6.5.14 Terrorism

6.5.14.1 Hazard Identification

Description of the Terrorism Hazard

Terrorism is violence committed by groups or individuals in order to intimidate a population or government into granting their demands.

Defining what is and what is not terrorism has proven to be a difficult task. 22 USC defines terrorism in the following ways:

(1) the term "international terrorism" means terrorism involving citizens or the territory of more than 1 country;
(2) the term "terrorism" means premeditated, politically motivated violence perpetrated against noncombatant targets by subnational groups or clandestine agents;
(3) the term "terrorist group" means any group, or which has significant subgroups which practice, international terrorism;
(4) the terms "territory" and "territory of the country" mean the land, waters, and airspace of the country; and
(5) the terms "terrorist sanctuary" and "sanctuary" mean an area in the territory of the country—
(A) that is used by a terrorist or terrorist organization—
(i) to carry out terrorist activities, including training, fundraising, financing, and recruitment; or
(ii) as a transit point; and
(B) the government of which expressly consents to, or with knowledge, allows, tolerates, or disregards such use of its territory and is not subject to a determination under—
(i) section 2405(j)(1)(A) of the Appendix to title 50;
(ii) section 2371 (a) of this title; or
(iii) section 2780 (d) of this title.
(Source: *U.S. Code Title 22, Ch.38, Para. 2656f(d))*

Once thought the be a type of disaster event that did not happen on U.S. soil, the threat of terrorism has evolved into a main concern, with Americans now citing homeland security as a top priority. Whether setting off a nuclear attack, igniting a traditional or dirty bomb, poisoning water/food supplies, or attacking the public transportation system, terrorists are familiar with our nation's vulnerabilities, and will manipulate them to inflict fear on the psyche of the American people.

Severity of the Terrorism Hazard

The US Department of Homeland Security monitors the terrorism threat on a national level, and is responsible for maintaining the Homeland Security Advisory System. This system was established by Presidential Directive, and is designed to guide protective measures when specific information to a particular sector or geographic region is received. It combines threat information with vulnerability assessments and provides communications to public safety officials and the public.

Figure 6.5.14.1-1 illustrates the Homeland Security Advisory System. Note that the US Department of Homeland Security discontinued the use of the HSAS in July 2011, and has not replaced it with another measurement or scale.

Figure 6.5.14.1-1
Homeland Security Advisory System

Source: US Department of Homeland Security

As terrorism is a man made hazard, the severity of the hazard within the planning area is impossible to predict. Scenarios range from minor disruptions to catastrophic damages and fatalities. There is no scale for measure the severity of an act of terrorism, and a great deal of variability between events. Terrorism can be targeted at specific individuals or the area as a whole. They may be premeditated or occur as the result of an opportunity.

Impact to People and Property from the Terrorism Hazard

There are a variety of methods by which terror can be inflicted on a population. These are discussed in Table 6.5.14.1-1.

Table 6.5.14.1-1
Methods of Implementation for Terrorism

Description	Application Mode	Duration	Extent of Effects	Mitigating or Exacerbating Conditions
Conventional Bomb/ Improvised Explosive Device	Detonation of explosive device on or near target; delivery via person, vehicle, or projectile.	Instantaneous; Additional "secondary devices" may be used, lengthening the time duration of the hazard until the attack site is determined to be clear.	Extent of damage is determined by type and quantity of explosive.	Effects generally static other than cascading consequences, incremental structural failure, etc.
Chemical Agent	Liquid/aerosol contaminants can be dispersed using sprayers or other aerosol generators; liquids vaporizing from puddles / containers; or munitions.	Chemical agents may pose viable threats for hours to weeks depending on the agent and the conditions in which it exists.	Contamination can be carried out of the initial target area by persons, vehicles, water and wind. Chemicals may be corrosive or otherwise damaging over time if not remediated.	Weather conditions and availability of shielding can greatly impact effectiveness of chemical agents.
Arson/ Incendiary Attack	Initiation of fire or explosion on or near target via direct contact or remotely via projectile.	Generally minutes to hours.	Extent of damage is determined by type and quantity of device / accelerant and materials present at or near target.	Effects generally static other than cascading consequences, Incremental structural failure, etc.
Armed Attack	Tactical assault or sniping from remote location.	Generally minutes to days.	Varies based upon the perpetrators' intent and capabilities.	Inadequate security can allow easy access to target, easy concealment of weapons and undetected initiation of an attack.
Biological Agent	Liquid or solid contaminants can be dispersed using sprayers / aerosol generators or by point or line sources such as munitions, covert deposits and moving sprayers.	Biological agents may pose viable threats for hours to years depending on the agent and the conditions in which it exists.	Depending on the agent used and the effectiveness with which it is deployed, contamination can be spread via wind and water. Infection can be spread via human or animal vectors.	Weather conditions can greatly impact effectiveness of biological agents.
Cyberterrorism	Electronic attack using one computer system against another.	Minutes to days.	Generally no direct effects on built environment.	Inadequate security can facilitate access to critical computer systems, allowing them to be used to conduct attacks.

Description	Application Mode	Duration	Extent of Effects	Mitigating or Exacerbating Conditions
Agriterrorism	Direct, generally Covert contamination of food supplies or introduction of pests and / or disease agents to crops and livestock.	Days to months.	Varies by type of incident. Food contamination events may be limited to discrete distribution sites, whereas pests and diseases may spread widely. Generally no effects on built environment.	Inadequate security can facilitate adulteration of food and introduction of pests and disease agents to crops and livestock.
Radiological Agent	Radioactive contaminants can be dispersed using sprayers / aerosol generators, or by point or line sources such as munitions, covert deposits and moving sprayers.	Contaminants may remain hazardous for seconds to years depending on material used.	Initial effects will be localized to site of attack; depending on meteorological conditions, subsequent behavior of radioactive contaminants may be dynamic.	Duration of exposure, distance from source of radiation, and the amount of shielding between source and target determine exposure to radiation.

Source: FEMA 386.

Depending on the method chosen, the impact of a terrorist act on life and property in the planning area could be devastating. People, property and infrastructure are all potentially at risk to devastating impacts. The economic impacts to the planning area could be catastrophic, depending on the severity of the attack and the property and infrastructure that is damaged or destroyed.

Occurrences of the Terrorism Hazard

No participants in the plan update reported specific occurrences of the terrorism hazard in the planning area. However, several incidents have occurred in Texas in recent years.

In 2007, the Texas Department of Public Safety, the agency responsible for homeland security in Texas, reported that individuals with ties to Hezbollah, Hamas and al-Qaida were arrested crossing the border from Mexico in recent years. From March 2006 to September 2007, almost 350 individuals “from terrorism-related countries" were arrested at the border.

In February 2010, after writing an anti-government, anti0big business, and anti-tax system rant, a computer engineer smashed a small aircraft into an office building where nearly 200 employees of the Internal Revenue Service were starting their workday. The pilot and two building occupants were killed in the attack.

Probability of Future Occurrences of the Terrorism Hazard

Occurrences of the terrorism incident hazard are solely dependent on external factors. An incident must involve human action, which cannot be predicted with any degree of certainty.

Given the lack of documented historical occurrences specific to the planning area, it's impossible to predict the statistical probability of future occurrences of the terrorism hazard, as there's not enough data from which conclusions can be drawn. However, a number of potentially high value targets do exist in the planning area. Therefore, the probability of future occurrence can be estimated as moderate.

Location and Extent of the Terrorism Hazard

Terrorism, bring a man made hazard, is not tied to specific geography or topography, but rather is usually tied to specific features of a community. These features are usually of high value to the community, or are necessary for the community's operations or livelihood. Several such locations exist in the planning area, including:

- Manufacturing facilities
- Military installations
- Universities
- Public utilities, including water reservoirs and treatment facilities
- Government facilities
- Food storage, processing and distribution centers

Terrorists most often search for highly visible targets which they can strike while avoiding detection. However, the motivation behind terrorist events can be varied and the entire planning area is considered at risk.

6.5.14.2 Risk Assessment

This subsection of the Plan Updates provides estimates of future terrorism losses, i.e. risk. Each of the loss calculations is based on best available data, but they must be considered estimates because highly detailed engineering was not performed as part of this planning process.

Methodology and Limitations

After discussion and review of the best available data regarding this hazard, and in consideration of the potential impacts of this hazard to the planning area, the EMC determined that the risk assessment should be limited to a qualitative analysis. At the time of this update, insufficient data exists to quantify the planning area's risks from and exposure to this hazard.

Qualitative
Each participating jurisdiction was asked to provide a qualitative risk assessment ranking regarding the terrorism hazard. (For definitions of these rankings, please see Table 6.4-1, earlier in this section.) The results of this assessment are presented in the table below.

6.5.14.2-1
Qualitative Risk Assessment Results – Terrorism

Jurisdictions Ranking Hazard as Low		Jurisdictions Ranking Hazard as Moderate	Jurisdictions Ranking Hazard as High
Bandera County	Frio County	Bexar County	Atascosa County
City of Bandera	City of Dilley	City of Alamo Heights	City of Charlotte
City of Balcones Heights	Gillespie County	City of Leon Valley	City of Christine
City of Olmos Park	City of Fredericksburg	City of Live Oak	City of Jourdanton
City of St. Hedwig	Medina County	City of Von Ormy	City of Lytle
City of Somerset	City of Castroville	City of Windcrest	City of Pleasanton
City of Universal City	City of Hondo	City of Pearsall	City of Poteet
Comal County	City of Natalia	Guadalupe County	City of Converse
City of Garden Ridge	Wilson County	City of New Berlin	City of Helotes
City of Bulverde	City of La Vernia	City of Schertz	City of Kirby
City of New Braunfels	City of Stockdale	City of Seguin	City of San Antonio
		Karnes County	City of Terrell Hills
		City of Devine	Kerr County
		City of Floresville	City of Ingram
			City of Kerrville
			San Antonio River Authority

Data to collect in order to improve this methodology prior to the Plan Update includes:

- Identification of higher-profile targets in the jurisdictions

Risk Assessment Conclusions

The majority of the participating jurisdictions ranked the terrorism hazard as low impact. However, this is not a hazard for which many mitigation actions are available. The jurisdictions may choose to consider more preparedness and mitigation activities for the future.

6.6 Summary of Hazard Identification and Risk Assessment

Mitigation planning is intended to provide a rational method for communities to decide what actions to take to reduce their risks from natural hazards. Aside from actually determining and implementing specific actions, perhaps the most important part of a mitigation plan is the risk assessment, which establishes an objective basis for prioritizing mitigation efforts. The risk assessment in this plan has been used to identify the most significant risks in the planning area; to identify the hazards that present the most potential damage to the participants and their assets; to ascertain where additional study may be warranted; and to begin identification and prioritization of mitigation actions.

As noted earlier, the purpose of risk assessment is to identify and quantify future losses from natural hazards, with the goal of using this information to determine what actions should be taken to reduce damages. Although the planning area as a whole has more risk from wind and floods than it does from winter weather or earthquakes, there are several factors that must be considered and understood in order to put this into context. First, winter storm and earthquake hazards are far less site-specific than floods and most other natural hazards, so the risk is by definition greater because the whole planning area is exposed. Second, there are no large-scale mitigation measures that would reduce risks to all properties simultaneously, so site-specific risks are a more significant consideration than county-wide or municipality-wide ones in most cases. It is necessary to calculate risks on a site-specific basis as a first step in developing meaningful mitigation actions.

Recommendations to Enhance the Risk Assessment

Section 8 of this Plan outlines a series of general recommendations that can be implemented as well as a wide range of specific, prioritized actions that individual participants are committing to as part of the planning process. The participants used the present risk assessment section as the basis for these actions and priorities. However, it has been generally acknowledged that additional information would be helpful in refining and updating this Plan in the years to come. Section 8 also includes actions to aid in this process that include the following general steps:

- Continue to identify and prioritize critical facilities, facilities with high occupancies, or operations with high value;
- Study hazard vulnerabilities based on specific conditions and hazards at sites for the highest priority sites and facilities;
- Undertake detailed risk assessments for critical facilities in hazard areas, and with known vulnerabilities; and
- Develop appropriate, cost-effective mitigation measures for the facilities.