Vehicle Ramming
Security Awareness for Soft Targets and Crowded Places

Homeland Security · SECURE COMMUNITY NETWORK

The use of a vehicle as a weapon in a terrorist attack is not new. Recent terrorist incidents and violent extremist propaganda demonstrate that the use of vehicles as a weapon continues to be of interest by those wishing to cause harm. Attacks of this nature require minimal capability, but can have a devastating impact in crowded places with low levels of visible security.

Potential Indicators

The use of vehicles as weapons often has few or no observable indicators but identifying and reporting suspicious activities may assist in detecting a potential vehicle-ramming attack plot. Any one of these activities may be insignificant on its own, but when observed in combination with other suspicious behaviors — particularly advocacy of violence — they may constitute a basis for reporting.

- Reported theft of large or heavy-duty vehicles.
- Observed difficulty in explaining the planned use of a rented vehicle.
- Exhibited nervousness during vehicle rental discussion and insistence on paying rental fees in cash.
- Inability to produce required documentation, such as a valid driver's license or appropriate endorsement for the class of vehicle sought.
- Observed difficulties in operating a rented vehicle, such as large or heavy-duty trucks, indicating a lack of familiarity from prior usage or experience.
- Loitering, parking, or standing in the same area over multiple days with no reasonable explanation.
- Unexplained use of binoculars, cameras, and recording devices.

What Should People Do in Case of a Vehicle Ramming Attack?

- Run to the nearest safe area while moving away from the source of hazard.
- If a fall occurs, curl into a protected position and try to get up as soon as possible to avoid being trampled.
- If no rapid escape is possible, seek cover behind any available natural or artificial objects that eliminate direct line of sight from the source of hazard.
- Call 9-1-1 and remain alert for potential secondary attacks.
- Render first aid when safe to do so.
- Maintain situational awareness while providing assistance to others.
- When help arrives, follow instructions given by law enforcement and first responders.

FACTS & EVENTS

- In October 2017, an ISIS inspired individual used a commercial-grade rental truck to attack pedestrians on a busy bicycle path near lower Manhattan, New York City, killing 8 and injuring more than 11 others. A pellet gun and a paintball gun were recovered from the scene.

- In August 2017, a personal vehicle was used to drive through a crowd of counter-protesters in Charlottesville, VA, killing one and injuring 19.

- In March 2017, a rental car was used to target pedestrians walking on Westminster Bridge in London, England, killing four people and injuring 40. The assailant abandoned his vehicle and proceeded to Parliament, where he killed a police officer with a knife.

- In January 2017, a personal vehicle was used to drive into a group of Israeli soldiers exiting a bus in East Jerusalem, Israel, killing four and injuring 15.

- In November 2016, a personal vehicle was used to strike pedestrians on a sidewalk at Ohio State University, injuring 11 people.

Mitigation Strategies and Protective Measures

In designing and applying measures to mitigate against the risk of vehicle ramming attacks, it is important to balance the security requirements with the operational and functional needs associated with the typical user of the facility or venue. As a result, a mitigation strategy cannot be a one-size-fits-all approach, and instead must be tailored to the specific physical constraints and functional demands of a given location.

Physical Security

- Post signage relating to emergency entry and exit points, first-aid stations, and shelter locations.
- Define the perimeter and areas that require access control for pedestrians and vehicles.
- Restrict all vehicular traffic through controlled and secure "pedestrian-only" areas, including separate ingress and egress routes for delivery vehicles away from events.
- Use remote parking and shuttle services to keep vehicles away from critical assets or mass gatherings.
- Establish clear standoff zones. Bollards, heavy planters, and barricades can be used to increase standoff distances between large crowds and vehicles. It is important to ensure that these architectural solutions are appropriately sized, adequately anchored, and purposely reinforced against impact loads.
- Evaluate the need for vehicle barriers, considering passive barriers (fixed bollards, fences, jersey barriers, etc.) and/or active barriers (retractable bollards, rising wedges, etc.).
- If appropriate, pre-position heavy vehicles to serve as physical barriers around the perimeter of densely populated locations.

Access, Planning, and Personnel

- Review personnel files of recently terminated employees to determine whether they pose a security risk.
- Evaluate vehicle traffic patterns near the venue and implement strategies to reduce vehicle speeds and improve pedestrian safety.
- Conduct a site assessment prior to holding an event that identifies vulnerabilities. For example, the driver of the vehicle may not necessarily follow traffic rules (e.g., one-way street), which must be taken into account when developing a strategy.
- Devise credential systems that indicate areas of access and purpose of activity on the premises.
- Monitor all vehicles approaching an entrance or gathering of people for signs of threatening or suspicious behavior (e.g., unexpected truck traffic, unusual high speed, vehicles riding particularly low).
- Design a monitoring, surveillance, and inspection program that is consistent with venue operations and associated security requirements. If surveillance cameras are used, train personnel to interpret video footage and identify potential security-related events.