulnerabilities, a needs analysis and a strategic risk review. These studies have led to several programs supported by Transit-Secure including facility hardening to prevent and detect infiltration, training for first responders, closed-circuit video enhancement in SkyTrain stations (with possible future integration of facial and behaviour recognition), and emergency voice alarms and displays in transit facilities. TransLink is also developing a mobile command system to remotely direct the Emergency Operations Centre in the event that an incident restricts physical access.



Greater Vancouver Transportation Authority

## Province of Nova Scotia

**Metro Transit.** Current transit safety and security measures in Halifax Regional Municipality include the presence of cameras and security personnel at major terminals. Metro Transit also has an automated vehicle location tracking system on its buses, and employs emergency measures codes and bomb threat procedures. For over ten years, a Transit Safe Ride Committee of transit and law enforcement personnel has recommended ways to improve transit passenger safety measures, such as the nighttime Request Stop Program.

Metro Transit is receiving Transit-Secure funding for a \$240,000 risk assessment and security plan for its bus and commuter ferry services. It will also enhance security through other measures such as surveillance cameras at terminals and on buses, transit property fencing and an employee photo identification system.



Metro Transit

*Metro Transit's Halifax Harbour ferries are included in security planning*

### References:

- (a) Sypher:Mueller International Inc. for the Canadian Urban Transit Association, *Transit's Safety and Security Record*, 2000

The Canadian Urban Transit Association (CUTA) is the voice of Canada's public transit industry. For additional information including research reports, industry updates, news bulletins and more, please contact us or visit our website.



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