4.21 Terrorism / Homeland Security Incident

4.21.1 Hazard Profile

The U.S. Department of Justice defines terrorism as the unlawful use of force or violence committed by a group or individual against persons or property to intimidate or coerce a government, the civilian population, or any segment thereof, in furtherance of political or social objectives.

For the purpose of this profile, a terrorism, or homeland security hazards includes chemical attack, explosive attack, radiological attack, nuclear attack, food / food production attack, armed assault, vehicle attack, bioterrorism, cyber-attack, and civil unrest. See the following Magnitude section for details. However, terror can be exhibited through many different forms and may be more subtle using non-traditional methods.

4.21.1.1 Geographic Location/ Extent

Acts perpetrated by violent extremists have far-reaching consequences in the United States, including structural and infrastructure damage, mass casualty and fatality incidents, environmental harm, decreased national morale, heightened perceived risk and fear by the public, and economic impacts.

Terrorism threat extent is determined using the National Terrorism Advisory System (NTAS). This system provides three levels of alert, including: elevated, intermediate, or imminent. It also provides a summary of the terrorism threat, additional details regarding the threat, a duration for the threat, and information for how the public can help and be prepared.

Local Emergency Operation Plans are beginning to address annexations and terrorism areas of concern. Consult these plans for further information.

4.21.1.2 Magnitude/ Severity

The severity of a terrorism incident depends on the method used, the proximity of a device to people, animals, or other assets and duration of the incident. Terrorists use several methods of attack, including the following.

4.21.1.3 Chemical attack

Chemical terrorism is the use of chemical agents to poison, kill, or incapacitate the population or animals, destroy crops or natural resources, or deny access to certain areas. Chemical agents can be broken into five different categories: nerve agents, vesicants, cyanide, pulmonary agents, and incapacitating agents.

4.21.1.4 Explosive attack

Terrorism using explosive and incendiary devices includes bombs and any other technique that creates an explosive, destructive effect. Bombs can take many forms from a vehicle-borne Improvised Explosive Device (IED) to a mail bomb.

4.21.1.5 Bioterrorism

Biological terrorism, or bioterrorism, is the use of biological agents to infect the population, plants, or animals with disease. The impacts of bioterrorism are discussed in the Communicable Diseases Hazard profile.

4.21.1.6 Radiological / Nuclear attack

Radiological/nuclear terrorism involves the use of radiological dispersal devices, nuclear weapons, or nuclear facilities to attack the population. Exposure to radiation can cause radiation sickness, long-term illness, and even death.

4.21.1.7 Cyber attack

Cyber terrorism is the attack or hijack of the information technology infrastructure that is critical to the functions controlled by computer networks such as: operating, financial, communications, and trade systems. Any cyber-attack that creates unrest, instability, or negatively impacts confidence of citizens/consumers can be considered cyber terrorism. Common types and methods of cyberattacks include botnet, card skimming, denial-of-service attack, malicious code, pharming, phishing, spam, spear phishing, spoofing, spyware, trojan horse, virus, and worm. Computer security incidents are an ongoing threat and require due diligence to address accordingly in order to mitigate any potential disruption to critical infrastructure. In order to ensure a quick and proper response to cyber-attacks, systems vulnerable to cyber terrorism should have an incident response plan to minimize negative impacts.

4.21.1.8 Food / food production attack

An attack on food or food production can be considered agroterrorism, or "the deliberate introduction of an animal or plant disease for the purpose of generating fear, causing economic losses, or undermining social stability." An agroterrorism attack might target agricultural facilities, impact food production and food supply, affect restaurants and grocery stores, and have detrimental effects on public health.

4.21.1.9 Armed assault

An armed assault is defined as a hostile non-state actor(s) using assault tactics to conduct strikes on vulnerable target(s) within the U.S. resulting in at least one fatality or injury (DHS, 2011)

4.21.1.10 Vehicle attack

A vehicle attack is characterized by the use of a vehicle to cause death, injury, and damage. Such attacks may be directed at large gatherings of people and/or buildings in areas of limited mobility due to the terrain or crowd mass.

4.21.1.11 Civil unrest

Civil unrest and violence typically occur on a smaller scale than other types of terrorism. Civil unrest can occur when large groups, organizations, or distraught individuals take action with potentially disastrous or disruptive results. Civil unrest can result following a disaster that creates panic in the community. Forms of civil unrest can range from groups blocking sidewalks, roadways, and buildings to mobs rioting and looting to gang activity. These types of incidents typically do not escalate to the traditional definition of a disaster, but can have significant impacts on the community and require additional resources to manage.

4.21.1.12 Previous Occurrences

No terrorism history was available for CVPDC at the time of the update. Several of the communities in the CVPDC provided information about their Emergency Operation Plans (EOP). These plans are beginning to address terrorism as a concern in operation. Please consult local EOPs for further guidance.

4.21.1.13 Relationship to Other Hazards

Figure 4-181 shows the interrelationship (causation, concurrence, *etc.*) between this hazard and other hazards discussed in this plan update.

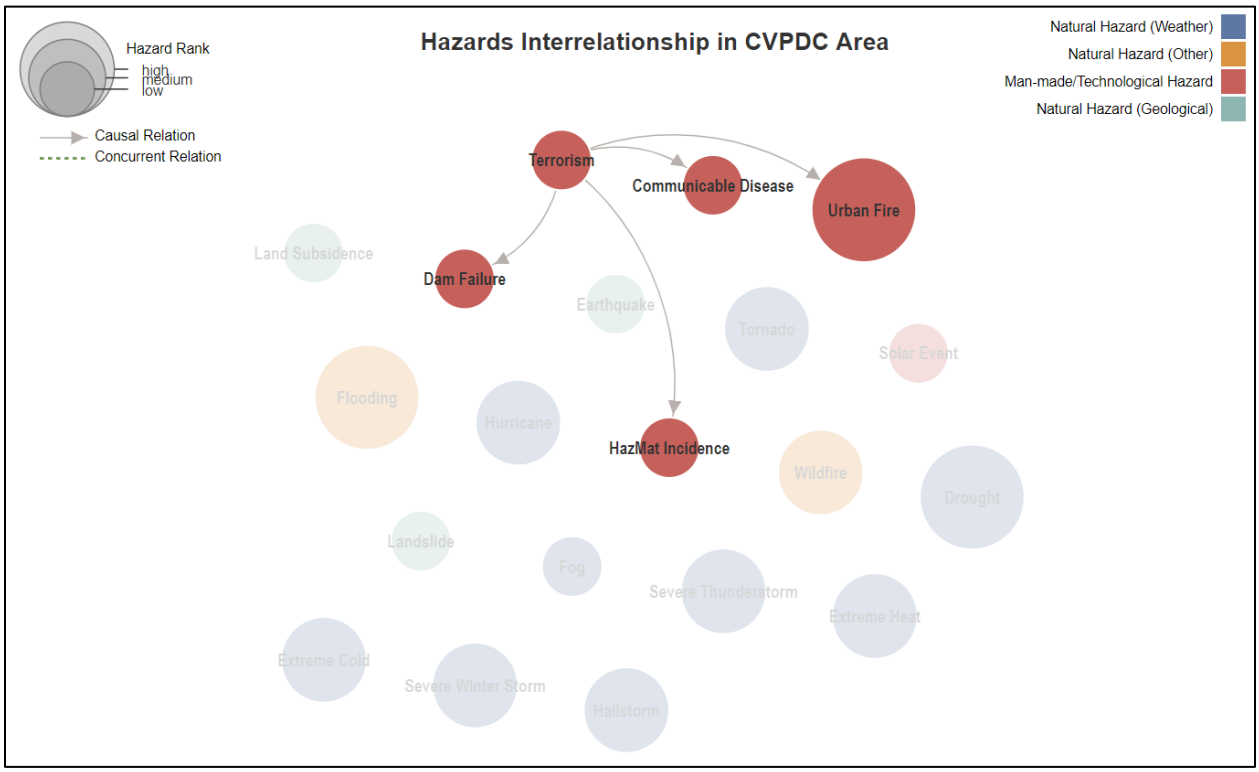


Figure 4-181 Hazards interrelationship

4.21.2 Impact and Vulnerability

The economic and financial impacts of a terrorist event on local government will depend on the scale of the event, what is damaged, costs of repair or replacement, lost business days in impacted areas, and how quickly repairs to critical components of the economy can be implemented. Vulnerability analysis, when available, has been conducted by the different localities. This information has been addressed in local Emergency Operation Plans.

Vulnerability to people

During attacks and times of unrest, the greatest risk is to human lives. Terrorists typically try to make a dramatic statement that will generate media interest. Attacking the population through a large loss of life is a common tactic. Depending on the type of attack, casualties can encompass much of an urban population.

Vulnerability to property

Nearly every type of structures is vulnerable to conventional terrorism incidents. Government facilities can become targets if an individual or group disagrees with actions they associate with the facility.

Certainly, some state-owned buildings and property may be more vulnerable to incidents than others due to the activities performed at the facility or the level of security at the building.

The FEMA risk management series on mitigating potential terrorist attacks against buildings provides information on developing a realistic prioritization of human-caused hazards. The mitigation strategies section on this report should provide projects to address human caused hazard vulnerability. Future concepts to consider include:

1. Communities determine the relative importance of various critical and non-critical facilities and the assets of these systems
2. Determine the vulnerability to the specified hazard
3. Determine what threats are known to exist in the communities

Vulnerability to critical infrastructures

The potential impact posed to critical infrastructure through the use of explosives is significant. Communication and power supply infrastructure are highly susceptible to this type of attack, which results in adverse impacts to businesses, residences, and critical facilities. As aforementioned, critical infrastructure has become more and more susceptible to acts of cyber terrorism. While cyber terrorism would not necessarily destroy the physical presence of critical infrastructure, it has the potential to shut down operations, which could in turn destroy physical structures if cyber terrorists were able to compromise internal systems and programs which provide service delivery.

Critical Facility and SCADA

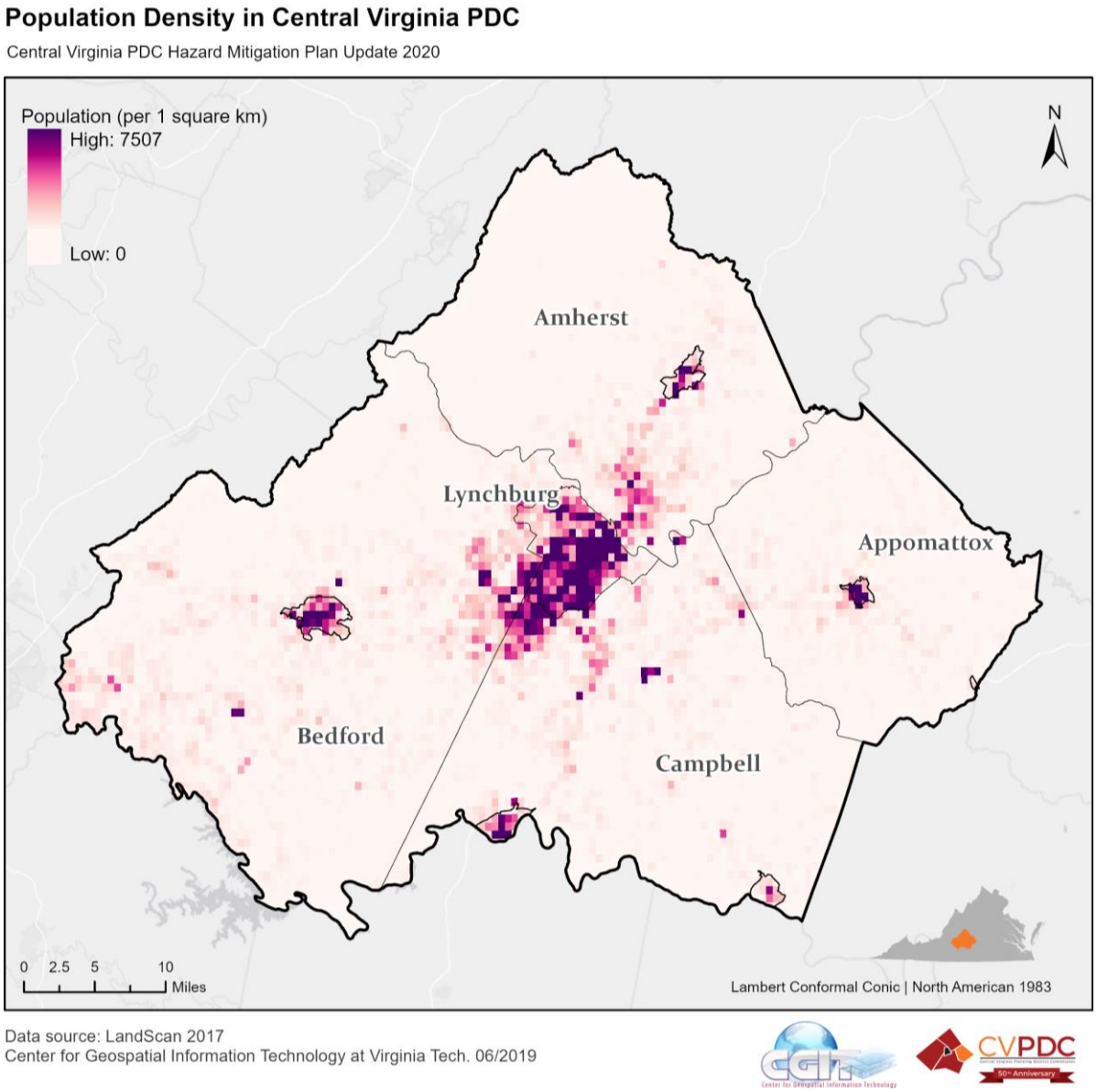
In April 2017, the Virginia State Police network suffered a malware attack that caused the agency to lose access to Internet and vital systems. Critical facilities and infrastructures like public safety, energy, transportation or water are vulnerable targets and increasingly under risk from cyber-attack. The key components of critical infrastructure issues in cyberspace are the industrial control system (ICS) and supervisory control and data acquisition (SCADA) systems. These systems provide real-time, two-way data flow between sensors, workstations, and other networked devices throughout a system. In the age of the Internet of Things (IoT), the smooth and reliable operation of ICS and SCADA systems is vital for critical infrastructures where both data acquisition and control are critically important. The possibility of an attack on the SCADA system's critical infrastructure could undermine the safety of millions of individuals and can compromise homeland security. Therefore, defense security of critical infrastructures require an "all-hazards" perspective, encompassing service failure, natural disasters and terrorism altogether.

https://www.pilotonline.com/news/article_195797af-a41c-5ec7-96f4-282b5f706ee6.html

4.21.3 Risk Assessment and Jurisdictional Analysis

Terrorist attacks can occur anywhere. Area with a dense population and location relative to major urban areas would be an attractive target of a potential terrorist activity (Figure 4-182). While it is not possible to predict the location of terrorist attack, large venue locations such as stadiums, civic centers and locations with correctional facilities are somewhat more likely to be susceptible to such incidents. Figure 4-183 and Table 4-170 shows several large population venues situated in the CVPDC area: Lynchburg City Stadium, Liberty Vines Convocation Center, Academy Center of The Arts, Altavista Area YMCA Family Center, and National D-Day Memorial. A potential worst-case scenario for the CVPDC would be a terrorist attack at one of these

venues, especially the Vines Center which has a capacity of over 9,500 seats.[111] Additional targets could be the PDC's critical infrastructure such as utilities, roadways, bridges, tunnels, hospitals, and schools.



(Source: LandScan 2017)

Figure 4-182 Population density in CVPDC Area

[111] https://www.liberty.edu/flames/index.cfm?PID=38028

Table 4-170 Large population venues in CVPDC

Locality	Facility Name	Location	Coordinates
Campbell	Altavista Area YMCA Family Center	1000 Franklin Ave, Altavista	37.1140, -79.2889
Bedford	National D-Day Memorial	3 Overlord Cir, Bedford	37.3305, -79.5360
Lynchburg	City Stadium	3176 Fort Ave, Lynchburg	37.3924, -79.1664
Lynchburg	Liberty Vines Convocation Center	1971 University Blvd, Lynchburg	37.3489, -79.1811
Lynchburg	Academy Center Of The Arts	600 Main St, Lynchburg	37.4174, -79.1441

According to the National Institute of Corrections, prisons are also potential terrorist targets—densely populated structures that are difficult both to defend and to evacuate. In addition to their attractiveness as terrorist targets, prisons may be involved with terrorists in other ways: [112]

- Terrorists may exist within the prison population and could be identified.
- The prison population offers terrorists a promising pool from which to recruit new members, allies, or mercenaries.
- The prison population is a potential source of intelligence about terrorist groups.

Figure 4-183 and Table 4-171 present the 8 county jails (detention facilities) located in the CVPDC area.

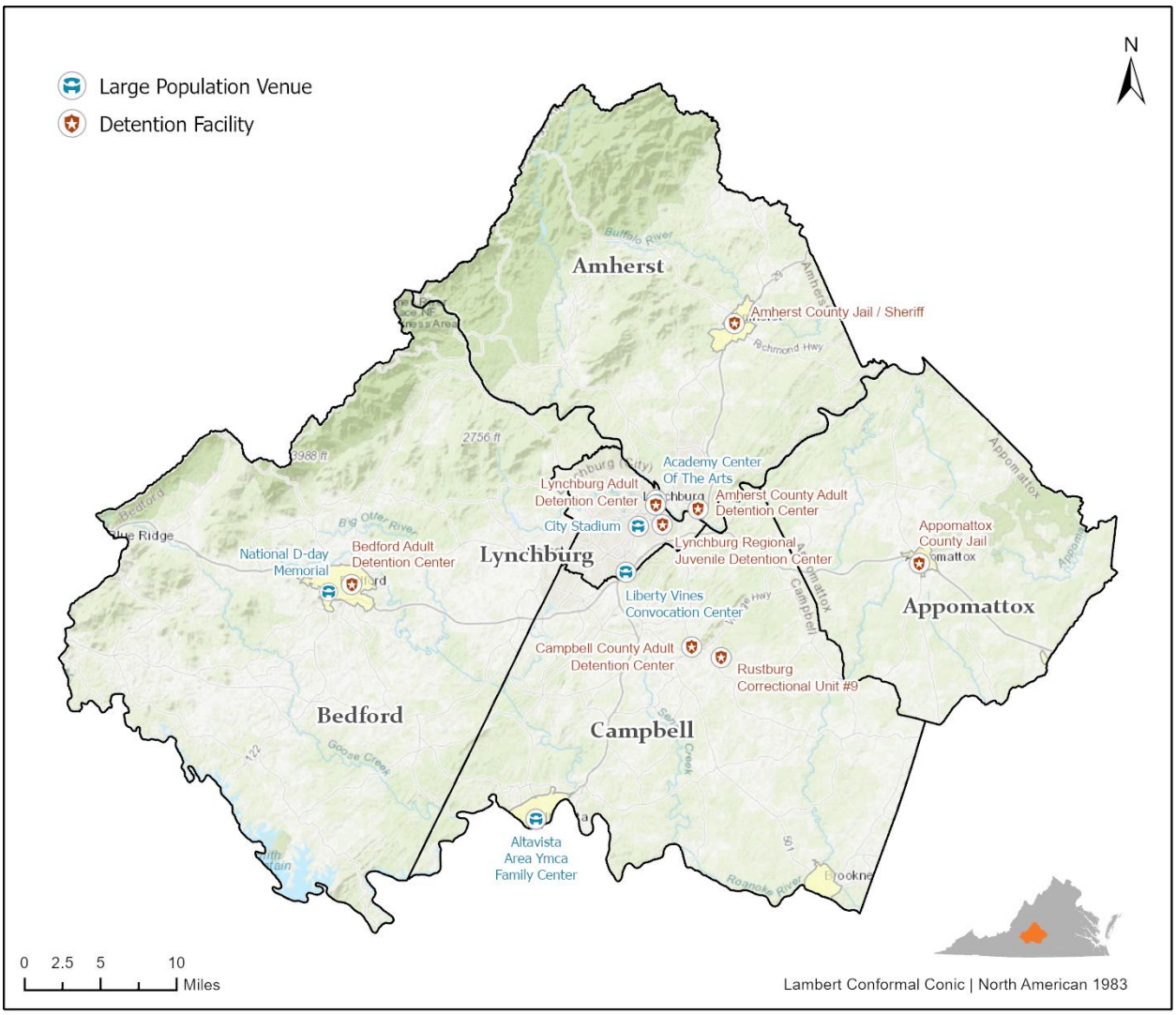
Table 4-171. Detention facilities in CVPDC

Locality	Town	Facility Name	Location	Coordinates
Amherst		Amherst County Adult Detention Center	219 Riverview Rd	37.4088, -79.0947
Amherst	Town of Amherst	Amherst County Jail / Sheriff	115 Taylor St	37.5854, -79.0498
Appomattox	Town of Appomattox	Appomattox County Jail	179 Morton Lane	37.3555, -78.8308
Bedford	Town of Bedford	Bedford Adult Detention Center	1000 Broad St	37.3375, -79.5083
Campbell		Rustburg Correctional Unit #9	479 Camp Nine Rd	37.2673, -79.0678
Campbell		Campbell County Adult Detention Center	90 Courthouse Lane	37.2774, -79.1029
Lynchburg		Lynchburg Regional Juvenile Detention Center	1400 Florida Ave	37.3940, -79.1371
Lynchburg		Lynchburg Adult Detention Center	510 9Th St	37.4127, -79.1451

[112] https://info.nicic.gov/nicrp/system/files/020293.pdf

Detention Facilities and Large Population Venues in Central Virginia PDC

Central Virginia PDC Hazard Mitigation Plan Update 2020



Data source: HIFLD Open GP - Law Enforcement, as of 09/2018
Center for Geospatial Information Technology at Virginia Tech. 05/2020

Figure 4-183 Detention facilities and large population venues in CVPDC

4.21.4 Probability of Future Occurrences

Terrorism can also take many forms and involves a range of political and personal agendas. The potential for future terrorism incidents in CVPDC is difficult to predict.

4.21.5 References

- Amir Vera. *Malware causes Virginia State Police to shutdown email service*. The Virginian-Pilot. April 26, 2017. https://www.pilotonline.com/news/article_195797af-a41c-5ec7-96f4-282b5f706ee6.html

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- Jeffrey A. Schwartz. *A Guide to Preparing for and Responding to Prison Emergencies*. U.S. Department of Justice, National Institute of Corrections. Page 239. June 2005. https://info.nicic.gov/nicrp/system/files/020293.pdf