New Hampshire THIRA/SPR Webinar Series

Part 1: THIRA/SPR Overview





Resources

- U.S. Department of Homeland Security
- Federal Emergency Management Agency
- National Preparedness Directorate
- National Training and Education Division
- Texas A&M Engineering Extension Service (TEEX)
- National Emergency Response and Recovery Training Center (NERRTC)
- New Hampshire Homeland Security and Emergency Management
- Comprehensive Preparedness Guide, 3rd Ed. (May 2018)





Target Audience

- Law Enforcement
- Fire Service
- Hazardous Materials (HazMat) Responders
- Emergency Medical Services
- Emergency Management
- Public Works
- Health Care

- Public Health
- Governmental Administration
- Public Safety Communications
- Public Elected Officials
- Private Sector and Non-Government Offices*
- Military*
 - *As requested by host agency





Purpose of the THIRA/SPR

- FEMA and other Federal agencies use THIRA/SPR results to improve the support (funding) they provide to communities before, during, and after disasters.
- In 2018, FEMA overhauled the THIRA/SPR methodology in an attempt to build a more accurate snapshot of the nation's preparedness as well as encouraging states to incorporate a whole community mindset in emergency preparedness and response.





Tentative THIRA/SPR Schedule

Date	Activities
January 2019	 THIRA Step 1 & 2 — Identify Threats and Hazards; Define Contexts and Impacts Develop scenario drafts with HSEM Internal working group and disseminate to SME's for review. Disseminate online THIRA/SPR Webinar class to all Stakeholders NLT January 25.
February 2019	Conduct regional THIRA/SPR training in each of NH regions. Meet with SMEs to finalize scenarios Submit scenario input by Marchan, 2019, for consolidation and presentation to HSEM Director for approval thior to Narch 8 Webinar/Conference Call)/Workshop)
March 8, 2019	THIRA Step 2 – Define Contracts and Impacts (Conference call/Webinar or ½ day workshop)Work with specialized to keholders/SME's to generate relevant impacts. Review THIRA Step Carr at seminate final Step 2 results to all stakeholders for review and review as becessary
June 4, 2019	Conduct THRA COVErview presentation at EP Conference
June 21, 2019	 THIR 4 (1, 3-1) Target Capabilities (full day workshop or 2 ½ day work hops) Review 5HIP, Step 3 and determine final statewide targets/goals Review 544 Steps Or split into two ½ day workshops (Prevention/Protection/Mitigation and Response/Recovery)
July 1, 2019	SPR – Determine Status of Capabilities and Source of Funding (Surveys or Specialized Small working groups) Send out SPR surveys via Wordpress links or meet with specialized small/agency level working groups July – September.
October 28, 2019	SPR – Surveys/Input due Input results into URT and finalize reports with individual stakeholders as needed prior to HSEM Director review
December 2, 2019	HSEM submits final 2019 THIRA-SPR to FEMA/DHS



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EXTENSION SERVICE

Webinar Series Goal

- Upon successful completion of the webinar series, stakeholders will be able to develop a Threat and Hazard Identification and Risk Assessment (THIRA) and Stakeholder Preparedness Review (SPR).
- Stakeholders will have a good understanding of the purpose for the THIRA/SPR and how it can be incorporated into their own emergency management actions.





Webinar Series Objectives

- Summarize the THIRA/SPR Process.
- Identify specific threats and hazards related to the municipalities and State of New Hampshire as a whole by applying principles and concepts related to threat and hazard groups, sources of threats and hazard information, and the factors to consider for threats and hazard selection.
- Develop threat and hazard context descriptions and estimate impacts of the threats and hazards.
- Develop core capability target statements which describe the level of capability a community plans to achieve for each of the 32 core capabilities.
- Assess current capability levels and how community capabilities have changed over the past year.
- Determine capability gaps and subsequent approaches for addressing gaps and sustainment needs using the POETE Model.
- Assess the extent to which relevant funding sources played a role in building and sustaining the capabilities assessed by the capability targets and describe the impact that capabilities built or sustained by FEMA preparedness or mitigation grants had in real-world incidents over the past year.





Learning Objectives

- Identify applicable Federal Guidelines
- Identify the six steps in the Threat and Hazard Identification and Risk Assessment (THIRA) and Stakeholder Preparedness Review (SPR) process
- Discuss the benefits of conducting a THIRA/SPR





Federal Guidelines

- PPD-8 National Preparedness
 - Released March 30, 2011
 - Requires the involvement of the whole community concept in a systematic effort to keep the Nation safe and resilient when struck by all hazards
 - Main elements of the directive
 - National Preparedness Goal
 - National Preparedness System
 - National Planning Frameworks
 - National Preparedness Report
 - Strategic National Risk Assessment

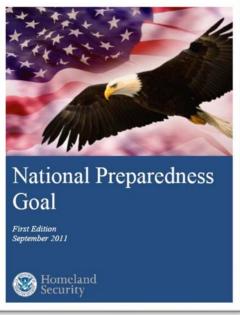






Federal Guidelines

- National Preparedness Goal
 - "A secure and resilient nation with the capabilities required across the whole community to prevent, protect against, mitigate, respond to, and recover from the threats and hazards that pose the greatest risk."
 - Describes the 32 core capabilities and categorizes them into 5 mission areas:
 - Prevention
 - Protection
 - Mitigation
 - Response
 - Recovery







Prevention	Protection	Mitigation	Response	Recovery
Planning	Planning	Planning	Planning	Planning
Public Information & Warning	Public Information & Warning	Public Information & Warning	Public Information & Warning	Public Information & Warning
Operational Coordination	Operational Coordination	Operational Coordination	Operational Coordination	Operational Coordination
Forensics & Attribution	Access Control & Identity	Community Resilience	Critical Transportation	Economic Recovery
Intelligence & Information Sharing	Verification Cybersecurity	Long-term Vulnerability Reduction	Environmental Response/Health & Safety	Health & Social Services
Interdiction & Disruption		Risk & Disaster Resilience	Fatality Management	Housing
Screening, Search, &	Intelligence & Information Sharing	Assessment	Services	Infrastructure Systems
Detection	Interdiction & Disruption	Threats & Hazards Identification	Fire Management Services	Natural & Cultural Resources
	Physical Protective		Infrastructure Systems	
	Measures		Mass Care Services	
	Risk Management for Protection Programs & Activities		Mass Search & Rescue Operations	
	Screening, Search, & Detection		On-Scene Security & Protection	
	Supply Chain Integrity & Security		Operational Communications	
		1	Logistics & Supply Chain Management	
			Public Health & Medical Services	~
TEXAS A&M EN	IGINEERING		Situational Assessment	

EMERGENCY MANAGEMENT ENSURING SAFETY, PROTECTING COMMUNITIES



Cross-Cutting Core Capabilities Planning Evaluating & Updating Plans, Organizational Planning, Whole Community Involvement & Coordination; Continuity Planning; Including AFN & ESL; Incorporating Risk Analysis; Integrated Different Plans; Pre-Incident Planning; Strategic Planning **Public Information &** Delivering Actionable Guidance, Alerts & Warnings, Culturally & Linguistically Appropriate Messaging, Inclusiveness of Entire Public; Developing SOPs; New Warning Communications Tools & Technologies: Protecting Sensitive Information, Public Awareness Campaign; Traditional Communications Mechanisms **Operational Coordination** Command, Control, & Coordination, NIMS/ICS Compliance, Stakeholder Engagement; Allocating & Mobilizing Resources; Determining Priorities, Objectives, Strategies; EOC Management; Ensuring Information Flow; Ensuring Unity of Effort; Ensuring COG & Essential Services; Establishing a COP; Establishing Lines of Communication; Establishing Roles & Responsibilities





<u>Prevention</u>	Prevent, avoid or stop an imminent, threatened or actual act of terrorism
Forensics & Attribution	Assessing Terrorist Capabilities, Attribution Assessments, Biometric Analysis, CNBRE, Crime Scene Preservation & Exploitation, Digital Media & Network Exploitation, Evidence Collection, Forensic Analysis, Terrorist Investigations
*Intelligence & Information Sharing	Analysis of Intelligence & Information, Continuous Threat Assessment, Developing Reports & Products, Disseminating Intelligence & Information, Establishing Intelligence & Information Requirements, Exploiting & Processing Information, Feedback and Evaluation, Gathering Intelligence, Monitoring Information, Safeguarding Sensitive Information
*Interdiction & Disruption	Anti-Terrorism Operations; Border Security; CBRNE Detection; CBRNE Render Safe; Deterrent Law Enforcement Presence; Financial Disruption; Interdicting Cargo, Conveyances, and Persons; Preventing Acquisition of CBRNE; Tactical Law Enforcement Operations; Tracking & Targeting Terrorists & their Weapons
*Screening, Search & Detection	Biosurveillance; Chemical & Biological Detection; Electronic Search; Explosives Detection; Laboratory Testing; Locating Terrorists; Physical Investigation; Promoting an Observant Nation; Radiological & Nuclear Detection; Screening

* Included in both Prevention & Protection Mission Areas





<u>Protection</u>	Protect our citizens, residents, visitors and assets against the greatest threats and hazards in a manner that allows our interests, aspirations and way of life to thrive.
Access Control & Identity Verification	Controlling Cyber Access; Controlling Physical Access; Verifying Identity
Cybersecurity	COOP for Cyber Systems; Controlling Electronic Access; Detecting Malicious Activity; End-User Awareness; Guidelines, Regulations, & Standards; Investigating Malicious Actors; Protective Measures; Security for Critical Infrastructure & Key Resources; Sharing Threat Information; Technological Countermeasures
Physical Protective Measures	Biosecurity; Border Protection; Identifying & Prioritizing Assets to Protect; Physical Security Measures; Site-Specific & Process-Specific Risk Assessments
Risk Mgmt for Protection Programs & Activities	Analysis Tools; Data Collection; Incorporating Risk Assessments in Exercise Design; Risk Assessment; Risk Communication; Risk Management Planning
Supply Chain Integrity & Security	Analysis of Supply Chain Dependencies; Implementing Countermeasures; Implementing Physical Protection; Integrating Security Processes; Verification & Detection
*Intelligence & Information Sharing	
*Interdiction & Disruption	
*Screening, Search & Detection	







Mitigation	Reduce the loss of life and property by lessening the impact of future disasters
Community Resilience	Collaborative Planning & Decision Making; Communication & Outreach; Education & Skill Building; Partnership Building; Understanding the Community
Long-Term Vulnerability	Adopting Vulnerability Reduction Standards & Building; Broadening the Use of Insurance; Developing Neighborhood Civic Organizations; Incorporating Mitigation Measures Into Construction; Individual & Family Preparedness
Risk & Disaster Resilience Assessment	Education & Training; Modeling and Analysis; Obtaining and Sharing Data
Threat & Hazard Identification	Data Collecting & Sharing; Estimating Frequency & Magnitude; Modeling & Analysis; Stakeholder Collaboration/Coordination





<u>Response</u>	Respond quickly to save lives, protect property and the environment, and meet basic human needs in the aftermath of a catastrophic incident.
Critical Transportation	Road Clearance; Evacuation; Airspace Management; Delivery of Response Assets; Reentering Affected Area; Transportation Safety & Condition Assessments
Environmental Response/Health & Safety	Individual Decontamination; Hazardous Materials Site Clean-up; Debris Removal; Environmental Impact Analysis; Health & Safety Monitoring & Assessment; Predictive Modeling; Responder Safety; Survivor Safety & Assistance
Fatality Management	Body Identification, Mortuary Services, Victim Identification; Bereavement Counseling; Family Reunification
Fire Management & Suppression	Structural Firefighting; Extended Attack Firefighting; Initial Attack Firefighting; Specialized Firefighting; Wildland Firefighting
*Infrastructure Systems	Power Restoration; Communications Systems; Wastewater Restoration; Water Restoration; Dams & Flood Control; Food Production & Delivery; Government Facilities; Heating Fuel Provision; Hospitals; Infrastructure Site Assessments; Public Restoration Facilities; Public Safety Facilities; Transportation Infrastructure
Logistics & Supply Chain Management	Resource Management, Resource Delivery; Access to Community Staples; Donation Management; Emergency Power Provision; Fuel Support; Private Resources; Resource Tracking; Supply Chain Restoration; Volunteer Management
Mass Care Services	Temporary Housing; Emergency Sheltering; Family Reunification
Mass Search & Rescue	Search & Rescue Operations & Support; Specialized Operations; Synchronizing Operations





* Included in both Response & Recovery Mission Areas



On-Scene Security, Protection, & Law Enforcement	Law enforcement, Protecting Response Personnel; Security of Disaster Area
Operational Communications	Interoperable Communications Between Responders; Communication between Responders & AFN/ESL; Data Communications; Re-Establishing Communications Infrastructure; Re-Establishing Critical Information Networks; Voice Communications
Public Health, Healthcare, and EMS	Triage & Initial Stabilization, EMS, Definitive Care; Clinical Laboratory Testing; Health Assessments; Medical Countermeasures; Medical Surge; Public Health Interventions
Situational Assessment	Providing notification to leadership & partner organizations; Analyzing Information; Assessing Hazard Impacts; Tracking Response Activities





<u>Recovery</u>	Recover through a focus on the timely restoration, strengthening and revitalization of infrastructure, housing and a sustainable economy, as well as the health, social, cultural, historic and environmental fabric of communities affected by a catastrophic incident
Economic Recovery	Reopening businesses; Business/Economic Continuity Planning; Developing Recovery Objectives; Developing the Workforce; Disseminating Information; Economic Impact Assessments; Incentivizing Entrepreneurial & Business Development; Management Planning
Health & Social Services	Reopening Healthcare Facilities & Social Services; Behavioral Health; Determining Health & Social Needs; Ensuring Access; Environmental Health; Food Safety; Health Assessment; Medical Products & Services; Public Awareness; Public Health Measures; Response & Recovery Worker Health; School Impacts
Housing	Long Term Housing; Housing Affordability; Housing Assessments; Reconstructing of Destroyed Housing; Rehabilitation of Damaged Housing
Natural & Cultural Resources	Natural & Cultural Site Damage Assessment & Restoration; Historic Preservation
*Infrastructure Systems	Power Restoration; Communications Systems; Wastewater Restoration; Water Restoration; Dams & Flood Control; Food Production & Delivery; Government Facilities; Heating Fuel Provision; Hospitals; Infrastructure Site Assessments; Public Restoration Facilities; Public Safety Facilities; Transportation Infrastructure

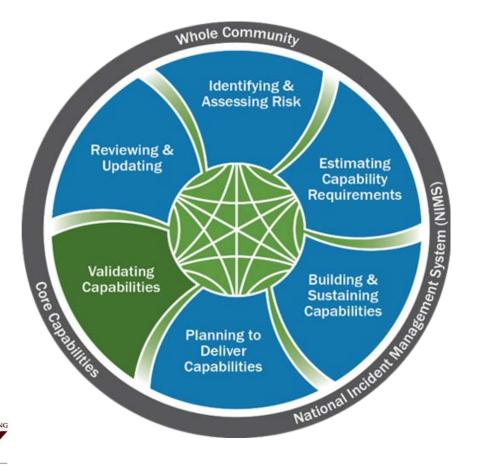


* Included in both Response & Recovery Mission Areas



National Preparedness System

 Enables the whole community to integrate preparedness efforts to build, sustain, and deliver core capabilities that are in the greatest need of sustainment and improvement in order to achieve the National Preparedness Goal of a secure and resilient nation.

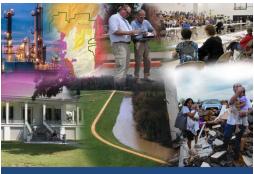






National Planning Frameworks

- One for each preparedness mission areas
- Describe how the whole community works together to achieve the goal.
- Foster and understanding of our roles and responsibilities from the firehouse to the White House.



National Mitigation Framework

May 2013

Homeland



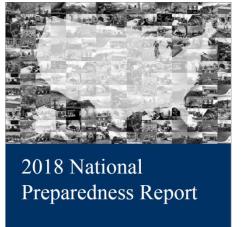


National Preparedness Report

- Findings:
 - Begun in 2012
 - Shows pattern of increasing threats
 - Summarizes and measures progress and remaining challenges in building, sustaining, and delivering the 32 capabilities
 - Core capabilities are identified as "National Areas of Improvement"
 - Annual requirement in accordance with the Post-Katrina Emergency Management Reform Act of 2006 and key component of National

Preparedness System

• SPRs drive the NPR



Homeland Security





- Identified known threats/hazards with potential for significant national impact
 - Natural hazards
 - Technological/accidental hazards
 - Adversarial, human-caused threats/hazards
- Determined by
 - Number of casualties
 - Economic loss
 - Psychological impact
- Most recent update available is 2011





Threat/ Hazard Group	Threat/Hazard Type	National-level Event Description
	Animal Disease	An unintentional introduction of the foot-and-mouth disease
	Outbreak	virus into the domestic livestock population in a U.S. state
	Earthquake	An earthquake occurs within the U.S. resulting in direct economic losses greater than \$100 Million
	Flood	A flood occurs within the U.S. resulting in direct economic losses greater than \$100 Million
	Human Pandemic	A severe outbreak of pandemic influenza with a 25% gross
	Outbreak	clinical attack rate spreads across the U.S. populace
	Hurricane	A tropical storm or hurricane impacts the U.S. resulting in
Natural		direct economic losses of greater than \$100 Million
	Space Weather	The sun emits bursts of electromagnetic radiation and energetic particles causing utility outages and damage to infrastructure
	Tsunami	A tsunami with a wave of approximately 50 feet impacts the Pacific Coast of the U.S.
	Volcanic Eruption	A volcano in the Pacific Northwest erupts impacting the surrounding areas with lava flows and ash and areas east with smoke and ash
	Wildfire	A wildfire occurs within the U.S. resulting in direct economic losses greater than \$100 Million





Threat/ Hazard Group	Threat/Hazard Type	National-level Event Description
	Biological Food Contamination	Accidental conditions where introduction of a biological agent (e.g., <i>Salmonella</i> , <i>E. coli</i> , botulinum toxin) into the food supply results in 100 hospitalizations or greater and a multistate response
Technological/ Accidental	Chemical Substance Spill or Release	Accidental conditions where a release of a large volume of a chemical acutely toxic to human beings (a toxic inhalation hazard, or TIH) from a chemical plant, storage facility, or transportation mode results in either one or more offsite fatalities, or one or more fatalities (either on- or offsite) with offsite evacuations/shelter-in-place
	Dam Failure	Accidental conditions where dam failure and inundation results in one fatality or greater
	Radiological Substance Release	Accidental conditions where reactor core damage causes release of radiation





Threat/ Hazard Group	Threat/Hazard Type	National-level Event Description
	Aircraft as a Weapon	A hostile non-state actor(s) crashes a commercial or general aviation aircraft into a physical target within the U.S.
	Armed Assault	A hostile non-state actor(s) uses assault tactics to conduct strikes on vulnerable target(s) within the U.S. resulting in at least one fatality or injury
	Biological Terrorism Attack (non-food)	A hostile non-state actor(s) acquires, weaponizes, and releases a biological agent against an outdoor, indoor, or water target, directed at a concentration of people within the U.S.
	Chemical/Biological Food Contamination Terrorism Attack	A hostile non-state actor(s) acquires, weaponizes, and disperses a biological or chemical agent into food supplies within the U.S. supply chain
Adversarial/	Chemical Terrorism Attack (non-food)	A hostile non-state actor(s) acquires, weaponizes, and releases a chemical agent against an outdoor, indoor, or water target, directed at a concentration of people using an aerosol,
Human- Caused	Cyber Attack against Data	ingestion, or dermal route of exposureA cyber attack which seriously compromises the integrity or availability of data (the information contained in a computer system) or data processes resulting in economic losses of a Billion dollars or greater
	Cyber Attack against Physical Infrastructure	An incident in which a cyber attack is used as a vector to achieve effects which are "beyond the computer" (i.e., kinetic or other effects) resulting in one fatality or greater or economic losses of \$100 Million or greater
	Explosives Terrorism Attack	A hostile non-state actor(s) deploys a man-portable improvised explosive device (IED), Vehicle-borne IED, or Vessel IED in the U.S. against a concentration of people, and/or structures such as critical commercial or government facilities, transportation targets, or critical infrastructure sites, etc., resulting in at least one fatality or injury

EMERGENCY MANAGEMEN





Comprehensive Preparedness Guide 201

- 3rd Edition, May 2018
- Two components of the updated process for jurisdictions (THIRA & SPR)
- Six step process
 - THIRA: 3 steps
 - SPR: 3 steps
- Official authority on the THIRA/SPR methodology



Threat and Hazard Identification and Risk Assessment (THIRA) and Stakeholder Preparedness Review (SPR) Guide

Comprehensive Preparedness Guide (CPG) 201 3rd Edition May 2018

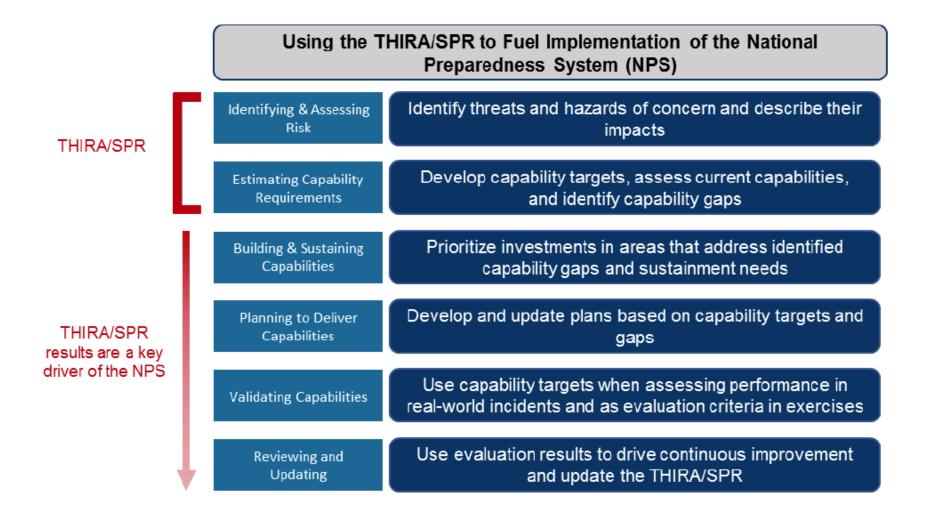


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Comprehensive Preparedness Guide 201







Community-wide Involvement

- The NPS calls for EVERYONE for preparedness efforts
- Developing a comprehensive and accurate THIRA/SPR requires active community involvement from a variety of stakeholders and Subject Matter Experts (SMEs)
 - Academia & research organizations
 - Cybersecurity experts
 - Emergency management professionals
 - Emergency Planning committees
 - Federal agencies
 - First responder agencies
 - Hazard mitigation offices
 - Infrastructure owners & operators
 - State fusion centers

- National Laboratories
- National Weather Service offices
- Port or transit organizations
- Private sector partners
- Professional associations
- DHS Protective Security Advisors
- VOAD
- Other agencies or organizations with significant impact on communities





THIRA Process

• The THIRA is a three-step risk assessment completed every 3 years.







Step 1 of the THIRA Process



- Three Categories
 - Natural
 - Technological
 - Human-Caused
- Two Factors
 - Likelihood
 - Impact on at least 1 of the core capabilities





Step 2 of the THIRA Process

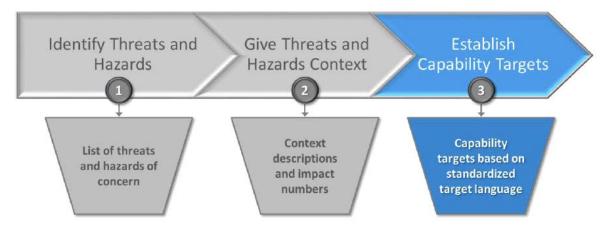


- Develop context statements/scenarios that would challenge the State's core capabilities prior to requesting out-of-state assistance
 - Details should include location, magnitude, time/date, general impacts on the population (who, what, when, where, why, and how)
- Determine estimates for standardized impacts
 - These are ESTIMATES, not exact numbers, which help in planning for that 1/500 year incident that has yet to occur
- Consider community-wide sources such as:
 - Real-world events, SME's, Exercises, Response & Recovery Plans, Modeling, and Tools





Step 3 of the THIRA Process



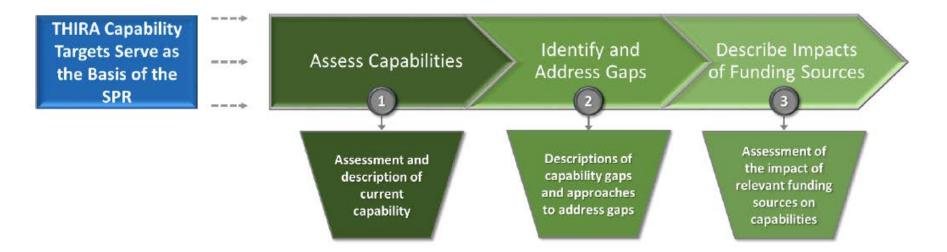
- Establish capability targets for each of the 32 core capabilities
 - Some will have multiple target statements
- Set specific goals for the core capabilities in a standardize target language
 - i.e. Within (#) hours of an incident, provide emergency sheltering for (#) people; maintain sheltering operations for (#) days.
 - Completing the (#) is assisted by the relevant impact estimates determined in Step 2





SPR Process

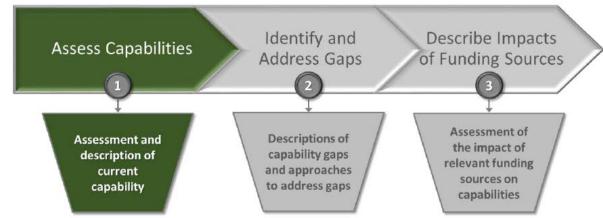
 SPR is an annual three-step self-assessment of a community's capability levels based on the capability targets identified in the THIRA.







Step 1 of the SPR Process

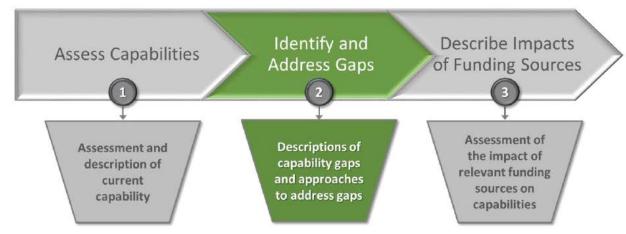


- Three primary elements
 - Quantitatively asses capability
 - Qualify current capabilities & capability changes
 - Provide context on current capability estimations





Step 2 of the SPR Process

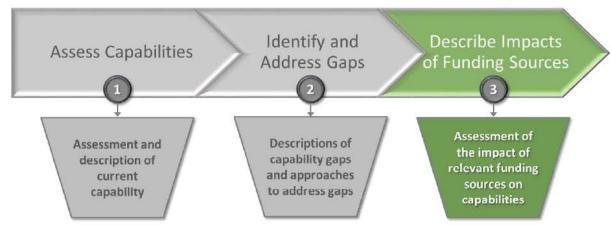


- Three primary elements
 - Identify and describe the capability gaps using POETE areas
 - Planning, Organization, Equipment, Training, Exercise
 - Describe approaches to address gaps & sustainment needs within the POETE areas
 - Functional Area POETE Gap Identification
 - Areas or actions listed under National Preparedness Goal that are not addressed by the standardized target statements





Step 3 of the SPR Process



 Indicate the extent to which funding sources played a role in building and sustaining the capabilities assessed by the capability targets.





Benefits of a THIRA/SPR

- Using the THIRA/SPR strategically
- Standardized process/risk management aid







Updated THIRA/SPR Cycle

- In 2019, the THIRA will move to a three-year reporting cycle.
- The planned requirements for states from 2018-2022 are as follows:
 - 2018: Complete the THIRA/SPR for the Response and Recovery Core Capabilities
 - 2019: Complete the full THIRA/SPR for all 32 Core Capabilities (Year 1 of 3)
 - **2020**: Update the SPR (Year 2 of 3)
 - **2021**: Update the SPR (Year 3 of 3)
 - 2022: Complete the full THIRA/SPR for all 32 Core Capabilities (Year 1 of 3)





Summary

- Reviewed Federal guidelines that inform the THIRA/SPR process
- Outlined the THIRA/SPR process
- Discussed benefits of conducting a THIRA/SPR



