Date Revised: 12/09/19

Event Goal: To teach recruit officers how to respond to a critical incident.

Session Goal: This module uses The National Strategy of Critical Infrastructure and Key Assets List to assist responders in identifying local potential targets of terrorism, and why terrorists may attack them. The law enforcement responder will be able to conduct vulnerability assessments of potential targets.

Learning Objectives:

- Identify the concepts of a threat and vulnerability assessment [43.III.A]
- Identify critical infrastructure sectors and key assets [43.III.B]
- Identify threat assessment rationale [43.III.C]
- Recognize why terrorists would target critical infrastructure and key assets
- Identify the preparation of vulnerability and risk analysis of potential Chemical, Biological, Radiological, Nuclear and Explosive (CBRNE) targets within local communities

Session Time: 1.5 Hours

Resources:

- Power Point
- Audio/video device
- Classroom with tables
- White board
- Dry-erase markers
- Session Summary: The student will be able to list critical infrastructures and key assets to identify terrorist targets in the community and why terrorists would attack them.

		Outline	Instructor Notes
1.	fo ar ta as re		Instructor Notes Facilitated discussion (1.5 hours) [1] ASK – Tell me some possible targets in L.A.? • Answer-Looking for amusement parks, sporting event locations, monuments, LAX etc.
	-	Identifying and assuring protection of infrastructures and assets that we deem most critical.	[LD43] – Identifying critical
	2.	Providing timely warning and assuring protection of those infrastructures and assets facing a	[LD26] – Response to a U.O.
	3.	specific, imminent threat. Assuring protection of other infrastructures and assets that may become terrorist targets over	[LD21] – Adding critical infrastructures to your usual patrol route

EV 09 – Critical Incidents Session 04 – LEPM/Targets

LD 43 – Emergency Management			
tin	ne by enabling a collaborative environment in		
wh	nich federal, state, and local governments, as	[LD3] – Critical Sites	
we	ell as the private sector can offer protection.		
a.	Agriculture and Food		
	1) Supply chains for feed, animals, and		
	animal products		
	2) Crop productions and supply chains of		
	seed, fertilizer, and other necessary		
	related materials.		
	3) The postharvest components of food		
	supply chain from processing and		
	packaging through storage and		
	distribution to retail sales, institution		
	food services and restaurant or home		
Ŀ	consumption.		
b.	Water-This sector consists of two basic, yet		
	vital, components-fresh water supply and		
	waste water collection and treatment. The		
	public water systems depend on reservoirs,		
	dams, wells, and aquifers, as well as		
	treatment facilities, pumping stations,		
	aqueducts and transmission pipelines. Waste		
	water utilities collect and treat sewage and		
	process water from domestic, commercial,		
	and industrial sources. It also includes storm		
	water systems that collect and sometimes		
	treat storm water runoff.		
	 Physical damage or destruction of 		
	critical assets, including intentional		
	release of toxic chemicals.		
	2) Actual or threatened contamination		
	of water supply.		
	3) Cyber attack on information		
	management systems that control		
	facilities, and determine routing of		
	water supply and control storage		
	facilities.		
	4) Interruption of services received		
	from another infrastructure such as		
	electrical power and transportation		
	services.		
C.	Public Health- This sector consists of state		
υ.	and local health departments, hospitals,		
	health clinics, mental health facilities, nursing		
	homes, blood-supply facilities, labratories,		
۱۔	mortuaries, and pharmaceuticals stockpiles.		
d.	Emergency Services- This sector consists of		

LD 43 – Emergency Management		
	highly mobile teams of specialized personnel	
	and equipment including fire, fire rescue,	
	Emergency Medical Services (EMS), law	
	enforcement, and emergency management	
	resources that react to save lives and	
	property in the event of accidental and	
	natural disasters or terrorist attack.	
e.	Defense Industrial Base- This sector consists	
	of the private sector defense industry and	
	supporting military facilities that	
	manufacture and provide the equipment,	
	materials, services, and weaponry used by	
	our armed forces.	
f.	Telecommunications- This sector provides	
	telecommunications through voice and data	
	services to public and private users through a	
	complex and divers public-network	
	infrastructure encompassing the Public	
	Switched Telecommunications Network	
	(PSTN), the Internet and private enterprise	
	networks. The PSTN provides switched	
	circuits for telephone, data, and leased point-	
	to-point services. Enterprise networks are	
	dedicated networks supporting the voice and	
	data needs and operations of large	
	companies and industries.	
g.	Energy- This sector is commonly divided into	
	two segments- electricity and oil and natural	
	gas. The electric industry services almost 130	
	million households and institutions. Almost	
	every form of productive activity-whether in	
	businesses, manufacturing plants, schools,	
	hospitals, homes, or agriculture- requires	
	electricity. Production of other forms of	
	energy, such as oil or nuclear materials,	
	require the use of large amounts of	
	electricity.	
h.	Transportation- This sector consists of several	
	key modes of transportation: aviation, rail,	
	highways, trucking and busing, pipelines,	
	maritime traffic, and public mass transit.	
	1) Aviation- The aviation system is vast and	
	contains thousands of entry points. The	
	aviation system consists of two main	
	parts:	
	a) The airports and associated assets	
	needed to support their operations,	

LD 43 – Emergency Management			
	and the aircraft served by those		
	airports		
	b) Aviation command, control		
	communications, and information		
	systems needed to support and		
	maintain the safe use of our national		
	airspace		
2)	Railroads- The nation's railway system is		
	vast and complex with multiple points of		
	entry. Railroads are different in design,		
	structure and purpose. Trains are		
	confined to specific routes and are		
	controllable. Railroads have bridges and		
	tunnels that are subject to destruction;		
	however, such destruction would usually		
	resort in a localized problem. A		
	vulnerability of the entire system is that		
	thousands of miles of track exist in an		
	unguarded condition and are subject to		
	destruction.		
3)	Highways, Trucking, Busing- Without		
	resources of highways trucking, and		
	busing, the movement of people, goods,		
	and services would be greatly impeded		
	and almost every other infrastructure		
	would be affected adversely.		
	Components of the infrastructure include		
	highways, roads, interchanges, bridges,		
	tunnels, trucks, buses, maintenance		
	facilities, and roadway crossings. Choke		
	points exist in each component and		
	present unique security challenges.		
	Choke points are those areas or points		
	along the highways or railway routes		
	that, if damaged or destroyed, would		
	impede the flow of traffic.		
4)	Pipelines- The United States has		
,	thousands of miles of pipelines- many of		
	which are underground- that carry oil,		
	refine petroleum products, and natural		
	gas. Most elements of pipelines can be		
	repaired or by-passed quickly to restore		
	services in the event of an attack. Loss of		
	a pipeline for a long period could		
	seriously impact the industries and		
	facilities dependant on the product.		
5)	Maritime- The maritime infrastructure		

LD 43 – Emergency Management				
	includes ports and their associated			
	structures, ships and passenger			
	transportation systems, coastal inland			
	waterways, locks, dams, and canals. It			
	also includes the system of railroads and			
	pipelines that connect the water borne			
	system to the inland system. There are			
	361 seaports in the United States, and			
	through these ports pass tons of cargo			
	each year. The volume of traffic and			
	diversity of cargo makes a complete			
	inspection of every vessel and cargo an			
	extremely difficult undertaking.			
	6) Mass Transit Systems- Each year,			
	passengers take approximately 9.5 billion			
	trips on public transportation in the U.S.			
	Mass transit carries more passengers			
	daily than does air or rail transportation.			
	Cities rely on their mass transit systems			
	to move the workforce, and they rely on			
	mass transit as a means of evacuation in			
	an emergency. Mass transit systems			
	were designed for ease of access, which			
	makes it difficult to monitor all points of			
	entry. An explosive material can be			
	carried aboard mass transit systems with			
	ease.			
i.	Banking and Finance- This sector consists of a			
	variety of physical structures such as			
	buildings and financial utilities, as well as			
	highly skilled human capital. Physical			
	structures to be protected house retail or			
	wholesale banking operations, financial			
	markets, regulatory institutions, and physical			
	repositories for documents and financial			
	assets. There are approximately 26, 500			
	Federal Deposit Insurance Corporations			
	(FDIC) insured financial institutions within the			
	U.S. The financial utilities infrastructures			
	include electronic devices such as computers,			
	storage devices, and telecommunication			
	networks.			
j.	Chemical Industry and Hazardous Materials-			
	This sector provides products essential to the			
	U.S. economy and standard of living. The			
	chemical industry manufactures products			
	that are fundamental elements of other			

LD 43 – Emergency Management			
economic sectors. For example, it produces			
fertilizer for agriculture and chlorine for			
water purification. Additionally, more than			
\$97 billion of the sector's products go to			
healthcare. Currently, the chemical sector is			
the nation's top exporter accounting for 10	[LD41] – Hazardous materials		
cents out of every export dollar [LD41]	incident risk as far as response		
k. Postal and Shipping- Americans depend			
heavily on the postal and shipping sector.			
Each day, we place more than two-thirds of a			
billion pieces of mail into the U.S. postal			
system, and each day more than 300,000 city			
and rural postal carriers deliver that mail to			
more than 137 million delivery addresses			
nationwide. In all, the vast network operated			
by the United States Postal Service (USPS)			
consists of a headquarters in Washington			
D.C., tens of thousands of postal facilities			
nationwide, and hundreds of thousands of			
official drop-box locations.			
B. Key Assets-Key Assets are comprised of facilities,			
sites, and structures whose destruction or disruption			
could have serious consequences. The category			
includes sites and structures that are not critical to			
our national defense and alone may not be vital to			
the continuity of critical services, but whose			
destruction might produce significant loss of life and			
could have serious impact on public health and			
safety, public confidence, and the economy. [LD3,21]			
[2]	[2] ASK – What do you think would		
1. National Monuments Icons- This category	be the benefit to attacking		
consists of U.S. national monuments and icons	monuments?		
(e.g., Mt. Rushmore, the Statue of Liberty, the	 Answer – The possibilities for 		
Lincoln Memorial, national parks, etc). The	mass casualties and		
protection of national monuments and icons	symbolism.		
typically combines the authorities,			
responsibilities and resources of federal, state,	[LD3] –Critical Sites		
and local jurisdictions, and in some cases, private			
foundations. The Department of the Interior	[LD21] – Adding critical		
(DOI) is the lead federal department with primary	infrastructures to your daily patrol		
jurisdiction over national icons and monuments.	,,,		
2. Nuclear Power Plants- This category is comprised			
of nuclear power plants, representing about 20%			
of our nation's electrical generation capacity. The			
U.S. has 104 commercial nuclear reactors in 31			
states. Nuclear power plants are among the most			
strongly constructed structures in the country,			

LD 43 – Emergency Management		
	and a terrorist attack would be considered a	
	significant security and psychological event.	
	3. Dams- Some of the larger and more symbolic	
	dams are major components of other critical	
	infrastructure systems, providing water and	
	electricity to large populations, cities, and	
	agriculture complexes. There are approximately	
	80,000 dam facilities identified in the national	
	inventory. The federal government is responsible	
	for roughly 10% of the dams, whose failure could	
	cause significant loss of life, property damage, or	
	public health and safety consequences. The	
	remaining dams belong to state or local	
	governments, utilities, and corporate or private	
	owners.	
	4. Government Facilities- This category is composed	
	of buildings the federal government owns, and	
	others leased from the private sector.	
	Government organizations also occupy buildings	
	used by a variety of nongovernmental tenants,	
	such as shops and restaurants. The General	
	Services Administration (GSA) is the principle	
	federal agency responsible for the management	
	of federal government facilities.	
	5. Commercial Key Assets- This category consists of	
	prominent commercial centers, office buildings,	
	sports stadiums, theme parks, and other sites	
	where large numbers of people congregate to	
	pursue business activities, conduct personal	
	commercial transactions, or enjoy recreational	
	past times. Daily protection of such facilities is	
	the responsibility of their commercial owners and	
	operators in close cooperation with local law	
	enforcement. The federal government's	
	responsibility to this key asset is providing timely	
	threat indicators and warnings.	
C.	Target Selection- Developing an effective strategy for	
	critical infrastructure and key asset protection	
	requires a clear understanding of the threats we face	
	and the potential consequences they entail. Targets	
	are selected to generate fear, social impact, political	
<u> </u>	change, and financial chaos.	
D.	Benefits to Terrorists Attacking Critical Infrastructure-	
	Critical infrastructure sectors are independent. Given	
	the extent to which our daily lives rely on them, a	
	successful attack to disrupt or destroy them could	
	have tremendous impact beyond the immediate	L

LD 43 – Emergency Management				
	target, and could continue to resurface thru other			
	correlated or independent infrastructures long after			
	the immediate damage is done. Terrorists are			
	inventive and resourceful in terms of target selection,			
	as well as in their selection and use of specific			
	instruments of violence and intimidation to achieve			
	their objectives; terrorists may choose to target			
	critical infrastructures and key assets as a low-risk			
	, means to generate mass casualties, shock, and panic.			
	1. Direct infrastructure affects- disruption or arrest			
	of the functions of critical infrastructure of key			
	assets thru direct attacks on a critical node,			
	system, or function. Disruption or destruction of			
	the asset itself brings about damage to the sector			
	that is desired			
	2. Indirect infrastructure affects- Cascading			
	disruption and financial consequences for			
	government, society, and economy thru public			
	and private sector reactions to an attack. An			
	example would be the use of hijacked airplanes			
	to destroy the World Trade Center (WTC).			
	Because of the large involvement of financial			
	interests in the WTC, world financial markets			
	were deeply affected.			
	3. Exploitation of infrastructure- Exploitation of			
	elements of infrastructure to disrupt or destroy			
	another target. While the WTC was the target,			
	the effects crippled the airlines because people			
	were afraid to fly; tourism and other industries			
	suffered catastrophic results.			
Ε.				
	characteristics of an asset's design, location, or			
	operation/use that render it susceptible to damage,			
	destruction, or incapacitation by terrorists or other			
	intentional acts, mechanical failures, and natural			
	hazards [43.III.A]			
F.				
	front lines of protection against terrorist attacks.			
	They play a key role in preparing for emergencies and			
	in developing plans for the protection of residents			
	and facilities within their jurisdictions. Initially every			
	incident is local and, therefore, involves the local law			
	enforcement responder [43.III.C]			
	1. Conduct an inventory of assets- It is probably a			
	mistake to view a critical infrastructure			
	component or key asset as being a probable			
	terrorist target or not. In almost every instance it			

EV 09 – Critical Incidents Session 04 – LEPM/Targets

LD 43 – Emergency Management				
	is not known what specific assets are being			
	viewed as targets by the terrorists			
	 Identify and assess vulnerabilities- Each asset 			
	identified through the inventory process should			
	be thoroughly examined to determine whether			
	characteristics of the asset's design, location, or			
	operation make it vulnerable to destruction,			
	-			
	damage, or incapacitation by acts of terrorism,			
	mechanical failure, or acts of nature. The			
	vulnerability assessment should include			
	identification of both strength and weaknesses.			
	3. Conduct analysis and prioritize assets- It is	[LD43] – Identifying the concepts of a		
	impossible to afford complete protection to	threat and vulnerability assessment.		
	every critical infrastructure component and key			
	asset across the U.S. There are simply not enough			
	resources. The process of assessing			
	vulnerabilities should identify those components			
	that have weaknesses that would make them			
	higher risk targets. The analysis and prioritization			
	process looks at each potential target in terms or	[LD43] – Identify threat assessment		
	reducing vulnerability verses the overall costs of	rationale		
	such in terms of actual costs, use of man power,			
	and other resources.			
	4. Develop and Implement Protective Programs-			
	Once the assets are inventoried, and have their			
	vulnerabilities assessed and have their priorities			
	established, plans should be made to prevent,			
	deter, or mitigate attacks on the assets per their			
	priorities. Such plans might include entering			
	mutual protection programs with our			
	jurisdictions, or coordinating plans with state			
	agencies to ensure plans are complete and			
	workable.			
G.	Intelligence and Information Analysis as Key			
	Components- There are four distinct categories of			
	intelligence and information analysis listed in the			
	National Strategy for Homeland Security that can be			
	used to assist in the planning for the protection of			
	vulnerable targets.			
	1. Vulnerability assessments- Vulnerability			
	assessments must be an integral part of the			
	intelligence cycle. They allow planners to view			
	the consequences of an attack against specific			
	targets, and which assets require protection			
	against threats. The vulnerable assets are subject			
	to constant change and plans must be kept			
	current to reflect those changes.			
	-			

LD 43 – Emergency Management			
2.	Threat vulnerability integration- Mapping terrorist threats and capabilities- both current		
	and future- against specific facility and sector		
	vulnerabilities will allow authorities to determine		
	which organizations pose the greatest threats,		
	and which facilities and assets are most at risk.		
	Facilities facing specific, identified threats must		
	be re-evaluated frequently to determine whether		
	their vulnerabilities have changed and plans must		
C	be updated accordingly.		
3.	Tactical threat analysis- Tactical threat analysis provides useful warning to specific targets,		
	security, public safety professionals, and general		
	population.		
4.			
	agencies must have a keen understanding of the		
	organizations with a global reach that may		
	conduct terrorist attacks against U.S. targets.		
	Knowing the identities financial and political		
	sources of support, motivation, goals, current		
	and future capabilities, and vulnerabilities of		
	these organizations will assist the U.S. and		
	preventing and pre-empting future attacks on		
	specific targets chosen by terrorists.		