



THE ROLE OF INTELLIGENCE IN CRITICAL INFRASTRUCTURE PROTECTION: SECURING THE METRO RAILWAY AND PUBLIC TRANSPORTATION

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Disclaimer: This briefing note contains the encapsulation of views presented by the speaker and does not exclusively represent the views of the Canadian Association for Security and Intelligence Studies.

KEY EVENTS

On November 13, 2023, Chief Officer Dave Jones presented *The Role of Intelligence in Critical Infrastructure Protection: Securing the Metro Railway and Public Transportation* for this year's West Coast Security Conference. The key points discussed were that North American passenger transit systems, such as railways and buses, lack robust safety screening systems, the challenges balancing visibility and effectiveness with cost and aesthetics as cities grow and transit usage increases; and the importance of increased information sharing, employing emerging technologies, risk assessments, and adaptation to the safety of transit networks.

NATURE OF DISCUSSION

Transit systems such as buses, trains, and ferries have a growing number of customers per day but are inherently vulnerable due to their accessibility and lack of security measures. While Vancouver transit systems such as Seabus, SkyTrain, and buses transport nearly 500,000 people daily, they face increased security challenges with city expansion and new developments. Security strategies involve K-9 units, investigative teams, and public partnerships, but as transit use grows, the need to balance effective security measures with privacy concerns becomes crucial.

BACKGROUND

Chief Officer Jones stated that passenger transit such as railways, bus systems, and ferries throughout North America are some of the most utilized forms of transit; however, they often lack a safety screening system in place comparable to that on an airplane or cruise ship. In Vancouver, the Seabus, SkyTrain, bus,

and rail systems transport up to 500,000 people per day, and this figure is expected to increase as the city's public transit expands to potential projects such as gondolas and light rail systems. In the Vancouver area, 183 police officers and 73 support staff are responsible for the protection of 53 SkyTrain stations and 79 kilometres of rail, eight West Coast Express stations with 65 kilometres of rail, 215 Coast Mountain Bus Company routes, and one Seabus route.

As transit becomes more relied upon, the varying forms of transit, the volume of people using transit, and the purposes for the use of transit evolve and change each day; this poses a challenge in terms of critical infrastructure protection. While most transit use is for work, school, and leisure purposes, transit systems can also become a hub for people during major sporting events, political events and even protests.

The Metro Vancouver Transit Police, founded in 2005 to supplement jurisdictional partners such as the RCMP and the municipal police, is the only police force in Canada dedicated specifically to transit. It is common in other major cities to have a division of the municipal police to assist with transit protection, however, the responsibility is often primarily left to private security forces to provide day-to-day safety. The risk with using private security companies as opposed to police is that the information-sharing capabilities of these private security forces is much lower than that of a traditional police force, and the information that is shared varies significantly between jurisdictions.

Chief Officer Jones noted that another common challenge with transit security and protecting public access infrastructure is that there often appears too much security until there's not enough, meaning that safety systems that may make a network less vulnerable to issues and attacks may be a deterrent in terms of appearance, effectiveness, or cost. Whereas many cities put a police-to-population ratio in place, many transit systems do not have a core population base on which to rate the number of security personnel necessary. Instead, it's generally rated by number of riders, with current transit security personnel sitting at about one per 200,000 riders.

Chief Officer Jones suggested that changes to housing density and limitations placed on vehicle parking and roadway traffic will push more and more people onto the transit system and as transit users increase, so does the risk of public transit being used for illegal activities. Additionally, there's a higher likelihood that transit will become a target for individuals or groups seeking to disrupt the general populace through protests or attacks and, therefore, as we expand transit systems to accommodate population growth, the issue of aesthetics and convenience versus safety and security becomes a major consideration. Finding

the ideal balance of these factors will help create resiliency within the transit system and ensure that passengers feel safe.

Common protections for transit systems include community police officers as well as specialty teams that rely on tactics such as physical detection, criminal intelligence, investigative teams, and K-9 explosive units to detect and anticipate threats. The Vancouver Transit Police has one of the largest single-purpose K-9 detection teams in Canada that are trained to detect firearm and ammunition odors and can even track them as they move.

Chief Officer Jones stated that, as new forms of public transit emerge, it's important to consider the new risks that will follow, including missed opportunities to learn lessons from previous attacks or issues. He pointed to the example of a proposed gondola system in Vancouver, suggesting that during its implementation, authorities must consider a similar system in the Squamish Valley area that was disabled on two occasions by individuals who cut the lines, causing damage to the system and surroundings. This demonstrates the vulnerability of any transit system as well as the importance of improving security measures in response to issues.

To improve public transit safety, authorities should form partnerships with the public, the police, professional associations, as well as community associations. The public, for example, is one of the greatest sources of transit intelligence available, as commuters develop an intimate familiarity with their daily surroundings on transit systems and therefore, can easily spot abnormalities. Additionally, community and professional associations can provide data gathering and analytic services that can be employed by transit police to identify trends and irregularities.

Chief Officer Jones suggested that societal norms—such as the high value that Canadians place on freedom, mobility, and privacy—do pose limitations to transit police in terms of data collection and risk identification. In Vancouver, for example, there are limitations on the circumstances under which police agencies can access video systems put in place by private enterprises. With many transit systems in Vancouver and throughout the country operated by corporate entities, this poses a significant challenge to transit security, as decisions made by privacy commissioners and other bodies have limited the use of such footage, except in after-the-fact investigations, and also limit the use of new surveillance and security technologies that may be of benefit. This goes so far as to restrict the use of facial recognition and similar technologies to help identify high-risk and missing individuals.

Critical incident disaster planning is a major role of transit police organizations, and this includes working to ensure the health and safety of first responders and the public, protecting property and infrastructure, reducing economic and social losses in a disaster situation, protecting the environment, and reducing human suffering. Transit protection agencies rely heavily on intelligence and information sharing to do so, and transit police must be able to effectively identify risks, including domestic risks. Transit police must also find a balance between passenger data collection and personal privacy and make use of the unique surveillance systems that will assist in these measures.

Intelligence, whether it be through technology, human sources, or physical detection, is the key factor in preventing major tragedies on transit systems, and this includes risk assessments, target hardening, information sharing, and inter-agency collaboration. In addition to considering new trends and implementing new methods, transit security operations must understand that intelligence and safety cannot operate in a silo.

KEY POINTS OF DISCUSSION

- North American passenger transit systems, such as railways and buses, lack robust safety screening systems, unlike airplanes or cruise ships.
- A challenge in transit security is balancing visibility and effectiveness with cost and aesthetics. As cities grow and transit usage increases, balancing safety and convenience becomes critical.
- Transit systems use various security measures, including K-9 units and investigative teams. However, emerging transit forms like gondolas pose new security risks, as seen in past incidents in Squamish Valley.
- Enhancing transit safety involves partnerships with the public, police, and community associations, leveraging public intelligence and data analysis. However, societal values around privacy limit data collection and surveillance by transit police, posing challenges in risk identification and response in critical situations.
- Increased information sharing, employing emerging technologies, risk assessments and adaptation are imperative to the safety of transit networks.



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