



Section 5. Risk Assessment

5.23 Terrorism

2014 Plan Update Changes

- The hazard profile has been significantly enhanced to include a detailed hazard description, location, extent, previous occurrences, probability of future occurrence, severity, warning time and secondary impacts of the terrorism hazard.
- Potential change in climate and its impacts on the animal disease hazard are discussed.
- A vulnerability assessment has been completed and directly follows the hazard profile.
- The consequence analysis for the terrorism hazard is now located in Section 9 of this Plan Update.

5.23.1 Profile

Hazard Description

Terrorism is the use of force or violence against persons or property with the intent to intimidate or coerce. Acts of terrorism include threats of terrorism; assassinations; kidnappings; hijackings; bomb scares and bombings; cyber-attacks (computer-based attacks); and the use of chemical, biological, nuclear, and radiological weapons (FEMA 2009). Various types of terrorism are discussed in the sections below.

Armed Attacks and Assassinations

Armed attacks include raids and ambushes. Assassinations are the killing of a selected victim, usually by bombings or small arms. Drive-by shootings is a common technique employed by unsophisticated or loosely organized terrorist groups. Historically, terrorists have assassinated specific individuals for psychological effect.

Arson and Firebombing

Incendiary devices are inexpensive and easy to hide. Arson and firebombings are easily conducted by terrorist groups that may not be as well organized, equipped, or trained as a major terrorist organization. An act of arson or firebombing against a utility, hotel, government building, or industrial center portrays an image to the public that the ruling government is incapable of maintaining order.

Bioterrorism

Bioterrorism refers to the intentional release of toxic biological agents to harm and terrorize civilians, in the name of a political or other cause. The United States Centers for Disease Control and Prevention (CDC) has classified the viruses, bacteria, and toxins that could be used in an attack. Category A Biological Diseases are those most likely to do the most damage. They include:

- Anthrax (*Bacillus anthracis*)
- Botulism (*Clostridium botulinum* toxin)
- The Plague (*Yersinia pestis*)
- Smallpox (*Variola major*)
- Tularemia (*Francisella tularensis*)
- Hemorrhagic fever, due to Ebola Virus or Marburg Virus



Bombings

Bombings are the most common type of terrorist act. Typically, improvised explosive devices are inexpensive and easy to make. Modern devices are smaller and harder to detect, and contain very destructive capabilities. An example of bombing occurred on August 7, 1998, when two American embassies in Africa were bombed. The bombings claimed the lives of over 200 people, including 12 innocent American citizens, and injured over 5,000 civilians. Terrorists such as those responsible for this bombing can use materials that are readily available to the average consumer to construct a bomb.

Cyber Terrorism

Cyber terrorists use information technology to attack civilians and draw attention to the terrorists' cause. This may mean that they use information technology, such as computer systems or telecommunications, as a tool to orchestrate a traditional attack. More often, cyber terrorism refers to an attack on information technology itself in a way that would radically disrupt networked services. For example, cyber terrorists could disable networked emergency systems or hack into networks housing critical financial information. There is wide disagreement over the extent of the existing threat by cyber terrorists. A full discussion of cyber terrorism is presented in Section 5.16 (Cyber Attack).

Ecoterrorism

Ecoterrorism is a recently coined term describing violence in the interests of environmentalism. In general, environmental extremists sabotage property to inflict economic damage on industries, businesses, or persons perceived as harming animals or the natural environment. Targets of ecoterrorist attacks have included fur companies, logging companies, and animal research laboratories.

Hijackings and Skyjackings

Hijacking is the seizure by force of a surface vehicle, its passengers, and/or its cargo. Skyjacking is the taking of an aircraft, which creates a mobile, hostage barricade situation; provides terrorists with hostages from many nations; and draws heavy media attention. Skyjacking also provides mobility for the terrorists to relocate the aircraft to a country that supports their cause and provides them with a human shield, making retaliation difficult.

Kidnappings and Hostage-Takings

Terrorists use kidnapping and hostage-taking to establish a bargaining position and to elicit publicity. Kidnapping is one of the most difficult acts for a terrorist group to accomplish, but, if a kidnapping is successful, it can gain terrorists money, release of jailed comrades, and publicity for an extended period. Hostage-taking involves the seizure of a facility or location and the taking of hostages present in that facility. Unlike a kidnapping, hostage-taking provokes a confrontation with authorities. It forces authorities to either make dramatic decisions or to comply with the terrorist's demands. It is overt and designed to attract and hold media attention. The terrorists' intended target is the audience affected by the hostage's confinement, not the hostage.

Nuclear Terrorism

Nuclear terrorism refers to a number of different ways nuclear materials might be exploited as a terrorist tactic. These include attacking nuclear facilities, purchasing nuclear weapons, or building nuclear weapons or otherwise finding ways to disperse radioactive materials.



Location

Terrorist attacks can occur anywhere; however, the State of New Jersey is a particularly attractive target of a potential terrorist activity because of its dense population and location relative to major urban areas. The State also houses the busiest commuter rail system in the United States, as well as the headquarters of major corporations in economically vital sectors such as the financial and pharmaceutical industries.

Additional targets in New Jersey include the State's critical infrastructure such as utilities, roadways, bridges, tunnels, hospitals, schools, civic centers, and other high-profile venues such as Met Life Stadium and the Prudential Center. The link between New Jersey Transit and New York City also makes this transportation system a target for terrorists.

Beyond the greater New York City region, other parts of New Jersey are vulnerable to terrorist attacks. These areas include the Trenton area, which houses the State's government offices, as well as areas immediately adjacent to Philadelphia that have significant historical significance. Locations with a high population density will be attractive targets for terror attacks. Figure 4-8 in Section 4 (State Profile) illustrates New Jersey's population density.

Extent

Any acts of terrorism can occur anywhere at any time of day. The National Terrorism Advisory System (NTAS) communicates information about terrorist threats by providing detailed information to the public, government agencies, first responders, airports and other transportation hubs, and the private sector. When there is a threat, an NTAS Alert will be announced by the Secretary of Homeland Security and will be shared with the public. It may include specific information about the nature of the threat, including the geographic region, mode of transportation, or critical infrastructure potentially affected, as well as steps that individuals and communities can take to protect themselves and help prevent, mitigate or respond to the threat. The alert indicates whether the threat is elevated or imminent. Elevated threats are when there is no specific information about the timing or location. Imminent threats are when it is believed the threat is impending or very soon. The alerts will be posted online and released to the news media for distribution. The United States Department of Homeland Security (USDHS) will also distribute alerts through its social media channels (USDHS 2013).

In New Jersey, the NJOEM, New Jersey Office of Homeland Security and Preparedness (OHSP), and the Regional Operations Intelligence Center (ROIC) have introduced NJ Alert, a mass text and email emergency notification system. During an emergency, NJ Alert assists these agencies in delivering emergency messages to the public through their handheld devices or computers, in addition to the Emergency Alert Systems and Amber Alert (NJEOM 2009).

Previous Occurrences and Losses

The most significant terrorist incident to occur in the United States occurred adjacent to New Jersey in Lower Manhattan, New York, when an extreme terrorist group hijacked two commercial airplanes and flew them into the Towers 1 and 2 of the World Trade Center. Additionally, a simultaneous attack occurred in the Washington D.C. area where a plane was crashed into the Pentagon. New Jersey was directly affected as many of the victims and evacuees were ferried across the Hudson River to New Jersey. The incident required a joint response between regional entities, and affected New Jersey significantly.

Additional attempts at terrorist attacks have occurred specifically in New Jersey. In 2007, six men plotted to stage an attack against military personnel stationed at Fort Dix. According to reports, the goal of the attack was to kill as many soldiers as possible. The conspirators were arrested on May 8, 2007, and were prosecuted in October 2008. Five of the six were found guilty of conspiracy to commit murder as a result of the plot.



The plot was foiled after the perpetrators recorded themselves shooting semi-automatic weapons and took the footage to a Mount Laurel video store to be converted to DVD. Store employees alerted officials who in turn launched a full-scale investigation. The group was also caught training on film in Cherry Hill, New Jersey. The men were eventually arrested.

The 2011 State Plan did not discuss specific terrorism events that occurred in New Jersey. For this 2014 update, terrorism events that occurred in the State between January 1, 2010 and December 31, 2012 were researched and included in Table 5.23-1. Events prior to January 1, 2010 are also included in this table and include events in the New York/New Jersey region. Because of New Jersey's proximity to New York City, past incidents occurring within New York City were included in the table. However, Table 5.23-1 many not include all events that have occurred throughout the State because not all sources have been identified or researched



Table 5.23-1. Terrorism Events in New Jersey and Surrounding Area

Date(s) of Event	Event Type	New Jersey Counties Impacted	Description
May 13, 1905	Bombing	N/A	The Sunday Bomber set off a series of bombs in New York City subways and ferries during Sundays and Holidays, killing one woman and injuring 51 other commuters.
June 22, 1905	Bombing	N/A	Three young men of Arab descent hurled crude Molotov cocktails at a synagogue in The Bronx, New York.
July 30, 1916	Explosion	Hudson	The Black Tom explosion in Jersey City, New Jersey, was an act of sabotage on American ammunition supplies by German agents to prevent the material from being used by the Allies in World War I.
July 4, 1940	Bombing	N/A	Two New York City policemen were killed and two were critically wounded from examining a bomb they had found at the British Pavilion at the World's Fair.
1940 – 1956	Bombing	N/A	George Metesky, the Mad Bomber, placed over 30 bombs in New York City in public places such as Grand Central Station and The Paramount Theatre injuring ten during this 16-year period in protest of the high rates of a local electric utility.
April 23 – 30, 1968	Hostage Taking	N/A	During a student rebellion at New York's Columbia University, members of the New Left organization Students for a Democratic Society and Student Afro-American Society held a dean hostage, demanding an end to both military research on campus and construction of a gymnasium in nearby Harlem.
August 7, 1969	Bombing	N/A	A total of 20 people were injured by radical leftist Sam Melville in a bombing of the Marine Midland Building in New York City.
August 8, 1969	Bombing	N/A	U.S. Department of Commerce Offices in New York City was damaged by bombing.
September 18, 1969	Bombing	N/A	The Federal Building in New York City was bombed by radical leftist Jane Alpert.
October 7, 1969	Bombing	N/A	The fifth floor of the Armed Forces Induction Center in New York City was devastated by explosives attributed to radical leftist Jane Alpert.
November 12, 1969	Bombing	N/A	A bomb was detonated in the Manhattan Criminal Court building in New York City.
January 24, 1975	Bombing	N/A	A bomb was exploded in the Fraunces Tavern NYC building, killing four people and injuring more than 50 others.
June 3, 1980	Bombing	N/A	At 7:30 pm, a time-delayed explosive device detonated in the Statue of Liberty's Story Room.
December 21, 1981	Terrorism	Warren	United Freedom Front members murdered a New Jersey State Police officer.
August 15, 1985	Terrorism	Passaic	Tscherim Soobzokov, alleged Nazi war criminal, was injured by bombing in Paterson possibly linked to the Jewish Defense League.
April 1, 1987	Terroristic Threat	Atlantic	Apparent Islamic terrorist plan to bomb casinos in Atlantic City was called off due to alerted authorities.



Table 5.23-1. Terrorism Events in New Jersey and Surrounding Area

Date(s) of Event	Event Type	New Jersey Counties Impacted	Description
March 1, 1989	Bombing	N/A	The <i>Riverdale Press</i> , a weekly newspaper in the Bronx, New York, was firebombed 1 week after publishing an editorial defending author Salman Rushdie's right to publish.
March 26, 1992	Terrorism	Bergen	Parivash Rafizadeh, wife of former senior officer in Iranian Shah's SAVAK, was shot near her home in Franklin Lakes.
February 26, 1993	Bombing	N/A	World Trade Center bombing
March 1, 1994	Shooting	N/A	The Brooklyn Bridge Shooting occurred when Lebanese-born Rashid Baz shot at a van of Jewish students that was traveling on the Brooklyn Bridge from a visit to Rabbi Menachem M. Schneerson, killing one and injuring three others.
December 10, 1994	Terrorism	Essex	Unabomber mail bomb kills New York advertising executive Thomas Mosser in North Caldwell.
April 19, 1996	Bombing	N/A	Oklahoma City bombing
February 24, 1997	Shooting	N/A	Ali Hassan Abu Kamal, 69-year-old Palestinian, opened fire on tourists at an observation deck atop the Empire State Building, killing a Danish national and wounding visitors.
September 11, 2001	Terrorist Attack	N/A	The September 11, 2001 terrorist attacks killed nearly 3,000 civilians in coordinated attacks in New York City and Washington D.C.
September 18, 2001 – November 2001	Bioterrorism	N/A	Letters tainted with anthrax killed five individuals across the United States, with politicians and media officials as the apparent targets.
May 7, 2007	Attempted Terrorist Attack	Burlington	Six men planned to attack Fort Dix, but the plot was stopped by authorities who arrested the individuals prior to the planned event.
October 26, 2007	Bombing	N/A	A pair of improvised explosive devices was thrown at the Mexican Consulate in New York City. The fake grenades were filled with black powder and detonated by fuses, causing very minor damage.
March 6, 2008	Bombing	N/A	A homemade bomb damaged a recruiting station in Times Square, New York.
May 25, 2009	Bombing	N/A	A 17-year-old set off a crude explosive on the Upper East Side of Manhattan, which shattered windows and destroyed a bench.
May 1, 2010	Bombing	N/A	In Times Square, New York City, an individual attempted to detonate a bomb in a vehicle. The device did not detonate.

Source: Johnston 2013; NJ State HMP 2011
 N/A Not Applicable; Not Available
 NYC New York city



FEMA Disaster Declarations

Between 1954 and 2012, FEMA declared that the State of New Jersey experienced one terrorism-related or emergency (EM) designation. Based on all sources researched, known terrorism events that have affected New Jersey and were declared a FEMA disaster are identified in Table 5.23-2. However, not all counties were included in the disaster declarations as determined by FEMA. This table provides detailed information concerning the FEMA disaster declarations for terrorism. Figure 5.23-1 illustrates the number of FEMA-declared disasters in New Jersey by county.



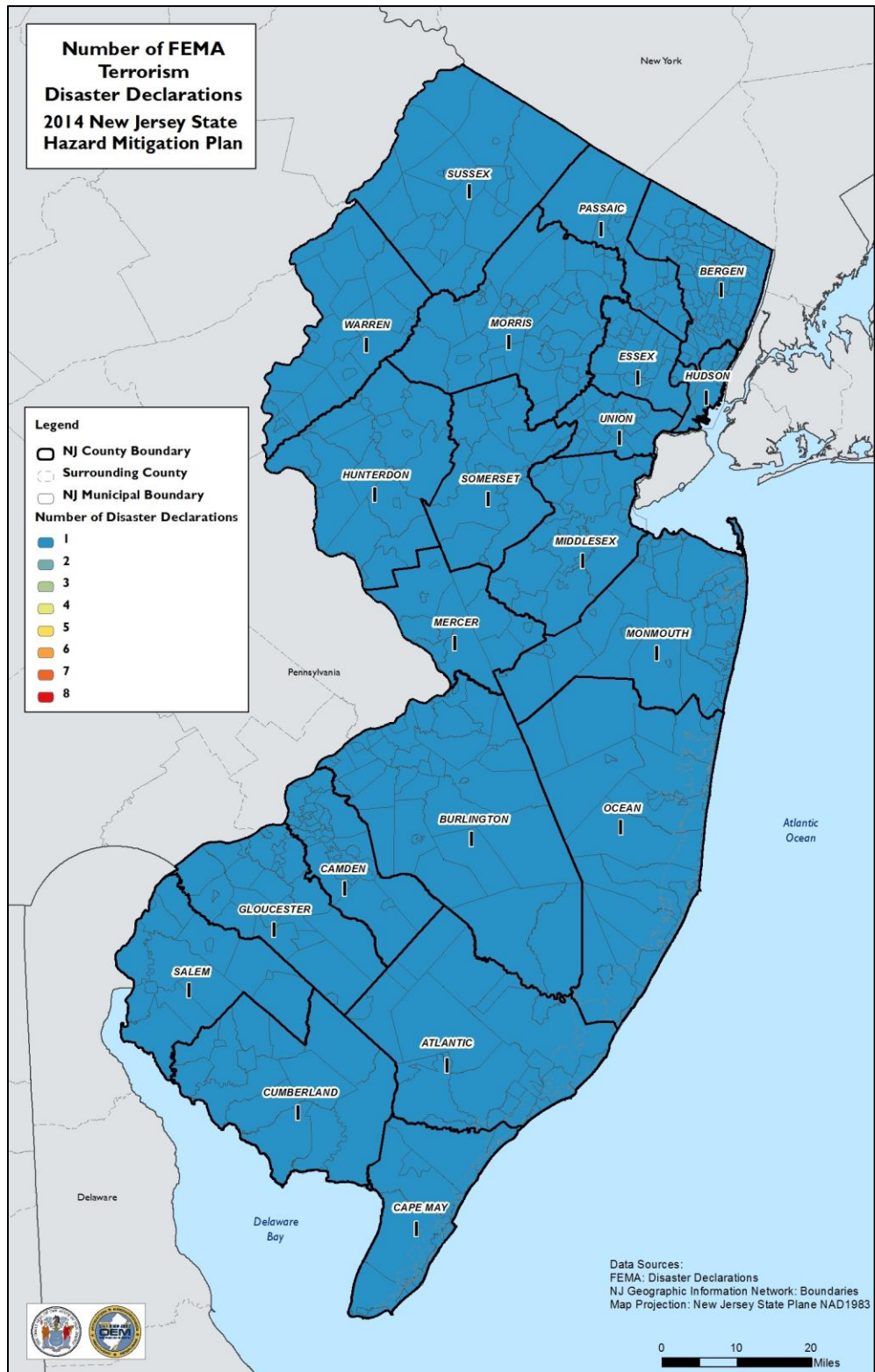
Table 5.23-2. FEMA Terrorism-Related Disaster Declarations (1954 to 2012)

Disaster #	Disaster Type	Declaration Date	Incident Period	Atlantic	Bergen	Burlington	Camden	Cape May	Cumberland	Essex	Gloucester	Hudson	Hunterdon	Mercer	Middlesex	Monmouth	Morris	Ocean	Passaic	Salem	Somerset	Sussex	Union	Warren	# Counties Impacted	
EM-3169	Terrorist Attack Emergency Declaration	11/19/01	9/11/01	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	21

Source: FEMA 2013



Figure 5.23-1. FEMA-Declared Terrorism Disasters by County



Source: FEMA 2013



Probability of Future Occurrences

While the potential for future terrorism incidents in New Jersey is difficult to predict, the combination of past incidents and potential terrorist targets make a terrorism incident possible. Efforts from local, state, and federal officials must be coordinated to prevent future terrorist incidents from occurring. However, despite the best efforts of these entities, the reality is that a terrorist attack may occur in New Jersey or the surrounding areas.

Severity

The effect of a terrorism event can vary depending on the type of attack and the magnitude of the event or events. A terrorism event can cause public fear regarding the use of mass transportation or leaving their homes in the event of a biological or nuclear attack. Communication systems, both public and private, can fail because of an overwhelming amount of usage or damage to its infrastructure. Healthcare facilities can become quickly inundated and must be prepared to triage injured patients, handle mass casualties, and conduct decontamination operations.

Warning Time

There is often very little if any warning time that a terrorist attack is about to occur. It is possible, however, to thwart terrorist attacks through aggressive intelligence monitoring and monitoring of individuals who exhibit radical tendencies. Some terrorist attacks may show warning signs that an incident may occur, such as a suspicious package left unattended. Local, state, and federal officials as well as the general public are responsible for recognizing the warning signs of terrorism incidents and for taking appropriate actions to mitigate against possible attacks. In New Jersey, the coordination, direction, and control of all law enforcement personnel and resources fall under the purview of the Attorney General. Additionally, the New Jersey Office of Homeland Security and Preparedness administers, coordinates, leads, and supervises New Jersey's counter-terrorism efforts.

Secondary Hazards

The secondary hazards resulting from a terrorist attack depend on the size and scope of the incident. Some possible secondary hazards include widespread utility failure, health effects such as epidemics or pandemics, flooding (if a dam was destroyed), and environmental contamination. Also of concern is the disruption an attack may cause to the State's government facilities.

Climate Change Impacts

Because terrorism is a human-caused hazard, no climate change impacts are associated with the hazard.



5.23.2 Vulnerability Assessment

The following discusses New Jersey's vulnerability, in a qualitative way, to the terrorism hazard. A consequence analysis for this hazard was also conducted and presented in Section 9. Impacts on the public, responders, continuity of operations, and delivery of services; property, facilities, and infrastructure; and the environment, economic condition of the state, and the public confidence in the State's governance is discussed in Section 9 in accordance with Emergency Management Accreditation Program (EMAP) standards. This section addresses assessing vulnerability and estimating potential losses by jurisdiction and to state facilities.

Assessing Vulnerability by Jurisdiction

The entire population of New Jersey is exposed to the effects of terrorism and terrorist incidents. However, because terrorists typically prefer to impact the greatest number of individuals in a given location, it can be inferred that individuals living in highly populated areas will have a greater exposure to terrorist incidents than those living in rural areas.

Section 4 summarizes the population statistics in New Jersey. The top five most populated counties in New Jersey are clustered together in the northeastern section of the State adjacent to New York City: Bergen, Middlesex, Essex, Hudson, and Monmouth Counties (United States Census 2010).

Because terrorist attacks are designed to take victims by surprise, predicting the location and nature of potential attacks is extremely difficult, as is assessing the population's vulnerability. Aside from population density, other indicators of vulnerable populations may be commuters using public transportation on a regular basis (as mass transit systems have been the targets of past terrorist attacks outside New Jersey), locations in and around military bases or government facilities (as was planned for Fort Dix in New Jersey in 2007), as well as high-profile gatherings of a large number of people (such as the attacks that occurred at the Boston Marathon in 2013).

Assessing Vulnerability to State Facilities

For the terrorism hazard, all State facilities are exposed to terrorist attacks. The vulnerability of these facilities is derived from importance of these buildings and the visual symbols that the buildings represent in New Jersey. Particularly vulnerable are buildings that are located in Trenton and are a part of the capital building complex and state government. Most State department buildings are located in Trenton and could be targeted in a terrorist attack.

Critical facilities are exposed to terrorist attacks, particularly because of the impact that an attack has on these types of facilities. Dams, power stations, and tunnels are all examples of critical infrastructure and facilities that are vulnerable. Additionally, communications systems, first-responder stations, and emergency operations centers are all vulnerable to terrorist attacks. Disrupting one of these facilities or destroying critical infrastructure would have devastating, cascading impacts on New Jersey.

Estimating Potential Losses by Jurisdiction

Measuring the economic impact of a terrorist attack on the State is a difficult task. The initial impact can be measured in immediate costs such as costs related to responding to the event, and those associated with the immediate loss of productivity due to closed businesses. The fuller economic impact includes long-term costs such as terrorism mitigation activities.



The direct cost of the attacks on September 11, 2001 has been estimated at somewhat over \$20 billion. Paul Krugman cites a property loss estimate by the Comptroller of the City of New York of \$21.8 billion, which he has said is about 0.2 % of the GDP for one year (Krugman 2004).

Similarly, the Organization for Economic Cooperation and Development (OECD) estimated that the attack cost the private sector \$14 billion and the federal government \$0.7 billion, while clean-up was estimated at \$11 billion. According to R. Barry Johnston and Oana M. Nedelscu, these numbers are equal to about one-quarter of one-percent of the United States annual GDP—approximately the same result arrived at by Krugman (Johnston and Nedelscu 2004).

In New Jersey, the impact of a large-scale terrorist attack would be significant. Of particular concern would be the State's top industries. Also, if an attack would occur along the Jersey Shore, the impact of lost tourism dollars would be significant.

Estimating Potential Losses to State Facilities

The potential losses to state facilities are difficult to quantify because of the unpredictability of terrorist events. The replacement cost value for state facilities provides a total risk exposure quantity.

Environmental Impacts

Depending on the type and location of an act of terrorism, it can impact the environment and result in loss of life for humans and animals. A radiological device or an improvised nuclear device would have a long term impact that could cost billions of dollars to remediate. Additionally, an attack on waste treatment, natural gas, petroleum, or chemical facilities could also have long term environmental impacts on New Jersey.