# State of Nevada 2022 Threat and Hazard Identification Risk Assessment / Stakeholder Preparedness Review Executive Summary

### **Overview**

As the State emerges from the worst of the COVID-19 Pandemic, the 2022 preparedness survey and workshop participants focused on the current threats and hazards of most concern — wildfires, floods, utility disruptions, HAZMAT releases, active assailant, and cyberattacks. Nevada used a combination of surveys and regional in-person workshops (Northern, Southern/UASI, and Eastern Nevada) to complete the THIRA/SPR process. The stress of COVID-19 as well as relatively low wages in Nevada have caused pressure in skilled, core public health, public safety, and emergency management career fields. The most significant concerns that need to be addressed include operational coordination from policy group, operational communication interoperability, recovery capabilities, and strengthening the integrity of the supply chain. The THIRA/SPR participants across the regions assessed a 4:1 ratio of increase in investment over loss of capability and demonstrates that the State of Nevada and its sub jurisdictions have been very good stewards of preparedness funds and increases in capabilities have far outstripped capability losses statewide.

### THIRA/SPR Process

The THIRA/SPR process is a FEMA's methodology designed to:

- 1. Identify the threats (human-caused) and hazards (natural or technological accidents);
- 2. Establish targets for each of 32 FEMA-defined core capabilities within 5 mission areas;
- 3. Define current capability to deliver core capabilities;
- 4. Identify core capability gaps and priorities to bridge those gaps.

### POETE Model

FEMA's process involves evaluating each core capability with respect to POETE elements that allow a jurisdiction to assess its threat/hazards, define gaps, create priorities for funding, and demonstrate improvement to encompass the entire process:

- Planning Development of policies, plans, procedures, mutual aid agreements, strategies, and other publications; involves the collection and analysis of intelligence/information
- Organization Individual teams, an overall organizational structure, and leadership at each level in the structure
- Equipment, supplies, and systems that comply with relevant standards
- Training Content and methods of delivery that comply with relevant training standards
- Exercises Exercises/incidents provide an opportunity to conduct, evaluate, and improve
  the ability of core capabilities to perform assigned missions and tasks to standards

### State of Nevada 2022 THIRA/SPR Results

### **Overall Results**

- Nevada DOES NOT get enough funding to make reduction in gaps when it comes to Organizations and equipment, the focus is on planning, training, and exercise
- Increases in capabilities have far outstripped losses statewide
- The stress of COVID-19 as well as relative low wages in Nevada have caused pressure in skilled, core public safety career fields
  - Law Enforcement, including intelligence analysts
  - o Firefighting, especially in specialized areas such as HAZMAT in rural areas
  - o Public health, healthcare, and EMS
  - o Emergency Management
- Operational Coordination Policy Group (**Priority 1**)
  - Senior leadership at state, county, tribal, and city levels need training on Policy Group and EOC operations
- Operational Communication Interoperability is a major concern (**Priority 2**)
  - o It is difficult for rural areas to "keep up" with new systems
  - Rural areas must rely upon urban areas for support in many capabilities rapid mobilization, deployment, and employment may be an opportunity for growth
  - o Myriad of public information platforms can cause conflicting messages
  - o Communication infrastructure/resources are out of date and not compatible
- Supply Chain Security and Integrity are a major concern (**Priority 3**)
  - o Road/Rail Interruptions
  - o Pipeline/electric line cyber/physical attack

# **Historical Statewide Priorities (3-Year performance period)**

- 2020: Logistics Supply Chain Management, Energy, Economic Recovery
- 2021: Logistics Supply Chain Management, Disaster Housing, Resilient Communication
- 2022: Cyber effects, Fatality Management, Health & Social Services

## **Threats and Hazards of Most Concern**

FEMA's THIRA methodology dictates that each core capability be associated with the threat/hazard that is the worst case for it. The State of Nevada THIRA addresses a mix of threats/hazards across the state that represent the "worst/most likely" case. The threats and hazards that drive the core capabilities for the 2022 State of Nevada THIRA are represented in the table below:

Table 1 is a matrix of scenarios with the threats/hazards of most concerns vs. core capabilities they most affect.

Threat / Hazard		Core Capability	Whose Target is Dete	ermined by the Thre	at / Hazard	
Earthquake – Frenchman's Fault	Planning	Public Information & Warning	Community Resilience – Building Codes	Critical Transportation - Debris Removal		Fire Management & Suppression - Urban
	Health & Social Services	C	Infrastructure Systems (4)	Logistics & Supply Chain Management		Mass Search & Rescue Operations
Earthquake – Mt. Rose	Long-term Vulnerability Reduction		Threats & Hazards Identification			
Active Assailant - Reno	Intelligence & Information Sharing		Operational Communications	Physical Protective Measures	Risk Management for Protection Programs & Activities	Screening, Search, & Detection
	Situational Assessment					
Active Shooter - Jackpot	Operational Coordination	Services	On-scene Security, Protection, & Law Enforcement	Public Health, Healthcare, & EMS		
Mass Casualty Attack – Las Vegas	Access Control & Identity Verification	Forensics & Attribution				
Wildfire – Ruby Mountains	Critical Transportation - Evacuation	_	Mass Care Services - Relocation			
HAZMAT Accident – Elko Rail	Response/Health &	Environmental Response/Health & Safety – Clean-Up				
Flood – Northern Nevada	Community Resilience - Outreach	Natural & Cultural Resources				
Cyber Attack – Statewide SCADA	Cybersecurity					
Cyber Attack – Pipeline Ransomware	Supply Chain Integrity & Security					

Table 1. Core Capability Whose Target is Determined by the Threat/Hazard.

Table 2 is a summary of the 2022 trends for the 23 core capabilities identified as High priority by at least one region.

<b>Core Capability</b>	Positive Trend	Trend of Concern	Negative Trend
Planning (East)	<ul> <li>Eastern Nevada is working a 4-5 county coordinating body to coordinate planning efforts – including tribal nations</li> <li>State is requesting rural planner to help fill the gap – most counties are one-deep</li> <li>Some counties are hiring/designating dedicated emergency manners</li> </ul>	<ul> <li>Planning is inconsistent across the region (East)</li> <li>Need better communication of plans and planning efforts</li> <li>Need funding</li> </ul>	Planning took a pause during COVID-19
Operational Coordination (North, South, & East)	Plans are generally in place     Leadership transition meetings	<ul> <li>New Governor and new County Emergency Managers should visit NVOC and ne inbriefed on capabilities and responsibilities</li> <li>Poor funding and loss of personnel</li> <li>Washoe and Quad-counties (Carson, Douglas, Lyon, &amp; Storey) have regional approaches; others need to consider</li> <li>Annual or at least in change of leadership, G402 ICS for senior elected and appointed officials</li> </ul>	<ul> <li>One of three core capabilities most in danger of declining in 2023</li> <li>The loss in jurisdictional and partner organization capabilities is due to the acquisition of systems by some jurisdictions / partners that others cannot acquire</li> <li>Clark County has 3 major cities, 3 tribes, 1 intermediate city, and two small cities with the unincorporated county; this causes several overlaps in responsibilities in duplication of efforts.</li> <li>Senior leadership does not understand policy group and their role in incidents and events.</li> </ul>
Forensics & Attribution (North & East)	<ul> <li>Validated this capability during small scale events</li> <li>Detective Sergeant has increased capability (East)</li> </ul>	<ul> <li>Difficulty hiring and maintaining trained staff</li> <li>NTAC needs a trained staff member for digital forensics</li> </ul>	

Core Capability	Positive Trend	Trend of Concern	Negative Trend
	Added and APP for digital		
	processing (East)		
Intelligence &	Every State Trooper is a fusion	<ul> <li>Difficulty hiring and maintaining trained</li> </ul>	• Information and communication
Information Sharing	center liaison officer (FLO)	staff	system interoperability gaps slow
(North & East)	• Fire, EMS, and Emergency	• Although there are six intelligence officers at	response
	Managers are also receiving FLO	NTAC, the staff goes short when people go	Constant need to upgrading
	training	off to training	communications equipment
	Adding communications links to      Adding communications links to	Jackpot Nevada State Police manned duty	creates gaps
Screening, Search, &	patrol cars in 2022 (East)	<ul><li>station is no longer manned</li><li>Bio-surveillance has fallen off due to privacy</li></ul>	_
Detection (North)	·	concerns	•
Detection (North)		K-9 dogs are a gap (North)	
Access Control &	Credentialling is ongoing, focused on	Need policy to back up the production of	•
Identity Verification	responders such as EOD, etc.	PIV-I cards with sharing of credentials across	
(North)		jurisdictions	
,		• PIV-I cards not recognized at National Guard	
		facilities	
Cybersecurity (North,	Colleges statewide have annual	<ul> <li>Requires constant effort</li> </ul>	• Difficulty hiring and maintaining
South, East)	cybersecurity training		trained staff – competing with
	SNCTC launched a cyber security		the private sector
	initiative that includes local and state		• Turnover in highly trained staff
	government and CIKR entities		is a constant challenge dealing
	• The City of Henderson has a C-SIRT that is focusing on this capability		<ul><li>with technology-based issues</li><li>Due to budgetary constraints,</li></ul>
	that is focusing on this capability		training and equipment have lost
			capabilities
Physical Protective	Approximately 90% of buildings	COVID-19 cut statewide capacity in half –	•
Measures (North)	evaluated have card access systems -	30 facilities per year vs. 60 pre-COVID	
,	state buildings use Nevada Cards	Having only one state person with DHS	
	Access system	assistance is a slow process	
<b>Community Resilience</b>	One of three core capabilities with	• Inconsistency – while Elko and White Pine	•
- Outreach (East)	the most progress in 2022	Counties conducts multiple events per year,	
	There is a Spring coordinators	other counties do not	
	meeting covering multiple	Printed materials have become more difficult	
	preparedness topics	to obtain	

Core Capability	Positive Trend	Trend of Concern	Negative Trend
	<ul> <li>Multiple tribal, county, city, and private sector events in 2022</li> <li>CERT program does public outreach</li> <li>Humboldt &amp; Elko Counties do the Pillow Case project</li> <li>Four, regional exercises in 2022 – community evacuation, wildlandurban interface, TTX, and PSOM TTX with NV Energy</li> </ul>	<ul> <li>Need new, trained, staff</li> <li>Need to replenish equipment</li> </ul>	
Critical Transportation – Evacuation (North)  Critical	<ul> <li>Washoe has worked evacuation plans         <ul> <li>both encouraging people to self-evacuate and worked a staged evacuation</li> <li>Software modeling exists but accuracy unknown</li> </ul> </li> <li>State is working an evacuation support plan to support locals         <ul> <li>NDOT, National Guard, etc.</li> </ul> </li> <li>Washoe County has a new debris</li> </ul>	<ul> <li>It took 2 days to develop the evacuation plan for the Caldor Fire</li> <li>Capabilities have not kept pace with community growth</li> <li>NDOT staff are very short statewide</li> </ul>	•
Transportation – Debris Removal (North)	removal plan		
Fatality Management Services (North, East)	<ul> <li>Coroners have been active in training and exercises in the past year</li> <li>Every County has a mass casualty plan</li> <li>Washoe County has worked with the NTSB on Family Support – need to include other</li> <li>Quad County and the state acquired thousands of body bags</li> <li>The region (South) has continued to take part in specific mass fatality training for coroner personnel</li> </ul>	<ul> <li>Not enough personnel, equipment, and facilities to meet this capability for a mass casualty event</li> <li>The Quad County Region has difficulty in participation with all partners on training and exercises</li> <li>"DMORT cannot be relied upon"</li> <li>Fuel for refrigeration trucks would be a challenge</li> <li>Shortage of pathologists</li> <li>Shortage in labs</li> <li>This capability is lagging across the country</li> </ul>	•

Core Capability	Positive Trend	Trend of Concern	Negative Trend
	The region (South) also has limited mass fatality plans in place as part of its larger medical and health planning system	<ul> <li>Transportation relies upon the mortuary industry which is already overstressed</li> <li>Identification and reunification system is no longer supported</li> </ul>	
Fire Management & Suppression (North, East)	<ul> <li>USFS has been allocated more funding to increase capabilities – to be realized</li> <li>Extensive actual experience</li> <li>Crews have heavy training</li> <li>Nevada Energy fires and fuels program is active in protecting NV Energy infrastructure and has firefighting capability</li> <li>Working with federal delegation to be treated like hurricane and receive pre-emptive declarations – deployments, caches, etc.</li> <li>The Eastern region is in the state wildfire protection program.</li> <li>NV Energy program funds wildland fire chief (East)</li> <li>BLM grant for mitigation projects</li> </ul>	<ul> <li>Fire Services have experienced personnel and equipment losses across the region (North)</li> <li>Need equipment replenishment across the board</li> <li>Need training and exercises for complex fire scenarios</li> </ul>	<ul> <li>One of three core capabilities most in danger of declining in 2023</li> <li>Difficulty hiring and maintaining staff</li> </ul>
Logistics & Supply Chain Management (South & East)	<ul> <li>NDEM is looking to reach 50% capability in the next few years then build out completely</li> <li>Eastern Nevada working this capability in the 2022 TTX</li> <li>CMS has a list (Empower) of people needing durable medical equipment</li> <li>Health district reviews Empower data quarterly</li> <li>Nevada Gold mines supported tribes and locals during COVID-19</li> </ul>	Need to partner with the private sector, faith- based community, and volunteer organizations to make sure all work the same priorities	COVID-19 experience was that there was a week or two lag between requests and deliveries

Core Capability	Positive Trend	Trend of Concern	Negative Trend
Core Capability  Mass Care Services – Shelter/Commodities (South, East)	<ul> <li>One of three core capabilities with the most progress in 2022</li> <li>The state has county shelter trailers form across the state</li> <li>State of Nevada has begun housing planning</li> <li>State has observed good sheltering procedures</li> <li>Clark County maintains a Shelter and Mass Care annex in its EOP, updated as of October 2022</li> <li>Region (South) has a large animal plan</li> <li>The region (South) has initiated a mass care and shelter study, which is the first step in determining a baseline for actual current capabilities and shelter plan updates</li> <li>The City of Las Vegas used COVID-19 funds to acquire an AFN mass care capability, including showers and toilets</li> <li>ARC has been providing shelter training</li> </ul>	<ul> <li>Need an AAR effort to capture lessons and codify procedures.</li> <li>Need to identify staff</li> <li>Need a regional (East) sheltering plan</li> <li>Need to include AFN specialists</li> <li>Need to identify facilities</li> <li>Need to include AFN specialists</li> <li>Need to identify non-profit and volunteer organizations to assist</li> <li>Rely on National Guard for isolated communities</li> </ul>	<ul> <li>Lack of shelters for a catastrophic scenario</li> <li>Lack of trained staff</li> </ul>
On-Scene Security, Protection, & Law Enforcement (North, South, East)	<ul> <li>Training has opened up post COVID         <ul> <li>A lot of training with</li> <li>Sacramento, the SF Bay Area,</li> <li>and Las Vegas</li> </ul> </li> <li>Have exercised accident,         <ul> <li>radiological, and active shooter mass</li> <li>casualty events (East)</li> </ul> </li> <li>Have had unified training with Twin         <ul> <li>Falls with bomb squad (East)</li> </ul> </li> </ul>	<ul> <li>It is especially challenging in locations such as Jackpot or Wendover, including for EMS response</li> <li>Training and exercises are not fully integrated across all disciplines</li> <li>Family reunification remains an area of concern based on 10/1/17 lessons</li> <li>As experience people retire, training and exercises must increase</li> </ul>	<ul> <li>One of three core capabilities most in danger of declining in 2023</li> <li>The further we get from October 1<sup>st</sup>, the more the focus drops off</li> <li>Need to re-energize pre-COVID training and exercises</li> <li>Example: Pre-COVID, the college and the community had a robust exercise</li> </ul>

Core Capability	Positive Trend	Trend of Concern	Negative Trend
, , ,	DRT RAT Team doing helicopter		program for nursing and
	training – 6-9 officers in		EMS students (EAST)
	approximately 45 minutes (East)		
	Search and rescue team and RAT		
	Team supports each other (East)		
	Casinos, critical infrastructure,		
	schools, etc. maintain "go bags" for		
	law enforcement to respond and		
	security staff act as pathfinders to		
	show law enforcement around.		
	Priority for training security medical		
	staff is being a pathfinder – knowing		
	where entrances, exits, etc., are		
	located		
	There is a cadre program to train		
	staff from schools, the university,		
	North Ls Vegas, Henderson, etc. to		
	train people on MACTAC		
	• The school district (South) is a		
	building capability in the MACTAC		
	MACTAC is an annual training		
	requirement for all officers		
	• There is now regional (South)		
	training at the strategic level in		
	addition to the tactical level		
Operational	• The region (North) has sustained its	Need to increase communications	• Interoperability was the most
Communications	Multi-Assault Counter-Terrorism	interoperability – varied systems in uses	common negative trend
(North, South, East)	Action Capabilities (MACTAC)	harms interoperability	identified across all regions
	• FirstNet should be statewide by April	o Counties and other local jurisdictions use	• Interoperability decreases as
	2023	a mix of 800 MHz and VHF	some organizations / agencies
	COVID-19 operations increased	Federal law enforcement uses VHF  The College and Ellipseity are digital.	upgrade their systems and others
	general capability Upgraded dispatch and continuing	<ul> <li>The College and Elko city are digital VHF</li> </ul>	cannot keep pace
	with that effort - using real world	<ul> <li>State highway patrol runs off of 800</li> </ul>	
	incident to build better comms /	MHZ digital	
	incluent to build better comms/	MINZ digital	

<b>Core Capability</b>	Positive Trend	Trend of Concern	Negative Trend
* *	coordination between departments	Interoperability can be cost prohibitive	
	(East)	<ul> <li>State fees are increasing</li> </ul>	
	Updated plans and incorporated	<ul> <li>New systems are very expensive</li> </ul>	
	lessons learned	• Cross-jurisdictional incidents cause conflict	
	Clark County Water Reclamation	• Need repeater stations and cell phone towers	
	uses FirstNet for SCADA operations	in remote areas	
	and in working with Moapa Valley	Coordinating with law enforcement working	
	and Indian Springs	on encrypted radios causes a lack of	
		coordination	
		Different radios between Northern and	
		Southern Nevada causes interoperability	
		problems	
		Nevada Dispatch Interconnect Project  ODDB	
		(NDIP) needs bigger push from local jurisdictions in collaboration with DPS	
		Communications and NDOT – redundancy in	
		911 centers (fiber, etc.)	
		<ul><li>System was put in without a full push for</li></ul>	
		integration	
		<ul> <li>Need full-scale training to include rural</li> </ul>	
		areas	
		• The LVMPD (Metro) has an encrypted 700	
		MHz system that is drawing people from	
		SNACC. Creating an interoperability	
		problem	
		The rural areas have essentially no	
		interoperability between the urban systems –	
		SNACC & Metro	
		Have has mixed results with medical	
		channels on the 800 MHz system	
		Henderson is not on 800 MHz	
Public Health,	• One of three core capabilities with	• In the North, there are no burn units or	• One of three core capabilities
Healthcare, & EMS	the most progress in 2022	trauma centers outside of Reno	most in danger of declining in
(North, East)	• There are local and Federal AARs in	There are few pediatric beds	2023
	process		

Core Capability	Positive Trend	Trend of Concern	Negative Trend
	<ul> <li>There is a State COMPAC for nursing mutual in process</li> <li>Increased access and capability with countermeasures for COVID-19</li> <li>The State has a mobile medical facility</li> <li>TTX for regional air transport in 2022 (East)</li> <li>State has a large-scale exercise in 2023 at Stateline</li> <li>State re-energized WEPCs to be more inclusive of tribal governments</li> <li>State is pushing for tribes to other be included in general planning and having tribal annexes</li> <li>Acquired many trauma kits</li> <li>Building cross border relationships</li> </ul>	<ul> <li>Response times in rural areas can be extensive</li> <li>Eastern participants called for stand-alone health districts to decrease reliance on the State</li> <li>Need training and exercises for catastrophic events</li> </ul>	<ul> <li>The stress from COVID-19 has resulted in difficulty hiring and maintaining qualified staff</li> <li>Lost EMS staffing over the past year. In particular, there are EMS gaps in the rural areas</li> <li>Retirements have caused a loss in corporate knowledge across the healthcare sector following COVID-19</li> </ul>
Situational Assessment (East)	<ul> <li>COVID-19 operations helped the process</li> <li>The new CAD systems is improving the situation</li> </ul>	<ul> <li>Not enough trained staff</li> <li>Need upgraded equipment to gain the ability to utilize cloud base software for the video conference for improved data speed in the EOC</li> </ul>	Difficulty hiring and maintaining staff
Infrastructure Systems – Power (North, East)	<ul> <li>NV Energy is putting more resources into infrastructure</li> <li>There are multiple power providers which provides some redundancy</li> <li>NV Energy continues planning, outreach, and education on public safety shutdowns and brown outs</li> </ul>	•	•
Economic Recovery (North, South, East)	<ul> <li>Southern Nevada may have a private sector partnership in recovery to be emulated across the state</li> <li>Clark County and Henderson EOPs have a Recovery annex</li> </ul>	<ul> <li>Lack of a whole community organization that includes a private sector lead</li> <li>The political environment also is a challenge         <ul> <li>National and state-level polices and actions hampered local jurisdictions' ability to recover quickly</li> </ul> </li> </ul>	<ul> <li>Business able to re-open did so as soon as they got the green light – those that were not, never reopened again</li> <li>Need to open businesses quicker</li> </ul>

Core Capability	Positive Trend	Trend of Concern	Negative Trend
		<ul> <li>Supply chain disruptions affect the reopening beyond local jurisdictions' control</li> <li>"Need to look across Nevada and see what everyone is doing with COVID-19 funds"</li> <li>Need to look at codifying post October 1 Recovery Committee work into new plans</li> </ul>	There needs to be support once the businesses reopen if they are on the margins
Health & Social	City of Las Vegas and Clark County	Supply chain problems has increased the	•
Services (South, East)	Social Services have been working	timeframe to bring damaged facilities back	
	closely especially with the un-housed		
		• Without its own health district, the region	
		must defer to the state for many capabilities	
		(East)	
		<ul><li>Few trauma units</li><li>Water supply is a major issue in Recovery</li></ul>	
Housing (South)	Clark County is developing a shelter	Cannot keep up in a disaster – need more	0
Housing (South)	inventory	housing availability	
	m ventory	• Current costs of construction, supply chain,	
		and inflation are major impacts	
		There is already an issue with un-housed	
		people due to economic conditions	
		Need wrap around services for the AFN	
		population, families, etc.	
		o Need other services such as daycare,	
		schools, etc.	
		Staff and partners need training and exercises     and frameworks and plans are developed.	
		once frameworks and plans are developed.	

Table 5: THIRA / SPR Trends for 23 Core Capabilities Identified as High-Priority