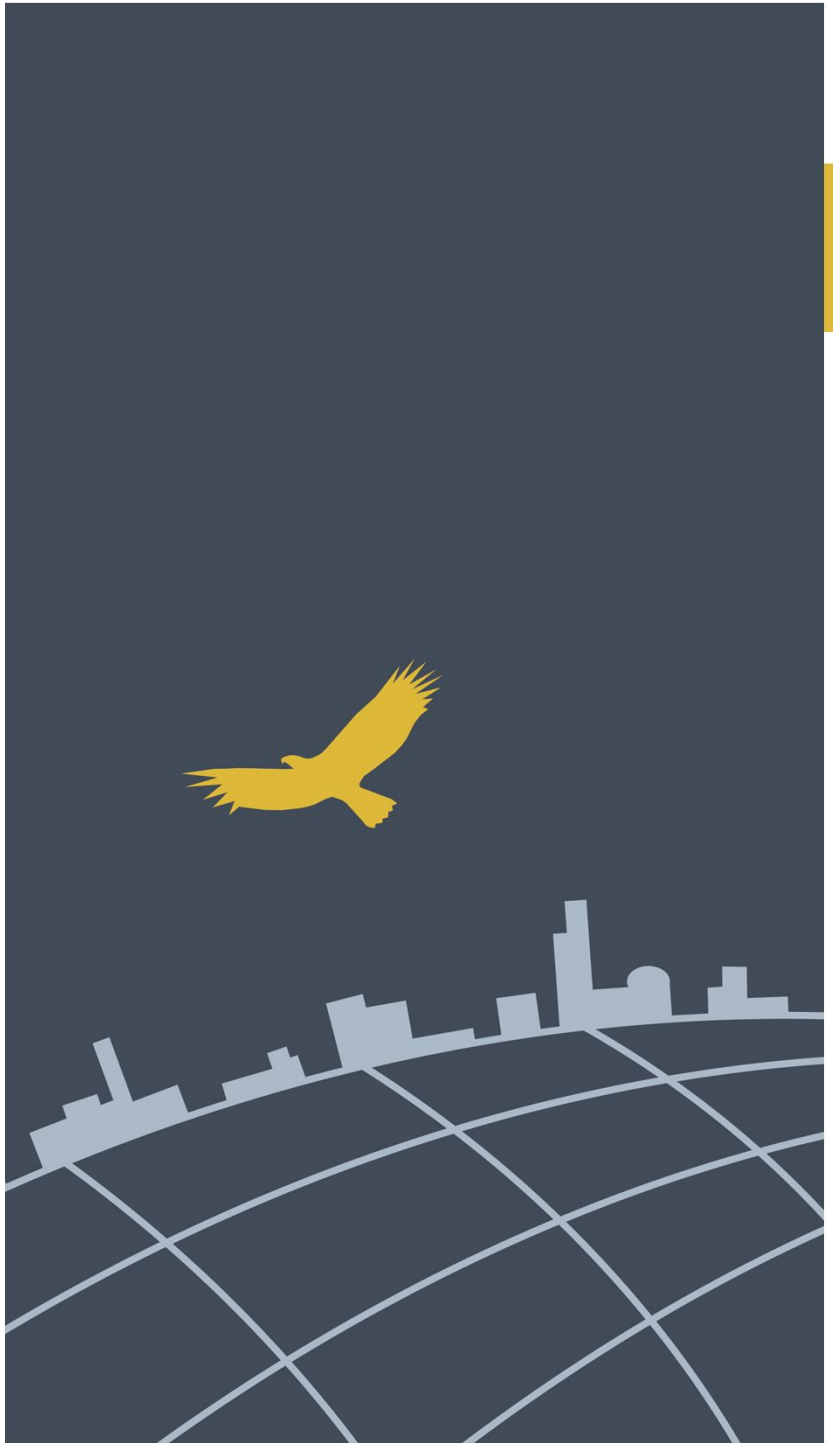


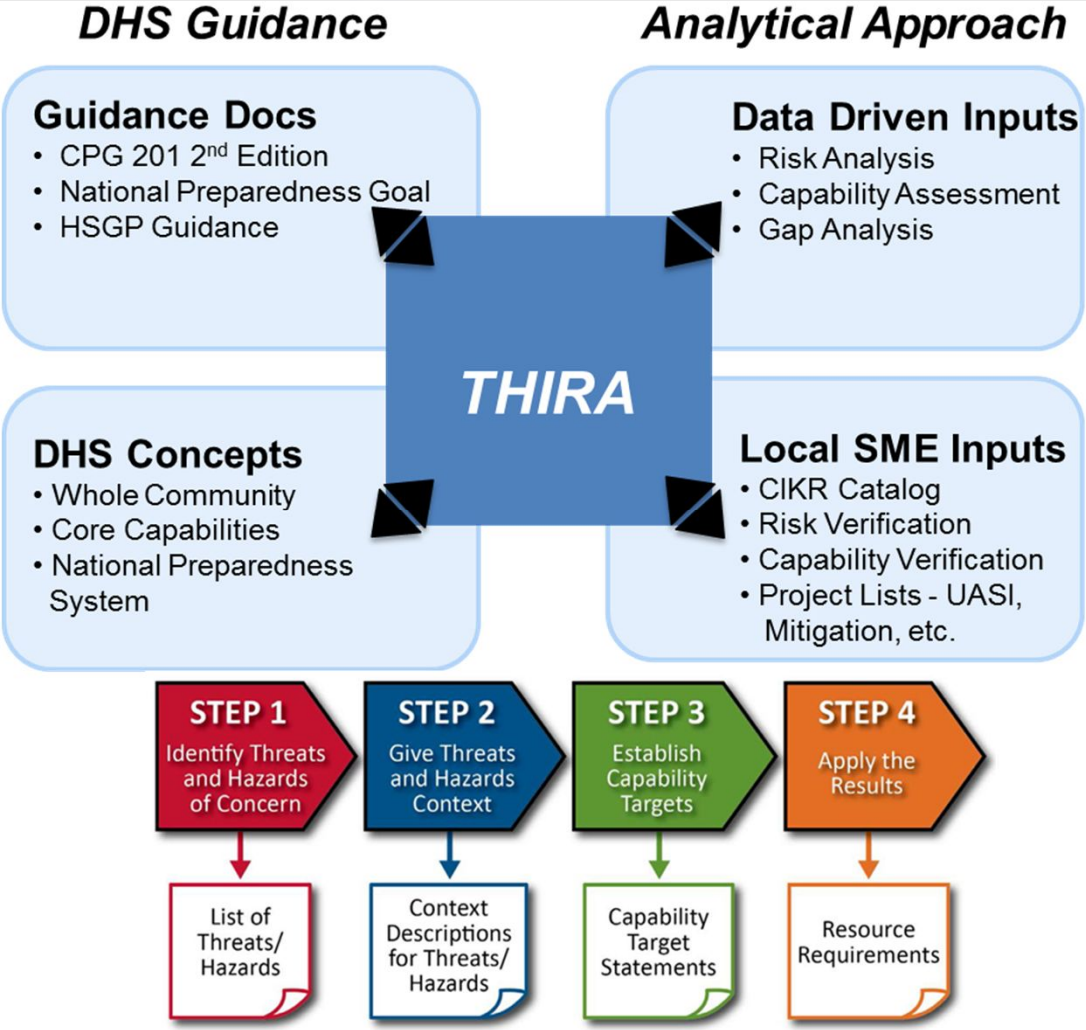
BAY AREA UASI

Threat and Hazard Identification and Risk Assessment (THIRA)

Approval Authority Meeting

January 9, 2014

THIRA Based on DHS Guidance & Analytics



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**
• Earthquake • Wildfire • Flood	• Oil Spill	• 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
	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.

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	During the first 72 hours of an incident, conduct operations to recover fatalities. 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. 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.
Capability Target: During the first72 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 6,600bodies with family members.	

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

Actions Taken/Moving Forward

- Submitted THIRA to FEMA by December 31, 2013
- Enhancements for Next THIRA and Planning Process
  - **Future Capability Estimation**: circulation of draft guidance has begun that would expand the process to not only include resource requirements but also a capability estimation of the currently available resources and the subsequent gaps and surpluses
  - **Unclear capabilities of NIMS-typed and Federal resources**: description is usually clear, but no the capability (how many buildings can a Type 1 USAR Task Force handle on average per day?). Commonly known Federalized resources such as DMAT, DMORT, MERS, etc., don't seem to be included in NIMS typing and again, capabilities are not clear
  - **Caring for Animals**: improve accounting of where pets fit into resource lists
  - **Whole Community**: expand our cooperative efforts to continue to embrace the Whole Community concept. We could strengthen our work with VOAD to continue and get stronger. We could also expand our partnerships with the private sector and with government agencies at the state and federal levels
  - **CIKR and Risk Inputs**: continue to work with all of our state and local partners to continuously update this information and to formalize governance so that defined cycles are in place to ensure up-to-date data is available
  - **Capability Assessment**: incorporate more stakeholders from the whole community in our annual capability assessments and gap analyses

Thank you.

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