



New Hampshire Department of Safety Division of Homeland Security and Emergency Management 2019 THIRA/SPR Executive Summary

Overview

The Threat and Hazard Identification and Risk Assessment (THIRA) and Stakeholder Preparedness Review (SPR) identifies which threats and hazards would have the most impact on communities and identifies which capabilities need additional funding to support emergency preparedness and community¹ resilience.

Federally mandated THIRA/SPR results are used by States and FEMA to improve the funding support provided before, during, and after incidents. Currently, FEMA requires states to complete the THIRA every 3 years and the SPR annually.

Threat and Hazard Identification and Risk Assessment (THIRA)

Background

The THIRA is a three-step risk assessment completed every three years. It helps answer the following questions:

- **What threats and hazards can affect our community?**
- **If they occurred, what impacts would those threats and hazards have on our community?**
- **Based on those impacts, what capabilities should our community have?**

The three steps are:

- 1. Identify Threats and Hazards:** Develop a list of threats and hazards that could affect the community. Consider only those that challenge the community's ability to deliver at least one core capability more than any other incident; the THIRA is not intended to include less challenging threats and hazards.
- 2. Give Threats and Hazards Context:** Describe the threats and hazards identified in Step 1, showing how they may affect the community and create challenges in performing the core capabilities.
- 3. Establish Capability Targets:** Use the impacts described in Step 2 to determine the level of capability that the community plans to achieve over time in order to manage the threats and hazards it faces. Create capability targets (or "goals") for each of the core capabilities based on this desired level of capability by identifying impacts, objectives, and timeframe metrics.

Summary

In 2019, New Hampshire stakeholders reviewed five large-scale fictitious scenarios designed to address hazards identified within the 2018 State Multi-Hazard Mitigation Plan Hazard Identification and Risk Assessment (HIRA). The below hazardous scenarios were identified as the most probable to occur and/or those that would result in the largest impact to our jurisdiction.

- 1. Cyber Attack.** Focused on a ransomware/malware attack on transportation and healthcare systems during a multi-day ice storm.
- 2. Extreme Winter Weather.** Developed as a combination of the 2008 Ice Storm and the January 4 2018 winter storm, which affected the coastal communities and caused a long-term power outage. In addition to the long-term power outage, the scenario included a multi-vehicle accident

¹ For the purpose of this document and the THIRA/SPR process the State of New Hampshire is referred to as "the community".

on an iced-over bridge on I-93 near the Town of Campton, resulting in a HAZMAT contamination in the Pemigewasset River.

3. **In-Land Flooding.** Describes a Category Two hurricane that caused coastal flooding due to storm surge and high winds statewide. Simultaneously, the City of Franklin experienced a 6.5 magnitude earthquake that severely damaged the Franklin Dam on the Merrimack River resulting in 22-foot surge down the Merrimack River and flooding parts of the City of Concord.
4. **Mass Casualty – Active Shooter.** Describes a complex coordinated terrorist attack on three New Hampshire malls during peak shopping times on Black Friday.
5. **Mass Casualty – Dirty Bomb.** Describes a vehicle-borne Radiological Dispersal Device (500 lbs. of homemade TNT mixed with two 500 millicurie (mCi) of Cesium-137) detonating outside the SNHU arena during a sold-out summer concert.

Based on the estimated impacts developed during the four stakeholder workshops, it was determined Scenario 3 (In-Land Flooding) would have the most devastating impact on the State as a whole due to the widespread and long-lasting impacts.

Stakeholder Preparedness Review (SPR)

Background

The SPR is an annual three-step self-assessment of a community's capability levels based on the capability targets identified in the THIRA. It helps answer the following questions:

- **What are our current capability levels and how have our capabilities changed over the last year?**
- **What gaps exist between the capabilities we want to achieve and the capabilities we currently have?**
- **What do we need to do to close the capability gaps or sustain the capabilities?**
- **What impact did different funding sources—including grants—have on building or sustaining the capabilities assessed by the capability targets over the last year?**

The three steps are:

1. **Assess Capabilities:** Based on the language from the capability targets set in THIRA Step 3, identify the community's current capability and how that capability changed over the last year, including capabilities lost, sustained, and built. Then, provide additional context to explain the reported data and its sources.
2. **Identify Capability Gaps and Intended Approaches to Address Them:** Determine the causes of the capability gap between the capability target and the current capability identified in SPR Step 1. Then, describe the actions and investments needed to close the capability gap or sustain the capability.
3. **Describe the Impacts of Funding Sources:** Identify how relevant funding sources, including but not limited to grant programs and the community's own resources, helped to build or sustain the capabilities assessed by the capability targets and describe how those capabilities were used in a real-world incident(s) over the past year.

Summary

The target (goal) statements were developed during the last two THIRA stakeholder workshops in August and September 2019. These target statements provide a way to determine any areas of improvement for a specific aspect within a capability but do not represent the capability as a whole. The SPR also allows stakeholders to identify areas of improvements for additional functional areas within each capability.

This year there were 110 SPR survey responses from over 80 participants. This included three municipalities: Keene, Salem, and Manchester, and two utilities: Liberty and NH Electric Cooperative. All 32 core capabilities were assessed.

The below chart summarizes the SPR for 2019. The columns for Priority, Confidence Rating, and Percentage of Target Achieved are **not related**, but apply to separate focus areas in the revised SPR. The full assessment includes those capabilities that were assessed through all three SPR steps in addition to identifying gaps in the functional areas.

Priority Rating

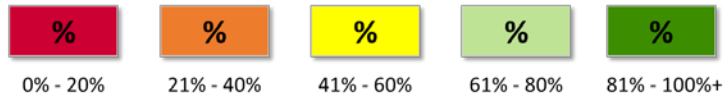
This rating reflects the level of importance over the next year that the community plans to build or sustain the capability in all areas. The rating is a selection between high, medium, and low.

Confidence Rating

This rating reflects how confident the community is in the accuracy of their reported current capability. The rating ranges from 1 to 5, where a “1” indicates a lower confidence in the estimate and a “5” indicates a higher confidence.

Percentage of Target Achieved

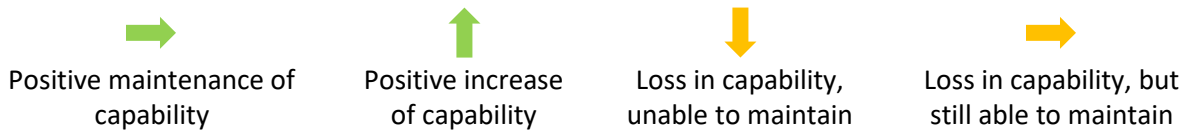
This percentage indicates the level of capability the community currently has for the specified target statement, **not the capability as a whole**. Percentages are shaded according to the range below.



For example, New Hampshire, as a whole, can meet approximately 92% of the Public Information and Warning capability in the Functional Areas of Delivering Actionable Guidance, Alerts and Warnings, Culturally and Linguistically Appropriate Messaging, and Inclusiveness of the Entire Public, but this percentage **does not include** the Additional Functional Areas of Developing Standard Operating Procedures for Public Information, New Communication Tools and Technologies, Protecting Sensitive Information, Public Awareness Campaigns, and Traditional Communication Mechanisms.

Trend

The arrows indicate a change in the maintenance of the capability in 2019 using the 2018 results as the baselines. The capabilities that were assessed for the first time in 2019 under the new THIRA/SPR methodology do not have a trending arrow and are indicated with an asterisk (*). This is a *tentative* indicator for this year, as several of the 2018 target statements were revised in 2019 in order to more accurately represent the State’s capability status according to the determined target/goal statements.



Identified Gaps/Areas of Improvement:

The identified gaps or areas of improvement reflect areas where stakeholders reported deficiencies even if that capability’s designated target area is adequately achieved.

Full Assessments					
Capability	Priority	Confidence Rating	% Target Achieved	Trend	Identified Gaps/Areas of Improvement
Cross-Cutting	Public Information & Warning	Target Statement: Within 90 minutes notice of an incident, deliver reliable and actionable information to 1,200,000 people affected, including 128,000 people with access and functional needs and 86,000 people with limited English proficiency.			
		M	4	66	↓
	Operational Coordination	Target Statement: Within 4 hours of a potential or actual incident, establish and maintain a unified and coordinated operational structure and process across 234 jurisdictions affected and with 713 partner organizations involved in incident management. Maintain for 72 hours.			
		M	3	100	→
Prevention/ Protection	*Intelligence & Information Sharing	Target Statement: During steady state, and in conjunction with the fusion center and/or Joint Terrorism Task Force (JTTF), every 1 year, review ability to effectively execute the intelligence cycle, including the planning, direction, collection, exploitation, processing, analysis, production, dissemination, evaluation, and feedback of available information, and identify the 25 personnel assigned to support execution of the intelligence cycle. Then, within 1 hour of the identification or notification of a credible threat, identify/analyze local context of the threat for the respective area of responsibility, and facilitate the sharing of threat information with 16 priority intelligence stakeholder agencies/entities in accordance with the intelligence cycle, and all dissemination protocols.			
		H	3	90	N/A
	*Interdiction & Disruption	Target Statement: Within 1 hour of the identification or notification of a credible threat, conduct outreach to the fusion center and Joint Terrorism Task Force (JTTF) in the community and identify 50 personnel assigned to support follow up interdiction and disruption activities that may be undertaken against identified suspects and/or contraband.			
		L	4	90	N/A
	*Screening, Search & Detection	Target Statement: Within 6 hours of notice of a credible threat, conduct screening, search, and detection operations for 15,000 people requiring screening, including 1,800 people with access and functional needs.			
		M	4	69	N/A
Protection	*Cybersecurity	Target Statement: Every 1 year, appropriate authorities review and update cyber incident plans/annexes based on evolving threats covering 300 publicly managed and/or regulated critical infrastructure facilities.			
		H	2	27	N/A

*First assessment under new THIRA/SPR methodology

Full Assessments (continued)					
Capability	Priority	Confidence Rating	% Target Achieved	Trend	Identified Gaps/Areas of Improvement
Response	Critical Transportation	Target Statement 1: Within 72 hours of an incident, clear 500 miles of road affected, to enable access for public, private, and non-profit emergency responders.			
		Target Statement 2: Within 72 hours' notice of an incident, complete the evacuation of 6,000 people requiring evacuation, including 200 people with access and functional needs.			
	H	4	56	↓	Evacuation, Staffing with required CDL
	Environmental Response/Health & Safety	Target Statement: Within 72 hours of an incident, assess, contain, and begin cleaning up hazardous material releases from 4 hazmat release sites.			
		H	3	100	→
	Fatality Management Services	Target Statement: Within 45 days of an incident, complete the recovery, identification, and mortuary services, including temporary storage services, for 15 fatalities.			
		H	4	100	↑
	Fire Management and Suppression	Target Statement: Within 24 hours of an incident, conduct firefighting operations to suppress and extinguish 50 structure fires.			
		M	3	100	→
	Logistics & Supply Chain Management	Target Statement: Within 72 hours of an incident, identify and mobilize life-sustaining commodities, resources, and services to 2,000 people requiring shelter and 99,000 people requiring food and water. Maintain distribution system for 2 weeks.			
		H	4	75	↓
	Mass Care Services	Target Statement 1: Within 2 weeks of an incident, move 100 people requiring temporary, non-congregate housing, including 20 people with access and functional needs, from congregate care to temporary housing.			
		Target Statement 2: Within 3 days of an incident, provide emergency sheltering, food, and water for 2,000 people requiring shelter and 99,000 people requiring food and water, including 240 people with access and functional needs and 25,740 people with access and functional needs, and 100 animals requiring shelter, food, and water. Maintain for 2 weeks.			
		H	4	69	↑
	Mass Search & Rescue Operations	Target Statement: Within 3 days of an incident, conduct search and rescue operations for 528 people requiring rescue.			
		H	3	19	→
On-Scene Security, Protection and Law Enforcement	Target Statement: Within 6 hours of an incident, provide security and law enforcement services to protect emergency responders and 10,000 people affected.				
	M	3	100	↑	Staffing, Funding, Aging Equipment
Operational Communications	Target Statement: Within 6 hours of an incident, establish interoperable communications across 234 jurisdictions affected and with 500 partner organizations involved in incident management. Maintain for 2 months.				
	H	3	60	↑	Communication with Partners, Communications between Responders and the Affected Populations, Data Communications, Re-Establishing Communications Infrastructure, Re-Establishing Critical Information Networks, Voice Communications

Full Assessment (continued)					
Capability	Priority	Confidence Rating	% Target Achieved	Trend	Identified Gaps/Areas of Improvement
Response	Public Health, Healthcare, & EMS	Target Statement: Within 12 hours of an incident, complete triage, begin definitive medical treatment, and transfer to an appropriate facility 200 people requiring medical care.			
		M	4	100	↑
Response/ Recovery	Infrastructure Systems	Target Statement 1: Within 1 week of an incident, restore service to 150,000 customers without communication service.			
		Target Statement 2: Within 1 week of an incident, restore service to 150,000 customers without power service.			
		Target Statement 3: Within 1 week of an incident, restore service to 17,314 customers without wastewater service.			
		Target Statement 4: Within 1 week of an incident, restore service to 17,314 customers without water service.			
		H	4	84	↑
Recovery	Economic Recovery	Target Statement: Within 1 year of an incident, reopen 4,688 businesses closed due to the incident.			
		H	3	4	↑
	Health & Social Services	Target Statement: Within 3 months of an incident, restore functions at 928 affected healthcare facilities and social service organizations.			
		M	4	100	↑
	Housing	Target Statement: Within 1 year of an incident, 1,214 people requiring long-term housing, including 140 people with access and functional needs, find and secure long-term housing.			
		H	5	0	→
Recovery	Natural & Cultural Resources	Target Statement: Within 3 years of an incident, restore 1 damaged natural and cultural resources and historic properties registered in the jurisdiction.			
		M	4	0	→

Abbreviated Assessments

The abbreviated assessments, mostly for the capabilities assessed for the first time in 2019, only included the quantified 2019 current capability, identified gaps in all functional areas, and the priority rating and confidence levels.

Abbreviated Assessments				
Capability	Priority	Confidence Rating	% Target Achieved	Identified Gaps (Areas of Improvement)
Cross-Cutting	Planning	Target Statement: Within every 4 years , update all emergency operations plans that define the roles and responsibilities of 713 partner organizations involved in incident management across 245 jurisdictions affected , and the sequence and scope of tasks needed to prevent, protect, mitigate, respond to, and recover from events.		
		M	4	100
Prevention	*Forensics & Attribution	Target Statement: Within 1 hour of a suspected terrorist attack, conduct outreach to the fusion center and Joint Terrorism Task Force (JTTF) in the community and identify 50 personnel assigned to support follow up information sharing, intelligence analysis, and/or investigative actions associated with the collection, examination, and analysis of evidence, as well as the identification of perpetrators.		
		L	3	100
Protection	*Access Control & Identity Verification	Target Statement: Within 2 hours of an event, be prepared to accept credentials from 150 partner organizations involved in incident management .		
		M	3	12
	*Physical & Protective Measures	Target Statement: Within 6 months of completing a risk and vulnerability assessment, appropriate authorities review and update physical security plans covering 100 publicly managed and/or regulated critical infrastructure facilities to incorporate new information from the assessment.		
		L	1	50
*Risk Management for Protection Programs & Activities	Target Statement: Every 1 year , appropriate authorities conduct a review of relevant physical and cyber threats and hazards, vulnerabilities, and strategies for risk management covering 300 publicly managed and/or regulated critical infrastructure facilities .			
	L	1	3	Need to update State's criteria for CIKR.
Protection	*Supply Chain Integrity & Security	Target Statement: Every 1 year , engage 1,500 partner organizations involved in incident management to promote awareness of threats, dependencies, vulnerabilities, and strategies to support restoration of private sector supply chains.		
		L	1	33

*First assessment under new THIRA/SPR methodology

Abbreviated Assessments (continued)				
Capability	Priority	Confidence Rating	% Target Achieved	Identified Gaps (Areas of Improvement)
Mitigation	*Community Resilience	Target Statement 1: Every 1 year , conduct 1,800 outreach events or activities to increase awareness of locally significant threats and hazards to help the residents be more prepared to prevent, protect against, mitigate, respond to, and recover from those events.		
		Target Statement 2: Within 5 years , 22,500 households are covered by risk-appropriate insurance, including homeowners, flood, windstorm, and seismic.		
	L	2	100	Broadening the Use of Insurance, Collaborative Planning & Decision Making, Communication & Outreach, Education & Skill Building, Partnership Building
	*Long-Term Vulnerability Reduction	Target Statement: Every 3 years , 234 jurisdictions review their building codes, and, if necessary, enact or update risk-appropriate, disaster resilient building codes.		
		L	2	100
	*Risk & Disaster Resilience Assessment	Target Statement: Every 3 years , after identifying threats and hazards of concern, model the impacts of 7 threat and hazard scenarios to incorporate into planning efforts.		
L		3	100	Modeling & Analysis
*Threats & Hazards Identification	Target Statement: Every 5 years , engage with 234 jurisdictions and 27 partner organizations involved in incident management to assess the threats and hazards that are realistic and would significantly impact your communities.			
	L	5	100	Modeling & Analysis
Response	Situational Assessment	Target Statement: Within 2 hours of incident, and on a 1 hour cycle thereafter, provide notification to leadership and 300 partner organizations involved in incident management of the current and projected situation. Maintain for 72 hours .		
		L	3	100

*First assessment under new THIRA/SPR methodology