



Homeland
Security

National Protection and Programs Directorate
Office of Cyber and Infrastructure Analysis (OCIA)

INFRASTRUCTURE INTELLIGENCE NOTE

(U) May 8, 2017; 1330 EDT

(U) COMMERCIAL FACILITIES SECTOR REMAINS ATTRACTIVE TARGET FOR VEHICLE-RAMMING ATTACKS

(U) Prepared By: Operational Analysis Division

(U) SCOPE NOTE: The Department of Homeland Security (DHS)/National Protection and Programs Directorate (NPPD)/Office of Cyber and Infrastructure Analysis (OCIA) produced this Infrastructure Intelligence Note to provide analysis of Foreign Terrorist Organization (FTO)-inspired vehicle-ramming operations in the West since 2016. This OCIA publication will inform critical infrastructure stakeholders on common characteristics of these operations and recommended mitigation strategies to improve critical infrastructure resiliency against future attacks.

(U) This product was coordinated with DHS/ NPPD/Federal Protective Services, DHS/NPPD/Office of Infrastructure Protection (IP)/Sector Outreach and Programs Division, DHS/NPPD/IP/Protective Security Coordination Division, DHS/Office of Intelligence and Analysis, DHS/Transportation Security Administration/Office of Intelligence and Analysis, DHS/Customs and Border Protection/Office of Intelligence, DHS/Immigration and Customs Enforcement/Homeland Security Investigations/Office of Intelligence, and private sector partners.

(U) KEY FINDINGS

- **(U//FOUO) OCIA assesses the increase in the number of vehicle-ramming attacks since January 2016 indicates FTO messaging efforts are probably resonating with violent extremists and will likely continue in the near term. However, OCIA cannot discount the influence that previous attacks may have on inspiring others to conduct similar vehicle-ramming attacks.**
- **(U//FOUO) OCIA assesses FTO-inspired violent extremists will likely continue to plan and engage in vehicle-ramming attacks against mass gatherings and public venues in Western countries. This tactic often requires minimal training, expertise, and preoperational planning.**
- **(U//FOUO) Based on OCIA's review of five FTO-inspired vehicle-ramming attacks since January 2016, we identified three common characteristics: targeting of public venues or mass gatherings; use of secondary weapons; and a lack of observable indicators prior to the attack.**
- **(U//FOUO) OCIA assesses that of all critical infrastructure sectors, the Commercial Facilities Sector is at the greatest risk of attack from FTO-inspired vehicle-ramming operations because of the recurring presence of mass gatherings at these locations; the potential for adverse economic impacts; and the media attention these types of attacks regularly receive.**
- **(U//FOUO) Violent extremists' use of simple tactics, such as the use of vehicles as weapons, often results in few or no observable indicators. However, identifying and reporting suspicious activities may assist in detecting a potential vehicle-ramming attack plot.**

(U//FOUO) Increase in FTO-Inspired Vehicle-Ramming Attacks Shows Power of Terrorist Messaging

(U//FOUO) OCIA assesses the increase in the number of FTO-inspired vehicle-ramming attacks since January 2016 indicates terrorist messaging efforts are probably resonating with some violent extremists and will likely continue in the near term. However, OCIA cannot discount the influence that previous attacks may have on inspiring others to conduct similar vehicle-ramming attacks. Since at least 2010, FTOs, through the use of publications and social media, have advocated the use of simple attack tactics, including the use of vehicles as weapons. The second edition of Al-Qa'ida in the Arabian Peninsula's (AQAP) *Inspire* magazine, published in 2010, first featured an article advocating for this tactic when it described pickup trucks as the "ultimate mowing machines."¹ Additional extremist publications such as Islamic State of Iraq and ash-Sham's (ISIS) *Rumiyah* magazine and AQAP's *Inspire Guide*, released publically over the past seven years, advocate vehicle-ramming operations as a tactic against the West.¹ Public calls from senior al-Qa'ida (AQ) and ISIS officials also encourage attacks against the West using "all available means," including the use of vehicles.²

- (U) May 2017: ISIS published the ninth edition of *Rumiyah*. In a section titled "Just Terror Tactics," ISIS provided an infographic on vehicle-ramming attacks using trucks. The graphic provided guidance on vehicle and target selection and recommended methods for vehicle acquisition. Of note, the article highlighted public gathering locations, including festivals, conventions, parades, outdoor markets, and outdoor rallies as ideal targets for vehicle-ramming attacks.³
- (U) April 2017: ISIS published the eighth edition of *Rumiyah*. The magazine included a short article and infographic highlighting the late-March 2017 ISIS-inspired vehicular attack against civilians and law enforcement in London, England.⁴
- (U) March 2017: AQAP published the fifth edition of *Inspire Guide* entitled *The British Parliament Operation in London*. This is the same attack highlighted in the eighth edition of ISIS' *Rumiyah* magazine, as noted in the previous bullet. AQAP noted the attacker used "civilian weapons" (vehicle and knife) to "bring the government to its knees and embarrass its security."⁵
- (U) November 2016: ISIS published the third edition of *Rumiyah*. An article within the magazine—"Just Terror Tactics"—recommended using a load-bearing truck to cause mass casualties during events that draw large crowds. The authors also provided guidance for selecting the appropriate vehicle and target.⁶
- (U) July 2016: AQAP published the second edition of *Inspire Guide*, which provided post-attack analysis of the July 14, 2016 ISIS-inspired vehicle-ramming attack in Nice, France. AQAP praised the attacker for targeting an area with large crowds and limited egress points.⁷
- (U) September 2014: Now-deceased ISIS spokesperson Muhammad al-Adnani called for supporters in the West to conduct attacks using any means possible stating, "If you are not able to find an IED or a bullet, then single out the disbelieving American, Frenchman, or any of their allies. Smash his head with a rock, or slaughter him with a knife, or run him over with your car, or throw him down from a high place, or choke him, or poison him."⁸
- (U) Fall 2010: AQAP published the second issue of *Inspire* magazine, which featured a two-page article instructing potential operatives to weld steel blades to pickup trucks for targeting pedestrians at crowded locations. This vehicle was dubbed "the ultimate mowing machine." The article also recommended having access to firearms in the event the vehicle becomes inoperable during the attack.⁹

(U//FOUO) Vehicular Attacks Likely to Continue Targeting Public Venues with Limited Indicators Prior to Attack...

(U//FOUO) OCIA assesses FTO-inspired violent extremists will likely continue to plan and engage in vehicle-ramming attacks against mass gatherings and public venues in Western countries. This

¹ (U) AQAP's two English-language publications are *Inspire* magazine and *Inspire-Guide*. There have been 16 editions of *Inspire* magazine since it was first released in 2010. Since 2016, AQAP released five editions of *Inspire Guide*, a concise report that critiques recent terrorist-inspired attacks in the West and provides additional guidance on how to enhance the lethality of future attacks.

tactic often requires minimal training, expertise, and preoperational planning. Vehicle-ramming attacks are attractive to violent extremists because of the ease of vehicle acquisition and limited skills needed to carry out these attacks. Also, there are few or no observable indicators associated with vehicle-ramming attacks, which increases the potential for a successful operation.

(U//FOUO) Based on OCIA’s review of the five FTO-inspired vehicle-ramming attacks since 2016 (see table I), we identified three common characteristics: targeting of public venues or mass gatherings; use of secondary weapons; and a lack of observable indicators prior to the attack. The attack characteristics are consistent with public calls by senior AQ and ISIS officials to employ simple tactics against civilians of “crusader” countries.¹⁰ Of note, the attack in Nice, France, resulted in the greatest number of casualties, likely because of the location and timing in targeting a large, densely packed crowd assembled in an area with limited egress points.

- (U) April 7, 2017: Rakhmat Akilov used a stolen 30-ton commercial truck to target pedestrians in a busy shopping area in Stockholm, Sweden, killing four people and injuring 15. Swedish law enforcement discovered undetonated explosives in the truck, according to multiple media outlets.^{11,12}
- (U) March 22, 2017: Khalid Masood used a rental car to target pedestrians who were walking on the Westminster Bridge in London, England, killing four people and injuring 40. After abandoning the vehicle, Masood proceeded to the Parliament building where he stabbed and killed a British police officer with a knife.¹³
- (U) December 19, 2016: Anis Amri stole a 25-ton commercial truck and drove it into pedestrians at a Christmas market in Berlin, killing 12 people and wounding 48.¹⁴
- (U) November 28, 2016: Abdul Ali Artan used his personal vehicle to strike pedestrians on a sidewalk at Ohio State University, injuring 11 people.¹⁵
- (U) July 14, 2016: Mohamed Lahouaiej Bouhlef drove a large, rented refrigeration truck into pedestrians gathered on a promenade to watch a fireworks display at the Bastille Day celebration in Nice, France. Eighty six people died in the attack and hundreds were wounded.^{16,17}

(U) The contents of this table are U//FOUO.

TABLE I—VEHICLE ATTACK CHARACTERISTICS

Event	Vehicle	Vehicle Acquisition	Secondary Weapon	Location	Target	Casualties
April 7, 2017 Stockholm, Sweden	Box truck	Stolen	Explosives	Popular shopping district	Civilians and department store front	4 dead; 15 injured
March 22, 2017 London, England	Car	Rented	Knife	Westminster Bridge; Parliament	Civilians and law enforcement	5 dead; 40 injured
December 19, 2016 Berlin, Germany	Box truck	Stolen	Pistol	Christmas market	Civilians	12 dead; 48 injured
November 28, 2016 Columbus, Ohio	Car	Owned	Knife	Ohio State University campus	Civilians	11 injured
July 14, 2016 Nice, France	Box truck	Rented	Pistol	Bastille Day celebration	Civilians	86 dead; 400+ Injured

(U//FOUO) OCIA assesses that of all critical infrastructure sectors, the Commercial Facilities Sector is at the greatest risk of attack from FTO-inspired vehicle-ramming operations because of the recurring presence of mass gatherings at these locations; the potential for adverse economic impacts; and the media attention these types of attacks regularly receive. The Commercial Facilities sector comprises a diverse group of assets where large numbers of people congregate to conduct business, purchase retail products, and attend recreational events. Venues within the Commercial Facilities Sector generally operate through a principle of open public access, which can increase the vulnerability to many types of attack methods. These venues are often highly recognizable and an attack at one of these facilities is likely to gain media attention, thus increasing the potential attractiveness to violent extremists.

(U//FOUO) A vehicle-ramming attack can impact additional critical infrastructure sectors locally. Economic impacts include short- and long-term disruptions to local businesses as a result of public fear and security concerns in areas where large gatherings are common. Cascading impacts to the Healthcare and Public Health Sector can also occur as local emergency and health services may be strained in the aftermath of a vehicle-ramming attack. Finally, public transportation may be impacted as areas are closed for emergency response or follow-on investigations.

- (U) The December 2016 attack on the German Christmas market resulted in the market's closure for four days, affecting local businesses affiliated with the market.¹⁸
- (U) According to media reporting, Swedish authorities closed Stockholm's metro and mainline trains after the April 2017 attack on the shopping district in Stockholm.¹⁹
- (U) French authorities cancelled events and closed the promenade and a number of public beaches in Nice following the July 2016 attack against the Bastille Day celebration.²⁰

(U//FOUO) ...Increasing the Importance of Suspicious Activity Reporting and Security Customized to Each Venue

(U//FOUO) Violent extremists' use of simple tactics, such as the use of vehicles as weapons, often results in few or no observable indicators. However, identifying and reporting suspicious activities may assist in detecting a potential vehicle-ramming attack plot. Of note, the following activities may be constitutionally protected, and any determination of possible illicit intent should be supported by additional facts that justify reasonable suspicion. These activities are general in nature and any one 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.

- (U) Reported theft of large or heavy-duty vehicles or equipment.
- (U) Observed difficulty in explaining the planned use of a rented vehicle.
- (U) Insistence on paying rental fees in cash.
- (U) Exhibited nervousness during vehicle rental discussion.
- (U) Unable to produce required documentation such as a valid driver's license or appropriate endorsement for the class of vehicle sought.
- (U) Observed difficulties in operating a rented vehicle, such as large or heavy-duty trucks, indicating a lack of familiarity from prior usage or experience.
- (U) Loading concealed materials into vehicle during overnight or pre-dawn hours.
- (U) Acquisition of suspicious quantities of weapons and ammunition or explosive precursor materials that could be used to produce explosives, such as hydrogen peroxide, acetone, gasoline, propane, or fertilizer.
- (U) Attempting to acquire or successfully acquiring firearms or ammunition prohibited under Federal, State, or local law.

- (U) Consumption and sharing of media glorifying violent extremist acts in attempting to mobilize others to violence.
- (U) Loitering, parking, or standing in the same area over multiple days with no reasonable explanation. Unexplained use of binoculars, cameras, and recording devices.

(U//FOUO) Nearly all aspects of security must be uniquely planned and formulated for the specific events and venues of concern. Public safety officials associated with the Commercial Facilities Sector should consider implementing risk-reduction measures prior to events, including physical access control and perimeter defense.

- (U//FOUO) Physical access control measures are designed to prevent unauthorized vehicles and dangerous items from being introduced into public gathering areas.
- (U//FOUO) Perimeter defenses include structural measures that prevent access to, or close proximity of unscreened vehicles, and reduce the speed of vehicles. This may include permanent or temporary barriers such as bollards and highway dividers.

(U) Based on suggestions from Federal law enforcement and private sector partners with holdings in the Commercial Facilities Sector, the following considerations in table 2 may assist in developing an effective mitigation strategy:

(U) The contents of this table are Unclassified.

(U) TABLE 2—POTENTIAL MITIGATION STRATEGIES

EVENT	STRATEGY
Planning and Preparation	Establish liaison and regular communication with Federal, State, and local law enforcement; emergency responders; and public health organizations to enhance information exchange, clarify emergency responses, track threat conditions, and support investigations. Practice a unified Incident Command System with established liaisons and an interoperable communication plan.
	Designate a security director to develop, implement, and coordinate all security-related activities.
	Conduct consequence analysis and security audits prior to an event, including assessments of other activities and operations in the vicinity (e.g., airports, chemical plants, government buildings, pipelines, rail lines, etc.) that may impact the event.
	Procure the necessary equipment to respond to a crisis. Maintain a cache of first aid supplies and distribute them throughout the facility or special event venue.
	Conduct threat, vulnerability, and risk assessments.
	Identify and designate egress and ingress routes for emergency vehicles.
	Identify potential staging areas and sites that could be used to triage victims and facilitate medevac operations.
	Develop policies and procedures for mitigating hoaxes and false alarms.
	Evaluate vehicle traffic patterns near the location (facility, mass gathering site, special event venue, etc.). Design and implement strategies to reduce vehicle speeds and improve pedestrian safety.
Establish mechanisms within communities to disseminate emergency public notifications, warning of hazardous conditions, locations, and suspect information.	

EVENT	STRATEGY
Personnel	Maintain an adequately sized, equipped, and trained security force. Conduct law enforcement and security officer patrols around drop-off and pick-up points at locations where there are large numbers of people concentrated in restricted spaces.
	Exercise any business continuity, security, or emergency action plans regularly (at least once per year) to ensure they remain applicable as changes occur at the commercial office building. Involve first responders in exercises to familiarize them with the building and its security plans, policies, and procedures.
	Incorporate security awareness and appropriate response procedures for security situations into vendor and organizer employee training programs.
	Provide an adequate level of security supervision and oversight for the event. Be alert to suspicious activities.
	Conduct employee background checks, and ensure proper identification and credentials of event staff.
Access Control and Barriers	Conduct mass casualty incident training that emphasizes a wide range of possible scenarios and weapons, incorporating both complex and simple tactics.
	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, barriers, and barricades can be used to increase standoff distances between large crowds and vehicles.
	Evaluate the need for physical barriers (natural and man-made). If appropriate, pre-position physical barriers around the perimeter of densely populated locations.
Monitoring, Surveillance, and Inspection	Remove all unauthorized vehicles.
	Evaluate, design, and implement a monitoring, surveillance, and inspection program. Use, maintain, and regularly review appropriate physical security measures, such as electronic access control systems, silent alarms, and closed circuit television (CCTV) cameras in a manner consistent with applicable State and Federal laws.
	Deploy security force to inspect sensitive or critical areas for signs of security issues.
	Screen all delivery and service vehicles and personnel.
Communication and Notification	Inspect packages, briefcases, backpacks, and parcels.
	Implement a public awareness and vigilance campaign that provides information for reporting and responding to potential terrorist activity (e.g., PA system announcements, television ads, social media, etc.).
	Install systems that provide communications with local law enforcement and emergency responders.
	Conduct regular information sharing with multi-disciplinary partners, to include local fusion centers, Joint Terrorism Task Force, and the private sector.
Provide a simple and straightforward means for people to communicate the presence of a potential threat or an emergency, such as texts, audio, or email dissemination.	

EVENT	STRATEGY
Incident Response	<p>Ensure an adequate number of emergency responders are on duty or on call at all times.</p> <p>Develop policies and procedures for dealing with an incident to advise the public of the situation and to diffuse rumors and panic.</p>

(U) The Office of Cyber and Infrastructure Analysis (OCIA) provides innovative analysis to support public and private-sector stakeholders' operational activities and effectiveness and to inform key decisions affecting the security and resilience of the Nation's critical infrastructure. All OCIA products are visible to authorized users at [HSIN-CI](#) and [Intelink](#). For more information, contact OCIA@hq.dhs.gov or visit <http://www.dhs.gov/office-cyber-infrastructure-analysis>.

(U) PDMI7071

SOURCES

- ¹ (U) OSC; EUP20101013167014; October 13, 2010; (U) "New Edition of Al-Qa'ida Magazine Instructs on Using Vehicle as Battering Ram."
- ² (U//FOUO) OSC; TRR2014092201178788; September 22, 2014; (U) "ISIL Spokesman Vows 'Defeat' for America, Calls For Killing Westerners in New Audio Message."
- ³ (U//FOUO) OSC; TRR2017050482941461; May 4, 2017; (U) "Ninth Issue of ISIS's English-Language 'Rumiyah' Magazine."
- ⁴ (U//FOUO) OSC; TRR2017040583038518; April 5, 2017; (U) "Eighth Issue of ISIS's English-Language 'Rumiyah' Magazine."
- ⁵ (U//FOUO) OSC; TRR2017040836871865; April 7, 2017; (U) "AQAP's 'Inspire Guide' Publishes 'Analysis' of British Parliament Attack."
- ⁶ (U//FOUO) OSC; TRR2016111165702104; November 11, 2016; (U) "Alert: Third Issue of ISIL English-Language 'Rumiyah' Magazine."
- ⁷ (U//FOUO) OSC; TRR2016072181777880; July 21, 2016; (U) "AQAP's Inspire Magazine Publishes 'Analysis' of Bastille Day Attack."
- ⁸ (U) *Business Insider*. (2017). "ISIS and Al Qaeda have specifically called for the type of attack that just happened in London;" <http://www.businessinsider.com/isis-al-qaeda-london-attack-2017-3>. Accessed April 13, 2017.
- ⁹ (U) OSC; EUP20101013167014; October 13, 2010; (U) "New Edition of Al-Qa'ida Magazine Instructs on Using Vehicle as Battering Ram."
- ¹⁰ (U) *Reuters*. "Islamic State calls for attacks on the West during Ramadan in audio message." <http://www.reuters.com/article/us-mideast-crisis-islamicstate-idUSKCN0YC00G>. Accessed April, 27 2017.
- ¹¹ (U//FOUO) IA-0124-17; (U//FOUO) Sweden Vehicle Attack Highlights Resonance of Foreign Terrorist Organizations Tactical Messaging; Overall Classification: U//FOUO.
- ¹² (U) *CNN*. (2017). "Stockholm attack: Uzbek man held on suspicion of terrorism." <http://www.cnn.com/2017/04/08/europe/sweden-stockholm-truck-attack/>. Accessed April 24, 2017.
- ¹³ (U//FOUO) IA-0112-17; (U//FOUO) UK Vehicle and Edged Weapon Attack Highlights Effectiveness of Multiple Simple Tactics in Mass Casualty Attacks; Overall Classification: U//FOUO.
- ¹⁴ (U//FOUO) IA-0049-17; (U//FOUO) Germany: Vehicular Assault at Christmas Market Underscores Threat to Mass Gatherings and Open-Access Venues; Overall Classification: U//FOUO.
- ¹⁵ (U) *CNN*. (2016). "Ohio State University: Attacker killed, 11 hospitalized after campus attack." <http://www.cnn.com/2016/11/28/us/ohio-state-university-active-shooter/>. Accessed April 12, 2017.
- ¹⁶ (U) *The New York Times*. "Truck Attack in Nice, France: What We Know, and What We Don't." https://www.nytimes.com/2016/07/16/world/europe/nice-france-truck-attack-what-we-know.html?_r=0. Accessed April 12, 2017.
- ¹⁷ (U) *BBC News*. "Nice attack death toll rises to 86 as injured man dies." <http://www.bbc.com/news/world-europe-37137816>. Accessed April 18, 2017.
- ¹⁸ (U) *Reuters*. "Germany says Tunisian's fingerprints found in Christmas market crash truck." <http://www.reuters.com/article/us-germany-truck-idUSKBNI48287>. Accessed May 5, 2017.
- ¹⁹ (U) *The Telegraph*. "Stockholm attack driver 'deliberately targeted young children' as he drove hijacked lorry into crowd." <http://www.telegraph.co.uk/news/2017/04/07/truck-crashes-crowd-people-stockholm/>. Accessed May 5, 2017.
- ²⁰ (U) *Daily Mail*. "Nice's once-bustling beaches reopen but barely draw a crowd after 84 were killed in a terror attack that has delivered another hit to France's ailing tourism sector." http://www.dailymail.co.uk/travel/travel_news/article-3693330/Nice-terror-attack-sees-holidaymakers-cancel-bookings.html. Accessed May 5, 2017.

UNCLASSIFIED



Homeland Security

National Protection and Programs Directorate
NPPD Customer Feedback Survey

1. Product Title:

2. Please rate your satisfaction with each of the following:

Very Satisfied (5)	Somewhat Satisfied (4)	Neither Satisfied Nor Dissatisfied (3)	Somewhat Dissatisfied (2)	Very Dissatisfied (1)
--------------------	------------------------	--	---------------------------	-----------------------

Timeliness of product

Relevance of product

3. How do you use the information from this mission?

- Integrated into one of my own organization's information or analytic products
Yes No If so, which products?
- Used contents to improve my own organization's security or resiliency efforts or plans
Yes No If so, which efforts?
- Shared contents with government, private sector, or other partners
Yes No If so, which partners?
- Other uses (please specify)
Yes No

4. Do you have questions that this product didn't answer?

Yes No (Please specify)

5. How could this product be improved?

6. Would you like to see more on this topic?

Yes No (Please specify)

7. Are there other topics or questions you would like to see addressed by OCIA?

To help us understand more about your organization so we can better tailor future products, please provide (OPTIONAL):

Name:	Sector:
Organization:	Partner Type:
Contact Number:	State:

[Privacy Act Statement](#)

[Paperwork Reduction Act Compliance Statement](#)

UNCLASSIFIED