

9.0 TERRORISM

9.1 Overview

For mitigation planning, terrorism is broadly inclusive of a wide range of deliberate malevolent acts intended to damage buildings, infrastructure or to result in deaths and injuries. The possibility of international terrorist organizations targeting Lane County, is not zero, but is certainly small. However, Lane County is certainly subject to deliberate malevolent acts from many sources including vandals, mentally disturbed individuals, domestic terrorist groups (e.g., eco-terrorists), as well as by disgruntled residents, and past or present employees.

The range of possible malevolent actions includes vandalism, arson, explosions and armed attacks, as well as use of chemical, biological, radiological or nuclear materials. Chemical attacks include deliberate release on on-site chemicals as well as deliberate dispersal of transported hazardous materials. Biological attacks include deliberate dispersal of biologically active materials (e.g., anthrax) capable of causing sickness or death. Radiological attacks include deliberate dispersal of radioactive materials, via dirty bombs (conventional explosives laced with radioactive materials) or other methods. Nuclear attacks include explosion of nuclear devices and the radioactive fallout from such explosions.

The range of possible malevolent actions also includes cyber-terrorism, or deliberate disruption/damage of computer systems and data. Especially for utility systems, cyber-terrorism can also result in loss of service due to disruption/damage to automated SCADA (Supervisory Control and Data Acquisition) systems widely used by utilities.

9.2 Threat Spectrum

For purposes of mitigation planning, we consider three sources of terrorist (malevolent) actions: outsiders, insiders, and hackers. In each case, we consider three levels of attack, with the levels reflecting the numbers of individuals involved, the level of technical knowledge or expertise, and the level of equipment or tools available. This threat spectrum is summarized below in Table 9.1.

In Table 9.1, outsiders means anyone who is not an employee of the facility under potential terrorist attack. Outsiders could be vandals, disturbed individuals, or members of domestic or international organized groups. For Lane County, the most likely terrorist or malevolent acts are minor vandalism or actions by disturbed individuals or employees. Deliberate terrorist actions are most likely from domestic groups, including eco-terrorists, and are unlikely to be from international organizations.

In Table 9.1, insiders means anyone who is an employee of the target under potential attack. Acts of vandalism, theft and other relatively minor actions are common. Larger scale malevolent acts are less common but still occur with some frequency. Such acts include larger scale damage, arson, explosives, and such actions as contamination of water supplies.

In Table 9.1, computer hackers means individuals or groups using remote access to explore, vandalize, or destroy websites, computer databases and such. For utility systems, hackers can also impact SCADA systems and may affect system operations directly.

**Table 9.1
Threat Spectrum for Terrorist Actions**

Adversary	Number of Adversaries	Level of Knowledge	Equipment Tools	Weapons	Objectives
Outsider: high level	1 to small group	Extensive knowledge of security systems, facilities and modes of attack	hand tools, power tools, vehicles	handguns or automatic weapons, incendiary devices, explosives, contaminants	Extensive damage to critical facilities, widespread damage or casualties
Outsider: medium level	1 to 3	Limited knowledge of security systems, facilities and modes of attack	hand tools, power tools, vehicle	handguns, incendiary devices, explosives, contaminants	Damage or casualties
Outsider: low level	1 or 2	Minimal knowledge of security systems, facilities and modes of attack	hand tools	None	Vandalism, damage or casualties
Insider: high level	1	Extensive knowledge of security systems, facilities, operations, policies and procedures	On site tools, chemicals, equipment, vehicles	handguns or automatic weapons, incendiary devices, explosives, contaminants	Damage or casualties
Insider: medium level	1	Moderate knowledge of security systems, facilities, operations, policies and procedures	On site tools, chemicals, equipment, vehicles	handguns, incendiary devices, explosives, contaminants	Damage or casualties
Insider: low level	1	Limited knowledge of security systems, facilities, operations, policies and procedures	On site tools, chemicals, equipment, vehicles	handgun or none	Vandalism, damage or casualties
Hacker: high level	1 to small group	Full knowledge of IT infrastructure, security systems, SCADA systems	Sophisticated hacker tools and methods	N/A	Destruction of data and systems, business operations
Hacker: medium level	1 or 2	Moderate knowledge of IT infrastructure, security systems, SCADA systems	Moderately sophisticated hacker tools and methods	N/A	Denial of service or disruption of some business services
Hacker: low level	1	Limited knowledge of IT infrastructure, security systems, SCADA systems	N/A	N/A	Minor cyber-vandalism to non-critical business areas

The probable impacts of terrorist events on Lane County are summarized below in Table 9.2. For Lane County, the most likely terrorist (or other malevolent) events are small scale events such as:

- 1) vandalism
- 2) minor damage by insiders (disgruntled employees)
- 3) minor damage by outsiders (extremist groups, mentally disturbed individuals), or
- 4) computer hacking events.

Larger scale events by domestic or international groups are possible, but unlikely for Lane County, because there do not appear to be many targets of national significance in Lane County, with the possible exception of major dams.

**Table 9.2
Probable Impacts of Terrorist Incidents on Lane County**

Inventory	Probable Impacts
Portion of Lane County affected	Localized impacts for minor incidents, large portions or the entire County for extremely unlikely major incidents
Buildings	Localized impacts to a single building or a few nearby buildings, except for extremely unlikely major incidents
Streets within Lane County	Some incidents may include temporary street closures
Roads to/from Lane County	Some incidents may include temporary road closures
Electric power	Some incidents may include temporary loss of electric power in localized parts of Lane County or for the entire County
Other Utilities	Some incidents may include temporary loss of utilities in localized parts of Lane County or for the entire County. Major damage to water or wastewater treatment plants could result in full or partial loss of service for extended time periods
Casualties	Small scale incidents may have no casualties or a small number of casualties. Possible, but unlikely, major events may result in significant casualties (deaths and injuries)

9.3 Mitigation Actions

Evaluation of the threat of terrorist or other malevolent actions generally includes several steps:

- 1) determine critical facilities,
- 2) identify the specific adverse consequences to be avoided,
- 3) review the likelihood of malevolent actions,
- 4) evaluate existing countermeasures, and
- 5) implement a prioritized risk reduction plan.

For Lane County, critical facilities include key elements of the water system, electric power substations, other facilities with hazardous materials (cf. Chapter 14) and important public facilities such as police and fire stations. There are also sites in the Eugene/Springfield Metro Area of some political significance including the Federal Building, Eugene City Hall, and the University of Oregon.

The most likely adverse consequences are vandalism and minor destructive actions by outsiders, insiders, or hackers. The evaluation of existing countermeasures should include:

- 1) physical security measures, such as fencing, locks and key control, structural integrity of critical assets, and detection capabilities such as intrusion detection systems, alarms, operational alarms for utility systems, and general security/access issues,
- 2) Cyber security measures, such as protection measures for business/operational computer systems and SCADA systems, including fire walls, access, security policies and protocols, including vendor access and system diagnostics, and
- 3) Security procedures and polices, such as personnel security, physical security, key and badge control, system control and operational data, chemical and

other vendor deliveries, as well as security and emergency response training, exercises and drills.

For Lane County vigilance and modest upgrades to existing physical security, cyber security, and security procedures and policies are probably all that are reasonably required. For the highest profile buildings, such as the Federal Building in Eugene, barriers to restrict vehicles reaching close proximity to the building, to the extent practical, might also warrant consideration.

The potential impacts of terrorism or other malevolent deliberate actions in Lane County can also be mitigated by improving emergency response capabilities. Such types of actions, such as fires or explosions, are self-evident and emergency responders are well trained for dealing with such situations.

Other types of actions such as release of radiological materials, bioterrorism, or contamination of water or food supplies may not be immediately recognized. For such types of actions, close cooperation with public health officials and awareness of the possibility of deliberate actions are important. Such situations also commonly require specialized expertise and equipment to detect and identify the radiological, biological or chemical materials used in an attack. Emergency response plans should be updated and expanded, as necessary, to cover such situations, including protocols for public notifications and information about appropriate public responses such as shelter in place or evacuation.

The following table contains terrorism mitigation action items from the master Action Items table in Chapter 4.

**Table 9.3
Terrorism Mitigation Action Items**

Hazard	Action Item	Coordinating Organizations	Timeline	Ideas	Plan Goals Addressed					
					Public Awareness	Life Safety	Protect Property Minimize Losses	Partnerships & Implementation	Emergency Services	Protect Environment
Terrorism Mitigation Action Items										
Short-Term #1	Enhance emergency planning, emergency response training and equipment to address potential terrorism incidents.		Ongoing	pg. 4-5 pg. 15-2		X			X	
Long-Term #1	Upgrade physical security detection and response capability for critical facilities, including water systems		5 Years	pg. 4-5 pg. 15-2		X	X	X	X	