

BAY AREA UASI

2014 Threat and Hazard Identification and Risk Assessment (THIRA)

Approval Authority Meeting
September 11, 2014



THIRA Based on DHS Guidance & Analytics

DHS Guidance

Guidance Docs

- CPG 201 2nd Edition
- National Preparedness Goal
- HSGP Guidance

DHS Concepts

- Whole Community
- Core Capabilities
- National Preparedness System

Analytical Approach

Data Driven Inputs

- Risk Analysis
- Capability Assessment
- Gap Analysis

Local SME Inputs

- CIKR Catalog
- Risk Verification
- Capability Verification
- Project Lists - UASI, Mitigation, etc.

THIRA

STEP 1

Identify Threats and Hazards of Concern

List of Threats/Hazards

STEP 2

Give Threats and Hazards Context

Context Descriptions for Threats/Hazards

STEP 3

Establish Capability Targets

Capability Target Statements

STEP 4

Apply the Results

Resource Requirements

Major Components of the THIRA

- This THIRA is organized around the following components:
 - Step 1: Identify the Threats and Hazards of Concern
 - Step 2: Give the Threats and Hazards Context
 - Step 3: Establish Capability Targets
 - Step 4: Apply the Results



Step 1: Identify Threats & Hazards of Concern



Identify all threats and hazards that are currently analyzed by or of concern to your UASI:

- Natural
- Technological
- Human-caused

Identify at least one scenario in each of the 3 categories above, to be the focus of further analysis based on:

- Threat and likelihood data
- Risk data
- Current events

Natural	Technological	Human-caused
Resulting from acts of nature	Involves accidents or the failures of systems and structures	Caused by the intentional actions of an adversary
<ul style="list-style-type: none"> • Earthquake • Wildfire • Flood 	<ul style="list-style-type: none"> • Oil Spill 	<ul style="list-style-type: none"> • VBIED • Cyber



Step 2: Give the Threats and Hazards Context



Create descriptions of SIX threats and hazards identified in Step 1 by leveraging:

- Threat likelihood data
- High risk critical infrastructure and key resources
- Geo-spatial depiction of region

Strike a balance between too general and too specific, to ensure practical application:

- Leverage standard, consistent definitions
- Customize definitions based on your UASIs individual data and profile

Threat/ Hazard Group	Threat/Hazard Type
Natural	Earthquake
	<p>Description: At approximately 2:00 PM USGS reported an earthquake occurred just outside the entrance to the San Francisco Bay, west of the Golden Gate Bridge. A foreshock preceded the main shock by 20 to 25 seconds. The estimated magnitude of the main shock is M 7.9 in widespread areas of the most severely affected counties. The earthquake's ground shaking effects lasted for 45 to 60 seconds. The earthquake ruptured approximately 300 miles of the northern segment of the San Andreas fault, from the San Juan Bautista area in the south to Cape Mendocino in the north.</p>



Step 3: Establish Capability Targets



Identify desired outcomes and estimated impacts by:

- Using risk analysis outputs to provide an analytic framework
- Examining each core capability in context of high risk jurisdictions and sectors
- Reviewing the vulnerability and consequence inputs for your UASI
- Incorporating guidance from CPG 201 with regard to quantifying outcomes

Threat/ Hazard Description	Fatality Management Impact
Earthquake	6,600 fatalities. Local coroner/ medical examiner resources and resources available through mutual aid in Region II will be overwhelmed by the number of fatalities and the requirements for transportation, storage, identification, and coordination with families, both immediately and over the long term. Resources from other regions will be deployed through the Coroners Mutual Aid system but will have difficulty reaching the affected area due to damage to infrastructure.



Step 3: Establish Capability Targets



Set Capability Targets Grounded in Analytics:

- Conduct capability assessment to measure current abilities
- Map capability assessment to risk to identify risk-based gap
- Gap analysis drives targets in a data-driven, analytically sound manner
- Map desired outcomes and estimated impacts together to inform capability targets

Core Capability	Desired Outcome
Fatality Management	<p>During the first 72 hours of an incident, conduct operations to recover fatalities.</p> <p>During the first 7 days of an incident, develop and implement a plan for storage and identification of remains and reunification of bodies with family members.</p>
	<p>Bay Area agencies, (e.g., medical examiner/coroner, law enforcement, public health, medical health, and emergency management) are able to coordinate with Federal Disaster Mortuary Operational Response Teams (DMORT) to ensure the proper recovery, handling, identification, transportation, tracking, storage, and disposal of human remains and personal effects; certify cause of death; and facilitate Family Assistance Centers (FAC) to provide access to mental/ behavioral health services for the family members, responders, and survivors of an incident.</p>
<p>Capability Target: During the first 72 hours of an incident, begin to conduct operation to recover 6,600 fatalities. During the first 7 days, implement plan for storage and identification of remains and reunification of the 6,600 bodies with family members.</p>	

Step 4: Apply the Results



Resource Requirements:

- Output of step 4: List of resources required to achieve the identified capability targets
 - Identify the major actions needed to achieve capability targets
 - Consider the numbers and types of resources needed to complete each mission-critical activity in support of the capability targets
 - Develop resource requirements expressed as a list of NIMS-typed resources, when possible, or other standardized resources

Core Capability: Mass Search and Rescue Operations

Capability Target

Within 72 hrs, rescue:

- 5,000 people in 1,000 completely collapsed buildings
- 10,000 people in 2,000 non-collapsed buildings
- 20,000 people in 5,000 buildings
- 1,000 people from collapsed light structures

Resource Requirement

Resources	Number Required
Type I US&R Task Forces	10
Type II US&R Task Forces	38
Collapse S&R Type III Teams	100
Collapse S&R Type IV Teams	20
Collapse S&R Type I Teams	20



Thank you.

BAY AREA UASI

