Salt Lake County Threat and Hazard Identification Risk Assessment Strategy Document 2024

Contents

I. Executive Summary 4
II. Methodology 5
1. Sources and References 6
III. Introduction 8
1. THIRA Overview 8
2. SPR Overview 9
IV. THIRA Steps 1 and 2: Threats, Hazards, and Context 11
1. Earthquake 11
2. Pandemic / Public Health Event 14
Context Description 14
3. Wildfire / Urban Interface Fire 16
4. Active Threat 18
6. Cyberattack / Cyber Incident 20
7. Dam Failure 22
8. Hazardous Materials Release 24
V. THIRA Steps 3 and SPR Summary Data 26
1. Planning 26
2. Public Information and Warning 28
3. Operational Coordination 31
4. Intelligence and Information Sharing 34
5. Interdiction and Disruption 37
6. Screening, Search, and Detection 39
7. Forensics and Attribution 41
8. Access Control and Identify Verification 43
9. Cybersecurity 45
10. Physical Protective Measures 47
11. Risk Management for Protection Programs and Activities 49
12. Supply Chain Integrity and Security 51
13. Community Resilience 53
14. Long-Term Vulnerability Reduction 57
15. Risk and Disaster Resilience Assessment 59
16. Threats and Hazard Identification 61

17. Infrastructure Systems 63
18. Critical Transportation 66
19. Environmental Response / Health and Safety 70
20. Fatality Management Services 74
21. Fire Management and Suppression 76
22. Logistics and Supply Chain Management 78
23. Mass Care Services 80
24. Mass Search and Rescue Operations 84
25. On-Scene Security, Protection, and Law Enforcement 86
26. Operational Communications 88
27. Public Health, Healthcare, and Emergency Medical Services 91
28. Situational Assessment 93
29. Economic Recovery 96
30. Health and Social Services 98
31. Housing 100
32. Natural and Cultural Resources 102

VI. SPR Assessment Summary 104
1. Planning Meeting Discussion 104
2. Funding Sources 108

VII. Recommendations 109

VIII. Acronyms 111

I. Executive Summary

Jurisdictional or organizational preparedness for disasters is an ongoing process that requires continuous assessment. Salt Lake County Emergency Management (SLCo EM) has proactively chosen to engage stakeholders in the Threat and Hazard Identification and Risk Assessment (THIRA) and Stakeholder Preparedness Review (SPR) process. The THIRA/SPR process is modeled after the National Preparedness Goal, which defines what it means for all communities to be prepared for the threats and hazards that pose the greatest risk to the security of the United States. The Goal identifies 32 core capabilities needed to address the greatest risks facing the Nation. These core capabilities are divided into five mission areas—Prevention, Protection, Mitigation, Response, and Recovery. While not required to conduct the THIRA/SPR process, SLCo EM initiated and engaged in this process to position itself to be as resilient as possible.

This report contains a summary of the information contained in the THIRA/SPR. More detailed information can be found in the Whole Community Input Form—a template provided by the Federal Emergency Management Agency (FEMA) for completing the THIRA/SPR. This report contains an overview of the THIRA/SPR process, followed by a summary of THIRA Steps 1 and 2 in which threats and hazards are identified and their impacts are estimated. The report is then broken out by core capability and for each capability, THIRA Step 3 (target capabilities) and SPR Steps 1 and 2 are summarized. The report ends with providing SPR Step 3 information, summarizing the SPR survey findings, and offering recommendations.

Disclaimer: The numbers included in the THIRA/SPR are estimates and may not reflect the actual impacts of threats and hazards or Salt Lake County's actual current capability. This report is based on the most accurate data available to Witt O'Brien's at the time of publication, and, therefore, is subject to change without notice. Information was gathered using available resources, experience from real-world events and exercises, and knowledge from subject matter experts. By nature, the SPR is a self-assessment and, thus, the results presented are based on the survey responses, planning meetings, and discussions with those who engaged with Witt O'Brien's and Salt Lake County Emergency Management during this process. This information should be used as a starting point for more in-depth conversations on the County's capabilities, gaps, and emergency management priorities.

II. Methodology

Salt Lake County completed both the THIRA and SPR this year. While the County has completed a THIRA in the past, the process has changed significantly since its last THIRA, leading to the creation and utilization of new documents and planning tools. Salt Lake County Emergency Management (SLCo EM) created a THIRA/SPR Planning Team to guide the County through this process and ensure participation and feedback from as many stakeholders as possible.

The THIRA/SPR Planning Team held a series of in-person and virtual meetings to gather data for the THIRA/SPR process. The initial two planning meetings were held in person, where stakeholders were placed in breakout groups to complete THIRA Steps 1 and 2, which involved selecting the threats and hazards the County wanted to focus on, developing scenarios for each of the threats and hazards, and estimating standardized and non-standardized impacts for each threat and hazard. Following each in-person meeting, the Planning Team hosted virtual follow-up meetings to gather additional information and present any updates to stakeholders.

A series of virtual meetings were held to gather and validate the capability targets defined in THIRA Step 3. These virtual meetings divided the 32 core capabilities into FEMA's five mission areas—prevention, protection, mitigation, response, and recovery—to drive discussion and relevance to the stakeholders present at each meeting.

Surveys were created to gather the information for SPR Steps 1, 2, and 3. This allowed stakeholders the chance to engage in internal discussions, review documents, and complete the assessments. After gathering this initial SPR data, Planning Meeting 3 was held in person to discuss additional gaps in each of the POETE areas—Planning, Organization, Equipment, Training, and Exercises—and realistic strategies to address these gaps in the coming years.

As detailed in **Section VI: SPR Assessment Summary** there are several gaps in information for this year's SPR assessment. The responses to the surveys were minimal, with nearly two-thirds of the surveys receiving no response at all. To increase stakeholder engagement and participation in Planning Meeting 3, the focus was on overall gaps in the POETE areas, rather than reviewing all 32 core capabilities and outstanding gaps following the surveys. Therefore, there are several items left blank throughout the SPR assessment.

The Planning Team compiled the THIRA/SPR data into this final report as well as the Whole Community Input Form (WCIF)—a template provided by FEMA for this process. The information contained in this report is a summary; the full THIRA/SPR can be found in the WCIF.

The THIRA is scheduled to be updated in 2027. The County is scheduled to complete the SPR self-assessment again in 2025 and 2026, utilizing the same THIRA scenarios and impact estimates established this year.

Figure 1. THIRA/SPR Project Timeline.

1. Sources and References

The following documents were used to develop the threat and hazard scenarios, standardized and non-standardized impacts, and target capabilities. This list is not all-inclusive and may not capture the feedback and inputs provided by subject matter experts based on their knowledge and experiences.

- Salt Lake County Hazard Mitigation Plan (HMP), 2019
- Salt Lake County Comprehensive Emergency Management Plan (CEMP), 2023
    - Active Threat Annex, 2021
    - Earthquake Annex, 2021
    - Public Health Annex, 2021
    - Wildland/Urban Interface Fire Annex, 2021
- FEMA Region 8 Wasatch Range Earthquake Response Plan, 2024
- State of Utah Hazard Mitigation Plan, 2024
- Utah Language Data Report, Utah Department of Health and Human Services (DHHS), 2024
- Centers for Disease Control and Prevention (CDC) Access and Functional Needs (AFN) Toolkit, 2021
- Salt Lake City Consolidated Plan, Housing and Neighborhood Development, 2020-2024
- US Census Data, 2020 Data
- CDC Disability and Health: State Profile Data for Utah, 2022
- Mountain Dell Dam Emergency Action Plan
- Health Facilities Bed Count Data from Utah DHHS, 2024
- National Registry of Historic Places
- Salt Lake County Parks and Recreation Dashboard
- Visit Salt Lake, Museum Webpage
- Salt Lake County Sheriff's Office, Jail Dashboard
- Utah Department of Public Safety, Bureau of EMS, Healthcare Facilities Dashboard

- Reference to previous events – information pulled from the HMP or Internet searches on topics such as COVID-19 restrictions, previous wildfire evacuation orders, events similar to the scenarios developed, etc.

III. Introduction

The Threat and Hazard Identification and Risk Assessment (THIRA) and Stakeholder Preparedness Review (SPR) process lays the foundation for communities to identify, assess, and address risks in their jurisdiction that most challenge their capabilities. The THIRA/SPR process is used to answer five key questions.

Figure 2. THIRA/SPR Key Questions.

1. THIRA Overview

The THIRA is a three-step risk assessment completed every three years that 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 THIRA reviews all types of threats and hazards, including natural, human-caused, and technological. The THIRA helps communities determine what they need to prepare for, what resources they may need based on potential impacts, and what their current gaps are. Understanding the risks at hand allows communities to determine what level of capability they should plan to build and sustain.

The THIRA is a three-step process, as described in the *Comprehensive Preparedness Guide 201, Third Edition*:

1. **Identify Threats and Hazards of Concern.** Based on a combination of experience, forecasting, subject matter expertise, and other available resources, develop a list of threats and hazards that could affect the community. When deciding what threats and hazards to include in the THIRA, communities consider only those that challenge the community's ability to deliver at least one core capability more than any other threat or hazard; 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. Identify the impacts a threat or hazard may have on a community.
3. **Establish Capability Targets.** Using the impacts described in Step 2, determine the level of capability that the community plans to achieve over time in order to manage the threats and hazards it faces. Using standardized language, create capability targets for each of the core capabilities based on this desired level of capability by identifying impacts, objectives, and timeframe metrics.

2. SPR Overview

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 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 SPR is a three-step process, as described in the *Comprehensive Preparedness Guide 201, Third Edition*:

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.

IV. THIRA Steps 1 and 2: Threats, Hazards, and Context

1. Earthquake

Category: Natural **Type:** Earthquake **Terrorism:** No

Context Description

A magnitude 7.0 earthquake occurs in Utah, causing significant damage in the Salt Lake Valley region. United States Geological Survey (USGS) immediately confirms that a 7.0 magnitude earthquake has occurred along the Salt Lake segment of the Wasatch Fault. Early reports from Salt Lake City and the surrounding area indicate extensive casualties and widespread damage to buildings, highways, and infrastructure.

Local, county, and state emergency operations centers (EOC) are activated to coordinate response efforts. Federal Emergency Management Agency (FEMA) Region VIII activates the Regional Response Coordination Center (RRCC) and begins mobilizing support. Colorado, Montana, North Dakota, South Dakota, and Wyoming activate their EOCs in preparation for providing aid. Response efforts are expected to be hampered by weather, with temperatures below freezing and 1–3 inches of snow expected within the next 24 hours.

In Salt Lake County alone, there are 2,157 fatalities; 1,129 people hospitalized with life-threatening injuries who are unable to receive treatment; 6,615 people hospitalized with non-life-threatening injuries; and 21,166 people injured but not hospitalized. There are 274,923 displaced persons, and 58,258 of them need shelter.

Landline and cell phone communication and internet access are severely disrupted. Several 800 MHz UCAN radio relay towers on the west bench (the mountains and foothills on the western edge of the Salt Lake City area) remain operational and provide reduced levels of radio traffic for up to 72 hours or longer if generators can be refueled. Point-to-point handheld 800 MHz and amateur radio communication remain available as long as battery power and recharging sources are accessible.

Utility lifelines are severed throughout the region. One natural gas facility is damaged and there are 98 breaks and leaks in natural gas pipelines. Eight oil facilities are damaged and there are 45 breaks and leaks in oil pipelines. Approximately 21 leaks and 77 breaks occur in the 1,277 miles of natural gas lines in the affected area. Fires are burning throughout the affected area, mostly due to damaged natural gas lines and downed power lines. Rocky Mountain and Murray Power are reporting significant power outages throughout SLCo with no restoration timeline available. Firefighting capabilities are limited due to structural damage and lack of water resources due to failed water systems and/or freezing of water

sources. All water and wastewater systems in and around the affected area have been disrupted. There are 306,712 households without potable water, and there are over 3,300 breaks and leaks in potable water pipelines and 5 wastewater treatment facilities have been damaged.

Transportation routes in and out of the affected area are severely damaged and/or flooded, causing significantly limited access. Access from the north is cut off at Woods Cross at the intersection of I-15 (approximately exit 318 in Bountiful) and I-215 (exit 29), cutting off Salt Lake City from Davis County. Access from the south is cut off, beginning at exit 297 on I-15 in Midvale. Access from the east is cut off at Parleys Canyon and from the west at Lake Point. The bridges south of Salt Lake City along I-15 near exit 288 have significant to moderate damage due to the earthquake, causing stress to the buttresses and wing walls on the approaches to the bridges. About 470 highway bridges and 3 railway bridges within the affected area have received moderate damage, and about 140 highway bridges are destroyed.

On April 18, there is a magnitude 6.0 aftershock that causes further damage and slows assessment, response, and recovery operations.

Standardized Impacts

STANDARDIZED IMPACT ESTIMATES – EARTHQUAKE SCENARIO			
IMPACT CATEGORY	**ESTIMATE**	**IMPACT CATEGORY**	**ESTIMATE**
Affected Healthcare Facilities and Social Service Organizations	800	People Requiring Long-Term Housing	8,000
Animals Requiring Shelter, Food, And Water	25,000	People Requiring Medical Care	25,000
Businesses Closed Due to The Incident	8,500	People Requiring Rescue	15,000
Customers (Without Communication Service)	600,000	People Requiring Shelter	58,500
Customers (Without Power Service)	340,000	People Requiring Temporary, Non-Congregate Housing	2,000
Customers (Without Wastewater Service)	300,000	People With Access and Functional Needs (AFN) Affected	275,000
Customers (Without Water Service)	310,000	People With AFN (Requiring Accessible Long-Term Housing)	2,000
Damaged Natural and Cultural Resources and Historic Properties	500	People With AFN (Requiring Accessible Shelter)	14,000
Fatalities	2,700	People With AFN (Requiring Evacuation)	25,000
Hazmat Release Sites	500	People With AFN (Requiring Food and Water)	112,000

STANDARDIZED IMPACT ESTIMATES – EARTHQUAKE SCENARIO			
IMPACT CATEGORY	**ESTIMATE**	**IMPACT CATEGORY**	**ESTIMATE**
Jurisdictions Affected	24	People With AFN (Requiring Temporary, Non-Congregate Housing)	500
Miles Of Road Affected	1,000	People With Limited English Proficiency Affected	121,000
Partner Organizations Involved in Incident Management	200	Personnel	35,000
People Affected	1,100,000	Priority Intelligence Stakeholder Agencies/Entities	25
People Requiring Evacuation	100,000	Structure Fires	500
People Requiring Food and Water	450,000		

Non-Standardized Impacts

NON- STANDARDIZED IMPACT ESTIMATES – EARTHQUAKE SCENARIO			
IMPACT CATEGORY	**ESTIMATE**	**IMPACT CATEGORY**	**ESTIMATE**
Highway Bridges Damaged	470	Tons of Debris Generated	2,258,000
Railway Bridges Damaged	3	Truckloads of Debris	90,320
Miles of Rail Damaged	529	Individuals Requiring Reunification	100,000
Buildings that Sustain Moderate, Extensive, or Complete Damage	80,000	Displaced Households	45,000
5 ignitions will burn 0.02 square miles of the region's total area. This will displace 157 people and burn $8 million of building value.			

2. Pandemic / Public Health Event

Category: Natural **Type:** Wildfire **Terrorism:** No

Context Description

Scenario: The World Health Organization (WHO) has been closely monitoring a novel strain of influenza A—avian influenza A (H7N9) virus. About 8 weeks ago, human-to-human transmission was detected in Vietnam among poultry farm workers following an unusual cluster of pneumonia cases reported in a rural hospital. Over the next several weeks, hundreds of more cases were reported throughout Vietnam and in surrounding countries associated with individuals who had travelled to Vietnam. Four weeks ago, the WHO declared H7N9 a pandemic with transmission reported on multiple continents. At that time, the only confirmed cases in the US were associated with travel to impacted areas.

Two weeks ago, an individual reported to a local Salt Lake City hospital presenting with respiratory distress. Testing confirmed that the individual has H7N9. The individual had no recent travel outside of the US but had recently attended a large concert in Salt Lake City. Since then, an additional 47 confirmed cases have been identified in Salt Lake City—many of whom attended the same concert—and over 400 cases have been confirmed in the US. The actual number of cases is estimated to be much higher than this as individuals are encouraged to only seek medical treatment if they are severely ill and testing is not widespread. With Salt Lake being the epicenter of cases in the US, it is in the spotlight, feeling the effects of increased media attention.

Based on previous localized H7N9 epidemics, officials estimate that a third of the population will become infected, with about a third of these individuals being asymptomatic but still able to spread the disease. Half of the infected individuals will seek medical care. The case fatality rate in symptomatic patients is approximately 33%.

With an estimated population of 1.2 million individuals, Salt Lake County can expect about 400,000 cases over the next year. Of those individuals, approximately 267,000 will be symptomatic, 133,000 will seek medical care, and 88,000 will die from the virus. This will overwhelm hospitals, healthcare facilities, and mortuary services in Salt Lake County, all of which are still recovering from the COVID-19 pandemic. It will be difficult to receive resources from outside the County as the entire country will be experiencing the effects of the pandemic.

Since H7N9 has been on the CDC's horizon for some time as a virus that could possibly cause a pandemic, they do have a limited stockpile of H7N9 vaccines. It will be at least 6 months until vaccine supply is adequate and vaccines can be offered to the public—it may be longer if two doses of the vaccine are needed. Antiviral drugs may reduce the time it

takes for symptoms to improve but will be in short supply and only recommended for those at greatest risk of severe infection. With natural immunity in the current population being very low, nearly the entire population is susceptible.

Standardized Impacts

STANDARDIZED IMPACT ESTIMATES – PANDEMIC SCENARIO			
IMPACT CATEGORY	**ESTIMATE**	**IMPACT CATEGORY**	**ESTIMATE**
Affected Healthcare Facilities and Social Service Organizations	250	People Requiring Temporary, Non-Congregate Housing	400
Businesses Closed Due to The Incident	300	People With Access and Functional Needs (AFN) Affected	100,000
Fatalities	88,000	People With AFN (Requiring Food and Water)	100
Jurisdictions Affected	24	People With AFN (Requiring Temporary, Non-Congregate Housing)	150
Partner Organizations Involved in Incident Management	100	People With Limited English Proficiency Affected	26,000
People Affected	400,000	Personnel	40,000
People Requiring Food and Water	400	Priority Intelligence Stakeholder Agencies/Entities	30
People Requiring Medical Care	133,000		

Non-Standardized Impacts

NON-STANDARDIZED IMPACT ESTIMATES – PANDEMIC SCENARIO	
IMPACT CATEGORY	**ESTIMATE**
Schools Impacted or Closed	420
Individuals Temporarily Out of Work Due to Closed Businesses	100,000
Childcare Facilities Impacted or Closed	600

3. Wildfire / Urban Interface Fire

Category: Natural **Type:** Wildfire **Terrorism:** No

Context Description

Preceding Conditions

Weather: Unseasonably warm with daily highs in the low 90s with very low humidity (average of 7%) and very little precipitation. Drought conditions are present. High winds are in the forecast along with heat, lightning, and dry thunderstorms. The Haines Index is a 6. Prevailing winds are from the Southwest to the Northeast. Red Flag Warnings (RFWs) are in effect until 9 PM for fire zones 478 and 479.

August 17, 2024

In the early morning hours on Saturday, lightning strikes ignite several brush fires near Rose and Butterfield Canyon. Early morning hikers near the Butterfield Trailhead Regional Park report heavy smoke and see several areas that are on fire. Although several fire apparatuses are en route to the brush fires, they take over an hour to arrive because of the secluded area and difficult terrain. Conditions quickly worsen, exacerbated by dry foliage and erratic wind gusts. The fires have consumed approximately 60,000 acres. The communities of Herriman, Bluffdale, and Riverton are now under immediate severe risk. The communities of South Jordan and its Daybreak neighborhood are at a moderate risk.

11:00 AM: The fire has now consolidated and spread north and east of the origin points, directly into Herriman. Winds begin to carry embers over a quarter mile away and the fuel source shifts from vegetation to residential structures. As homes catch on fire from surrounding brush and embers landing on rooflines, fire personnel become unable to contain the fire. Firefighters are reporting 0% containment. Local and state firefighting resources are stretched thin due to ongoing fire responses throughout the state. Mutual aid resources are dispatched to respond but are slow to arrive due to the congestion on the roadways. Police begin to aid with evacuation routes. Across the region, phone systems, including cellular communications and 9-1-1, are becoming overloaded and unreliable. Rocky Mountain Power has been monitoring the situation and is now carrying out emergency de-energization of its power lines in the area. Evacuations are necessary, including hospitals and other dependent care facilities, and cascading effects include air quality, water quality due to firefighting runoff, loss of habitat, and loss of power infrastructure assets.

Standardized Impacts

STANDARDIZED IMPACT ESTIMATES – WILDFIRE SCENARIO			
IMPACT CATEGORY	**ESTIMATE**	**IMPACT CATEGORY**	**ESTIMATE**
Affected Healthcare Facilities and Social Service Organizations	25	People Requiring Medical Care	25
Animals Requiring Shelter, Food, And Water	1,500	People Requiring Rescue	20
Businesses Closed Due to The Incident	100	People Requiring Shelter	3,000
Customers (Without Communication Service)	50,000	People Requiring Temporary, Non-Congregate Housing	400
Customers (Without Power Service)	50,000	People With Access and Functional Needs (AFN) Affected	15,000
Customers (Without Water Service)	10,000	People With AFN (Requiring Accessible Long-Term Housing)	50
Damaged Natural and Cultural Resources and Historic Properties	30	People With AFN (Requiring Accessible Shelter)	750
Fatalities	5	People With AFN (Requiring Evacuation)	5,000
Jurisdictions Affected	6	People With AFN (Requiring Food and Water)	1,250
Miles Of Road Affected	20	People With AFN (Requiring Temporary, Non-Congregate Housing)	100
Partner Organizations Involved in Incident Management	30	People With Limited English Proficiency Affected	3,900
People Affected	60,000	Personnel	1,500
People Requiring Evacuation	20,000	Priority Intelligence Stakeholder Agencies/Entities	20
People Requiring Food and Water	5,000	Structure Fires	200
People Requiring Long-Term Housing	200		

Non-Standardized Impacts

NON-STANDARDIZED IMPACT ESTIMATES – PANDEMIC SCENARIO	
IMPACT CATEGORY	**ESTIMATE**
Acres Impacted	60,000+

4. Active Threat

Category: Human-Caused

Type: Active Shooter

Terrorism: Unknown

Context Description

It is a warm Friday afternoon in Salt Lake City as they prepare for the George Strait, Chris Stapleton, and Little Big Town Concert at the Rice – Eccles Stadium (expected crowd is around 60,000). Around 7:30 p.m., as the opening act is playing, popping sounds fill the stadium. At first, many fans think it is part of the concert as it is coming from multiple locations. Throughout the venue, fans begin to fall, which causes the crowd to panic and try to flee as they realize what is happening. Many people are trampled and call for help. As fans exit the stadium, they are greeted by more gunfire in the parking lot. The gunmen move through the stadium, shooting and stabbing fans and using incendiary devices to set the venue on fire.

As law enforcement arrives on scene, they are forced to retreat to the fieldhouse and the cemetery to avoid gunfire. As they regroup, the shots continue in the parking lot and the stadium. Fans continue to flee the area.

9-1-1 is overwhelmed with calls for help. The estimated number of victims is not known at this time. The number of gunmen is unknown, but at least 3 have been reported in different areas with automatic weapons and an unknown number of incendiary devices.

Standardized Impacts

STANDARDIZED IMPACT ESTIMATES – ACTIVE THREAT SCENARIO			
IMPACT CATEGORY	**ESTIMATE**	**IMPACT CATEGORY**	**ESTIMATE**
Affected Healthcare Facilities and Social Service Organizations	20	People Requiring Rescue	300
Businesses Closed Due to The Incident	15	People Requiring Screening	1,000
Customers (Without Communication Service)	20,000	People With Access and Functional Needs (AFN) Affected	12,000
Fatalities	130	People with Access and Functional Needs (Requiring Screening)	250
Jurisdictions Affected	24	People With AFN (Requiring Food and Water)	1,000
Miles Of Road Affected	10	People With Limited English Proficiency Affected	4,100
Partner Organizations Involved in Incident Management	50	Personnel	2,500
People Affected	60,000	Priority Intelligence Stakeholder Agencies/Entities	3

STANDARDIZED IMPACT ESTIMATES – ACTIVE THREAT SCENARIO			
IMPACT CATEGORY	**ESTIMATE**	**IMPACT CATEGORY**	**ESTIMATE**
People Requiring Food and Water	5,000	Structure Fires	1
People Requiring Medical Care	1,000		

Non-Standardized Impacts

NON-STANDARDIZED IMPACT ESTIMATES – ACTIVE THREAT SCENARIO	
IMPACT CATEGORY	**ESTIMATE**
People that Utilize a Family Reunification or Reception Center (mostly children separated from their parents or caregivers)	500
Fires in the Parking Lot	15
Items of Evidence (Including Belongings Left Behind in the Stadium)	30,000
Individuals Seeking Long-Term Mental Health Support	5,000
People Requiring Transport Away from the Stadium	10,000

Additional Considerations:

- Public relations for the University and the County; additional PR concerns as this happened at the university. What messaging will need to go out to students, parents, and alumni?
- Transportation will be an issue. Several individuals will have arrived at the stadium via public transport or ride share. These services will likely be largely unavailable in the immediate aftermath. Those that did drive themselves to the concert may be unable to leave with their own vehicle due to road closures. Several individuals may flee on foot and may be unable to access their vehicles for days once the scene is blocked off.
- There will be long-term mental health impacts for many attendees and victims.
- Reunification/reception center.
- Volunteers/VOAD.
- Fire in parking lots.
- The need for interpreters who will be needed without warning.
- Evidence control (belongings left behind) is a years long recovery effort and difficult to manage.

6. Cyberattack / Cyber Incident

Category: Human-Caused

Type: Cyber Attack

Terrorism: Yes

Context Description

On June 14th, SLCo experienced a severe cyber-attack that originated in the City of West Jordan. The incident began when West Jordan City's IT infrastructure was infiltrated through a phishing campaign, allowing hackers to deploy ransomware and encrypt critical systems. The interconnected nature of municipal and county IT systems allowed the ransomware to spread to SLCo's network. Early in the morning, SLCo's IT staff detected unusual network activity and multiple system errors, revealing the ransomware attack. The attackers demanded a ransom of $500,000 in cryptocurrency. SLCo immediately activated their cyber incident response protocols, isolating affected systems and contacting cybersecurity experts. Despite swift action, the attack impacted public safety dispatch systems and online services, causing initial disruptions but not halting vital city services.

By June 16th, the cyber-attack's impact on SLCo's financial systems became evident. Daily financial transactions, including payroll and vendor payments, were disrupted as the county's access to their financial system prevented them from selling their much-needed bonds. The security protocol in place requires authentication from the county network. This interruption caused a significant liquidity crunch, severely limiting SLCo's ability to manage its finances and maintain liquidity. The halt in financial transactions created immediate cash flow issues, delaying critical payments and increasing operational risks. Additionally, residents reported issues with water services due to compromised SCADA systems, leading to intermittent water supply and low pressure. SLCo extended the closure of non-essential county services to focus resources on incident response.

On June 18th, SLCo faced growing public concern and frustration as rumors about potential data breaches spread. The county reassured residents that sensitive financial data was not stored on compromised systems, emphasizing their commitment to data security. However, the ongoing outage of financial systems continued to exacerbate access to money, delaying payroll and vendor payments. SLCo extended payment deadlines and waived late fees for utility bills to mitigate the impact on residents. Public confidence wavered, but SLCo maintained transparent communication, establishing a hotline for residents and providing regular updates on the recovery efforts. Emergency measures, including bottled water distribution, were implemented to ensure public health and safety.

By June 20th, SLCo collaborated with neighboring jurisdictions and federal agencies to bolster their response efforts. The county worked with cybersecurity experts to decrypt

affected systems, prioritizing the restoration of financial transaction capabilities. Despite progress, the liquidity crunch persisted as financial systems remained partially offline, affecting daily operations.

On June 22nd, critical systems began to come back online, with financial transaction capabilities and water services prioritized for restoration. The liquidity crunch started to ease as the county resumed daily fund transfers, though operational delays continued. SLCo initiated a thorough review and analysis of the incident, identifying vulnerabilities and implementing measures to enhance future resilience against cyber threats.

Standardized Impacts

STANDARDIZED IMPACT ESTIMATES – CYBERATTACK SCENARIO			
IMPACT CATEGORY	**ESTIMATE**	**IMPACT CATEGORY**	**ESTIMATE**
Affected Healthcare Facilities and Social Service Organizations	7	People With Access and Functional Needs (AFN) Affected	75,000
Businesses Closed Due to The Incident	1	People With AFN (Requiring Food and Water)	7,500
Jurisdictions Affected	24	People With Limited English Proficiency Affected	19,500
Partner Organizations Involved in Incident Management	3	Personnel	200
People Affected	300,000	Priority Intelligence Stakeholder Agencies/Entities	6
People Requiring Food and Water	30,000		

Non-Standardized Impacts

NON-STANDARDIZED IMPACT ESTIMATES – CYBERATTACK SCENARIO	
IMPACT CATEGORY	**ESTIMATE**
Individuals with Impacted Water Services (Intermittent Water Supply and/or Low Pressure)	250,000
Jails Impacted	2
Inmates Impacted	1,850
Additional Considerations: • Digital phone services/VoIP may be impacted. • Public messaging. • Traffic lights and systems may be impacted. • May utilize local organizations, such as Meals on Wheels, to help distribute water and possibly food to impacted individuals. • Immunization and other medical services. • Impacts on schools that do not have water and school IT infrastructure that is impacted by the cyber event.	

7. Dam Failure

Category: Technological **Type:** Dam Failure **Terrorism:** No

Context Description

Preceding Conditions

Snowpack: The snow water equivalent (SWE) in the areas around the Salt Lake Valley are at 240% of normal.

Weather: March and April have seen an unusually high amount of precipitation due to a series of heavy rain events. The ground is saturated and water levels in the reservoir are at a record high.

Mountain Dell Dam Structural Integrity: Recent inspections have shown minor seepage but nothing alarming. However, the heavy rainfall and constant pressure on the dam have exacerbated hidden weaknesses.

April 14, 2025:

8:00 AM: Heavy rain continues to fall, adding to the already overburdened reservoir. Engineers monitor the situation closely but believe the dam will hold.

April 15, 2025:

10:00 AM: Increased seepage is observed on the downstream face of the dam. Engineers begin emergency protocols, including notifying local authorities and starting controlled releases of water.

6:00 PM: Seepage increases significantly, and minor cracking sounds are heard. The engineers suspect internal erosion, also known as piping, could compromise the dam's integrity.

April 16, 2025:

7:30 PM: A small breach appears near the base of the dam, and water begins to flow through. Efforts to plug the breach are initiated but are hampered by the volume of water and the worsening weather.

8:00 PM: The breach widens rapidly due to the force of the escaping water, leading to a complete structural collapse of the dam. A torrent of water is unleashed downstream.

8:15 PM: Salt Lake County Emergency Management issues an immediate evacuation order for areas downstream, including parts of south/southeastern Salt Lake City, Holladay, and Millcreek. Since it is a Friday afternoon, the roadways are inundated with commuters trying to leave the area.

8:30 PM: Floodwaters inundate the areas directly below the dam, causing significant damage to homes, businesses, and infrastructure. The speed and volume of the floodwaters catch many residents off guard, despite the evacuation orders. Several injuries are reported with potential fatalities as rescue operations continue. Floodwaters reach I-15, causing major disruptions in transportation and isolating some communities.

Standardized Impacts

STANDARDIZED IMPACT ESTIMATES – DAM FAILURE SCENARIO			
IMPACT CATEGORY	**ESTIMATE**	**IMPACT CATEGORY**	**ESTIMATE**
Affected Healthcare Facilities and Social Service Organizations	20	People Requiring Long-Term Housing	1,500
Animals Requiring Shelter, Food, And Water	4,000	People Requiring Medical Care	500
Businesses Closed Due to The Incident	100	People Requiring Rescue	100
Customers (Without Power Service)	10,000	People Requiring Shelter	10,000
Customers (Without Wastewater Service)	5,000	People Requiring Temporary, Non-Congregate Housing	1,000
Customers (Without Water Service)	20,000	People With Access and Functional Needs (AFN) Affected	25,000
Damaged Natural and Cultural Resources and Historic Properties	25	People With AFN (Requiring Accessible Long-Term Housing)	300
Fatalities	50	People With AFN (Requiring Accessible Shelter)	2,500
Hazmat Release Sites	20	People With AFN (Requiring Evacuation)	15,000
Jurisdictions Affected	4	People With AFN (Requiring Food and Water)	500
Miles Of Road Affected	30	People With AFN (Requiring Temporary, Non-Congregate Housing)	250
Partner Organizations Involved in Incident Management	30	People With Limited English Proficiency Affected	6,500
People Affected	100,000	Personnel	1,500
People Requiring Evacuation	60,000	Priority Intelligence Stakeholder Agencies/Entities	10
People Requiring Food and Water	2,000	Structure Fires	2

8. Hazardous Materials Release

Category: Technological **Type:** Hazmat Release - Chemical **Terrorism:** No

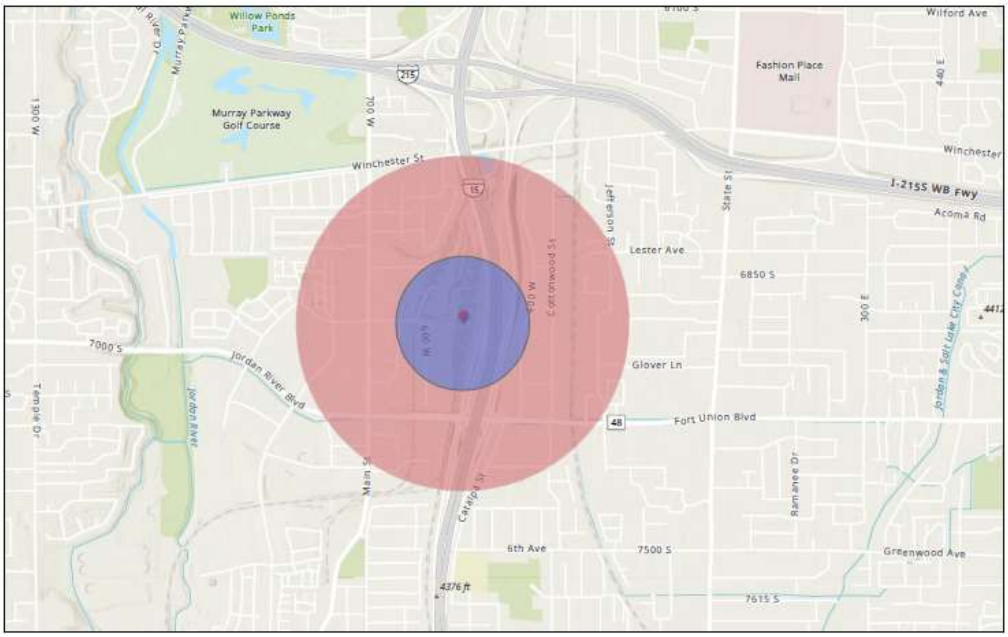
Context Description

Preceding Conditions

Weather: It has been an unusually hot and dry spring and summer. Temperature have been in the mid to high 90s for the past month with very low humidity (average of 10%) and very little precipitation.

June 25, 2025

9:00 AM: A rail tank car, which was on the west unloading rack (7200 south) in Midvale, sustained a sudden and catastrophic rupture that propelled the tank of the tank car an estimated 750 feet. This in turn caused several other rail tank cars to rupture and ignite. The 20,000-gallon tank car initially contained about 161,700 pounds (14,185 gallons) of isooctane. 9-1-1 is overwhelmed with calls of severe injuries and the calls are overwhelming cell towers in the area. Savage Rail Company had approximately 10 employees onsite at the time of the collision. Amazon and Union Pacific are reporting significant damage to their facilities and several calls for help can be heard from within their buildings. Several other businesses in the area have requested assistance in evacuating their employees. Traffic on I-15 is significantly impacted, and several accidents have been reported near the plant. See the map below for the estimated evacuation zones.



Standardized Impacts

STANDARDIZED IMPACT ESTIMATES – HAZARDOUS MATERIALS RELEASE SCENARIO			
IMPACT CATEGORY	**ESTIMATE**	**IMPACT CATEGORY**	**ESTIMATE**
Affected Healthcare Facilities and Social Service Organizations	6	People Requiring Long-Term Housing	10
Animals Requiring Shelter, Food, And Water	10	People Requiring Medical Care	500
Businesses Closed Due to The Incident	100	People Requiring Rescue	50
Customers (Without Communication Service)	10	People Requiring Shelter	30
Customers (Without Power Service)	500	People Requiring Temporary, Non-Congregate Housing	5
Damaged Natural and Cultural Resources and Historic Properties	1	People With Access and Functional Needs (AFN) Affected	5,000
Exposed Individuals - Hazmat-Related Incidents (OPTIONAL)	11,000	People With AFN (Requiring Accessible Long-Term Housing)	3
Fatalities	25	People With AFN (Requiring Accessible Shelter)	10
Hazmat Release Sites	1	People With AFN (Requiring Evacuation)	2,750
Jurisdictions Affected	3	People With AFN (Requiring Food and Water)	50
Miles Of Road Affected	2	People With AFN (Requiring Temporary, Non-Congregate Housing)	2
Partner Organizations Involved in Incident Management	10	People With Limited English Proficiency Affected	1,300
People Affected	20,000	Personnel	300
People Requiring Evacuation	11,000	Priority Intelligence Stakeholder Agencies/Entities	10
People Requiring Food and Water	200	Structure Fires	4

Non-Standardized Impacts

NON-STANDARDIZED IMPACT ESTIMATES – HAZARDOUS MATERIALS RELEASE SCENARIO	
IMPACT CATEGORY	**ESTIMATE**
Super Fund Sites in Reuse within a 5-Mile Radius (Midvale Slag, Sharon Steel Corp., Pallas Yard, Murray Smelter)	4
Public Transportation Services Impacted (UTA red and blue lines and the Frontrunner)	3
Grocery Stores in the Evacuation Zone (1 grocery store, 2 gas station/convenience stores, and 1 bakery)	1

V. THIRA Steps 3 and SPR Summary Data

1. Planning

Description: Conduct a systematic process engaging the whole community as appropriate in the development of executable strategic, operational, and/or tactical-level approaches to meet defined objectives.

THIRA Step 3: Capability Target

Within every **1 year**, update all emergency operations plans (CEMPs) that define the roles and responsibilities of **60** partner organizations involved in incident management across **24** jurisdictions affected, and the sequence and scope of tasks needed to prevent, protect, mitigate, respond to, and recover from events.

Context and Comments

The timeframe of 1 year is provided as the CEMP and its annexes state they are reviewed and updated annually. In the CEMP, it lists approximately 60 response partners and 24 jurisdictions (23 cities/towns and Salt Lake County itself). Local jurisdictions should also review their plans annually.

Partners in the CEMP include: all 24 jurisdictions, 9 County departments and agencies (as listed in the CEMP: County EM, Mayor's Office, Health Department, Information Services, Public Works, Human Services, Mayor's Office of Finance, Unified Police, and Unified Fire), the County's Sheriff's Office, SL VECC 911 Center, Salt Lake City 911 (Central Dispatch), State Division of Emergency Management, State Bureau of Investigation, FEMA, FBI, American Red Cross, Faith-Based Organizations (4), MOSAIC Inter-Faith Ministries, the Salvation Army, and Private Sector (~15, including utility companies).

While there are more response partners in the County, not all of them have official roles in the County's emergency operations plan. If the County strives to include more partners in regular emergency management planning, this target capability can be increased.

Planning for an earthquake and active threat is extremely challenging due to both incidents occurring with little to no warning, involving numerous response partners, and having significant and widespread impacts.

The threat or hazard that most challenges the County's ability to achieve this capability target is an **Earthquake** or **Active Threat**.

SPR Overview

Assessment of Current Capability

Within every **1 year**, update all emergency operations plans (CEMPs) that define the roles and responsibilities of **60** partner organizations involved in incident management across **24** jurisdictions affected, and the sequence and scope of tasks needed to prevent, protect, mitigate, respond to, and recover from events.

Quantitative Assessment

Metric	Capability Target	Capability Lost	Capability Sustained	Capability Built	Estimated Current Capability	Capability Gap
Partner Organizations	60		X		60	0
Jurisdictions Affected	24		X		24	0

Qualitative Assessment

Over the past year, the County lost planning capability as the Recovery Plan has not been updated in years and there are inconsistent planning efforts across jurisdictions. The County sustained planning capability by continuing to review the Comprehensive Emergency Management Plan (CEMP), updating the Multi-Jurisdictional Hazard Mitigation Plan and other hazard vulnerability documents, conducting a variety of training and exercises, and engaging emergency management partners. The County built planning capability by increasing knowledge of the THIRA and HMP processes, developing a greater understanding of the CEMP, creating a planning group to share knowledge and plans, and developing or updating Continuity documents for most County departments and agencies.

Gaps in the POETE Areas

Gaps in the Planning capability include:

- The need for additional annexes to the CEMP, plans for each jurisdiction, standard operating procedures, Incident Action Plan(s), and jurisdictional risk assessments.
- Organization gaps include the lack of full-time emergency management staff in some jurisdictions, not enough planning-specific staff in SLCo EM, and a lack of understanding on a county-wide level of an individual's and department's role in emergency management.

Level of Confidence in the Accuracy of the Capability Assessment: 4

5 is the highest level of confidence and 1 is the lowest level of confidence

Priority Placed on Sustaining and/or Building this Capability Target: High

2. Public Information and Warning

Description: Deliver coordinated, prompt, reliable, and actionable information to the whole community through the use of clear, consistent, accessible, and culturally and linguistically appropriate methods to effectively relay information regarding any threat or hazard, as well as the actions being taken and the assistance being made available, as appropriate.

THIRA Step 3: Capability Target

Within a **4-hour** notice of an incident, deliver reliable and actionable information to **1,200,000** people affected, including **300,000** people with access and functional needs (affected) and **125,000** people with limited English proficiency (LEP) affected.

Context and Comments

While in most incidents, the goal should be to get information out to the public as soon as possible, County officials need to ensure this information is both reliable and actionable. The County has developed multiple target capabilities that are dependent on the type of incident.

In an earthquake scenario, the entire population needs to be alerted with actionable information. However, communication systems will likely be down, and the number of people without reliable communication will be high (an estimated 600,000 people will be without communication service). Therefore, getting information to the entire population, even if the County is using all possible means and alert systems available to them, is going to be challenging. The County also needs to ensure this information is actionable (what areas to avoid because of damages, where/how people can be reunited with family, where people can go for support services, etc.). The County population does not necessarily need to be alerted that an earthquake occurred as they will be aware of that and have felt the impact.

In a dam failure, hazardous materials release, or wildfire that requires immediate evacuation of community members, the target capability may be: Within a **30-minute** notice of an incident, deliver reliable and actionable information to **60,000 (dam failure), 11,000 (hazardous materials release), or 20,000 (wildfire)** people affected… [the rest of the target is proportionately the same]. The timeline to get the information out to the entire affected population is 30 minutes as individuals may need to evacuate immediately in these situations.

For an active threat, the timeframe for pushing out public messages is situation dependent. The County may use a WEA/EAS to send an immediate message about a known threat, but a more detailed public message will take longer to develop. The target following an active threat is "within **90 minutes** of an incident, deliver reliable and actionable information to **60,000** people affected… [the rest of the target is proportionately the same].

The number of people with AFN is estimated to be 25% of the population. The number of people in the County with LEP is estimated to be 6.9% of people over 5 years old.

The threat or hazard that most challenges the County's ability to achieve this capability target is an **Earthquake**.

SPR Overview

Assessment of Current Capability

Within a **60-minute** notice of an incident, deliver reliable and actionable information to **48,000** people affected, including **12,000** people with access and functional needs (affected) and **3,300** people with limited English proficiency affected.

Quantitative Assessment

Metric	Capability Target	Capability Lost	Capability Sustained	Capability Built	Estimated Current Capability	Capability Gap

People Affected	1,200,000		X		48,000	1,152,000
People with AFN Affected	300,000		X		12,000	288,000
People with limited English proficiency	125,000		X		3,300	121,700

Qualitative Assessment

A qualitative assessment of the Public Information and Warning capability was not provided. Questions related to how capability was lost, sustained, and built related to Public Information and Warning were not answered on the survey or discussed during Planning Meeting #3 or throughout the SPR process.

Gaps in the POETE Areas

Gaps in the Public Information and Warning capability include:

- Planning gaps include the lack of a Public Information Plan (including pre-scripted messaging) and Countywide Communications Plan.
- Organizational gaps with a lack of PIO staff in SLCo EM
- Equipment gaps include the lack of a Countywide mass notification system.
- The lack of training and exercises related to public information and warning as well as the lack of trainers within the County that can provide training.

Level of Confidence in the Accuracy of the Capability Assessment: 5

5 is the highest level of confidence and 1 is the lowest level of confidence

Priority Placed on Sustaining and/or Building this Capability Target: Medium

3. Operational Coordination

Description: Establish and maintain a unified and coordinated operational structure and process that appropriately integrates all critical stakeholders and supports the execution of Core Capabilities.

THIRA Step 3: Capability Target

Within **3 hours** of a potential or actual incident, establish and maintain a unified and coordinated operational structure and process across **24** jurisdictions affected and with **60** partner organizations involved in incident management. Maintain for **14 days**.

Context and Comments

The County aims to establish their Emergency Coordination Center (ECC) as quickly as possible. The Salt Lake County Emergency Manager or County Mayor must activate the ECC and determine the level of activation needed (enhanced watch or levels 1-3). While the decision to activate and activation level can be determined quickly, it will take time to notify partners and for these partners to arrive at the ECC and begin response operations as a unified and coordinated structure, especially in an earthquake when critical infrastructure, such as communications and transportation, is severely damaged. Select County emergency management employees are encouraged to check on their family first during an incident then report to the ECC or other designated meet-up location as quickly as possible to begin establishing a response structure.

Note that the timeframe for establishing and maintaining a unified and coordinated operational structure may be different for each jurisdiction within the County. Depending on the severity of the incident and what area of the County is most impacted, a local jurisdiction's ability to respond will differ. The County aims to begin developing a unified, coordinated response structure within 3 hours, but may not be able establish operational communication with all jurisdictions and response partners within that timeframe, depending on the status of the communication infrastructure.

This response structure should include all 24 jurisdictions affected and all 60 partners laid out in the CEMP. The CEMP includes the following partners: all 24 jurisdictions, 9 County departments and agencies (as listed in the CEMP: County EM, Mayor's Office, Health Department, Information Services, Public Works, Human Services, Mayor's Office of Finance, Unified Police, and Unified Fire), the County's Sheriff's Office, SL VECC 911 Center, Salt Lake City 911 (Central Dispatch), State Division of Emergency Management, State Bureau of Investigation, FEMA, FBI, American Red Cross, Faith-Based Organizations (4), MOSAIC Inter-Faith Ministries, the Salvation Army, and Private Sector (~15, including utility companies).

The County's goal is to maintain the incident response structure for 14 days as this will allow adequate response to most incidents. While some events will require a longer response (i.e., a catastrophic earthquake or pandemic), in these instances the response

structure will change over the length of the event and/or additional resources and personnel, such as an Incident Management Team, will be brought in from outside the County to assist the County.

Maximum Target Capability:

Within **3 hours** of a potential or actual incident, establish and maintain a unified and coordinated operational structure and process across **24** jurisdictions affected and with **100** partner organizations involved in incident management. Maintain for **18 months**.

This maximum target capability is geared towards a pandemic scenario. In that instance, the organizational structure will require additional partners (likely a maximum of 100 as there are currently 83 partners listed in the Public Health Annex to the CEMP). Additionally, a pandemic response will need to be sustained for a longer period of time. While some jurisdictions experienced a longer response time than 18 months during the COVID-19 pandemic, by the time jurisdictions reached 18 months, the intensity of the response, number of response personnel, and number of response organizations had decreased. Jurisdictions saw a high rate of staff turnover during the COVID-19 Pandemic and staff burnout. While the County may respond to a pandemic for longer than 18 months, it should strive to have the capability for at least that long in a pandemic, understanding that the response environment, resources, and personnel needs will change over time.

The earthquake scenario poses challenges in achieving this capability as infrastructure systems will be greatly impacted, making it difficult to get in contact with all response partners, gather at a physical ECC/EOC, or operate a virtual EOC (if communication services are down). An active shooter is difficult in its own way due to the high number of agencies that are responding in a short amount of time. Many of these agencies may not work together regularly and establishing a unified structure may be challenging.

The threat or hazard that most challenges the County's ability to achieve this capability target is an **Earthquake** or **Active Threat**.

SPR Overview

Assessment of Current Capability

Within **4 hours*** of a potential or actual incident, establish and maintain a unified and coordinated operational structure and process across **24** jurisdictions affected and with **60** partner organizations involved in incident management. Maintain for **14 days**.

**Survey respondents assessed the County's current capability as 2-6 hours from the time of the incident to establish a unified and coordinated operational structure. The average timeframe was 4 hours.*

Quantitative Assessment

Metric	Capability Target	Capability Lost	Capability Sustained	Capability Built	Estimated Current Capability	Capability Gap
Partner Organizations	60		X		60	0
Jurisdictions Affected	24		X		24	0

Qualitative Assessment

Over the last year, the County lost Operational Coordination capability due to staffing vacancies, a lack of focus and priority given to emergency management, and a lack of county-wide training and exercises. The County sustained its capability by maintaining its response equipment and continuing to engage emergency management partners and build relationships. The County built Operational Coordination capability by filling staffing vacancies within SLCo EM, improving coordination with response partners and executives, and increasing regional cooperation.

Gaps in the POETE Areas

Gaps in the Operational Coordination capability include:

- Not having full-time emergency management staff in all jurisdictions.
- Lack of common response processes (i.e., ICS) and common operating picture at the organizational level.
- Lack of understanding from some departments/agencies/organizations on how they fit into the larger response structure and emergency management system. Lack of understanding from some individuals on their role in emergency management.

Level of Confidence in the Accuracy of the Capability Assessment: 4

5 is the highest level of confidence and 1 is the lowest level of confidence

Priority Placed on Sustaining and/or Building this Capability Target: High

4. Intelligence and Information Sharing

Description: Provide timely, accurate, and actionable information resulting from the planning, direction, collection, exploitation, processing, analysis, production, dissemination, evaluation, and feedback of available information concerning physical and cyber threats to the United States, its people, property, or interests; the development, proliferation, or use of WMDs; or any other matter bearing on U.S. national or homeland security by local, state, tribal, territorial, Federal, and other stakeholders. Information sharing is the ability to exchange intelligence, information, data, or knowledge among government or private sector entities, as appropriate.

THIRA Step 3: Capability Target

During steady state, and in conjunction with the fusion center and/or Joint Terrorism Task Force (JTTF), every **1 year**, review the 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 **20** personnel assigned to support execution of the intelligence cycle.

Then, within **30 minutes** 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 **7** priority intelligence stakeholder agencies/entities in accordance with the intelligence cycle and all dissemination protocols.

Context and Comments

The *Active Threat Annex* to the *Salt Lake County Comprehensive Emergency Management Plan* states that it will be reviewed and updated annually. The 20 personnel assigned to support the intelligence cycle represent primary and support from local law enforcement agencies, the Unified Police Department, the County Sheriff's Office, the Unified Fire Authority, SL VECC, Fusion Center / JTTF, tribal police, and the State Bureau of Investigation. Although any single incident will likely not involve all of these jurisdictions/agencies, members from each should be assigned and trained to support the intelligence cycle for their jurisdiction/agency.

Within 30 minutes, the information should be shared with partners according to the intelligence cycle and dissemination protocols. The 7 organizations that should be privy to this information as soon as possible include law enforcement in the jurisdiction in which the incident occurs, the Unified Police Department of the affected precinct, the County Sheriff's Office, the Civil Support Team, Unified Fire Authority [particularly if firefighter, medical services, or search and rescue operations are needed], SL VECC, the Utah State Bureau of Investigation, and Federal Bureau of Investigation.

The threat or hazard that most challenges the County's ability to achieve this capability target is an **Active Threat**.

SPR Overview

Assessment of Current Capability

During steady state, and in conjunction with the fusion center and/or Joint Terrorism Task Force (JTTF), every ____, review the 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 ____ personnel assigned to support execution of the intelligence cycle.

Then, within ____ 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 ____ priority intelligence stakeholder agencies/entities in accordance with the intelligence cycle and all dissemination protocols.

Quantitative Assessment

Metric	Capability Target	Capability Lost	Capability Sustained	Capability Built	Estimated Current Capability	Capability Gap
Personnel	20					
Priority Intelligence Stakeholder Agencies/Entities	7					

Qualitative Assessment

A qualitative assessment of the Intelligence and Information Sharing capability was not provided. Questions related to how capability was lost, sustained, and built related to Intelligence and Information Sharing were not answered on the survey or discussed during Planning Meeting #3 or throughout the SPR process.

Gaps in the POETE Areas

There were no gaps identified in the Intelligence and Information Sharing capability. County personnel and subject matter experts for this capability engaged during the THIRA process and helped develop the target capabilities, but did not provide feedback during the SPR process regarding this core capability.

Level of Confidence in the Accuracy of the Capability Assessment: Low

5 is the highest level of confidence and 1 is the lowest level of confidence

Priority Placed on Sustaining and/or Building this Capability Target: Medium

5. Interdiction and Disruption

Description: Delay, divert, intercept, halt, apprehend, or secure threats and/or hazards.

THIRA Step 3: Capability Target

Within **30 minutes** 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.

Context and Comments

Within 30 minutes of an incident, the agency/jurisdiction leading the incident should have notified the fusion center and JTTF and identified 50 personnel to support the interdiction and disruption activities. These 50 personnel may come from the impacted city, neighboring cities, Salt Lake County (UPD, UFA, Sheriff, Health Department, SL VECC), Civil Support Team, neighboring counties, the state, and/or the FBI field office.

An active threat or terrorism incident of any kind will start locally and expand as the situation unfolds and requires additional personnel and agencies. Depending on the situation, 50 personnel may not be assigned within 30 minutes to support interdiction and disruption activities, but these numbers are realistic for a large-scale event and/or event that is a known terrorist attack or active threat from the onset.

The local impacted jurisdiction(s) and, as needed, County partners will identify needed partners and personnel shortfalls.

If a threat is identified as credible and/or a known terrorist attack, notifying federal partners within 30 minutes is a reasonable target. However, in some instances, officials may not know right away whether the event is an act of terrorism, thus, notification to federal partners may more realistically occur 90 minutes following an incident.

The threat or hazard that most challenges the County's ability to achieve this capability target is an **Active Threat**.

SPR Overview

Assessment of Current Capability

Within **2 hours** 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 **25** personnel assigned to support follow up interdiction and disruption activities that may be undertaken against identified suspects and/or contraband.

Quantitative Assessment

Metric	Capability Target	Capability Lost	Capability Sustained	Capability Built	Estimated Current Capability	Capability Gap
Personnel	50				25	25

Qualitative Assessment

Over the last year, the County lost Interdiction and Disruption capability due to the need for the Unified Police Department (UPD) and Salt Lake County Sheriff's Office (SLCOSO) to right-size their response capabilities, including developing new policies and procuring new equipment following the split of the two agencies. The County sustained its capability as it continued to provide training and exercise opportunities at the same cadence as in previous years. The County built capability due to the split between the two agencies and the new organizational structure and leadership.

Gaps in the POETE Areas

Gaps in the Interdiction and Disruption capability include:

- A gap in planning, policies, procedures, and equipment due to the split of the UPD and SLCOSO. All of these gaps are actively being worked on as the two agencies establish themselves.

Level of Confidence in the Accuracy of the Capability Assessment: 3

5 is the highest level of confidence and 1 is the lowest level of confidence

Priority Placed on Sustaining and/or Building this Capability Target: Medium

6. Screening, Search, and Detection

Description: Identify, discover, or locate threats and/or hazards through active and passive surveillance and search procedures. This may include the use of systematic examinations and assessments, biosurveillance, sensor technologies, or physical investigation and intelligence.

THIRA Step 3: Capability Target

Within **36 hours** of notice of a credible threat, conduct screening, search, and detection operations for **1,000** people requiring screening, including **250** people with access and functional needs (requiring screening).

Context and Comments

Following an incident, it takes time to get personnel and resources in the area to conduct thorough screening, search, and detection operations. Initially, officers on the scene will do a basic screening as they search for the active threat. However, a more thorough search in a large area or crowd (i.e., during a big concert) will take additional time and resources.

In the active threat scenario at a concert, many individuals will immediately flee the venue when they realize what is occurring. Some individuals may remain behind if they are injured, hiding in the stadium, or have been instructed to. Law enforcement officials will work to clear the entire stadium, which will take several hours. If the suspect(s) have not been found, officials will continue to search the entire campus and surrounding area, which will require the screening and searching of nearly 1,000 individuals and will take over a day. This is very situation dependent. In a typical active shooter situation, most adults will flee the area, thus, there will not be many people left in the vicinity to screen or search.

This situation changes in a CBRNE event. CST has monitors to assist with quickly screening and detecting people.

Throughout the THIRA impacts document and scenario, the estimated percentage of the population with an AFN is 25%.

The threat or hazard that most challenges the County's ability to achieve this capability target is an **Active Threat**.

SPR Overview

Assessment of Current Capability

Within ____ of notice of a credible threat, conduct screening, search, and detection operations for ____ people requiring screening, including ____ people with access and functional needs (requiring screening).

Quantitative Assessment

Metric	Capability Target	Capability Lost	Capability Sustained	Capability Built	Estimated Current Capability	Capability Gap
People Requiring Screening	1,000					
People with AFN Requiring Screening	250					

Qualitative Assessment

A qualitative assessment of the Screening, Search, and Detection capability was not provided. Questions related to how capability was lost, sustained, and built related to Screening, Search, and Detection were not answered on the survey or discussed during Planning Meeting #3 or throughout the SPR process.

Gaps in the POETE Areas

There were no gaps identified for the Screening, Search, and Detection capability. County personnel subject matter experts for this capability engaged during the THIRA process and helped develop the target capabilities, but did not provide feedback during the SPR process regarding this core capability.

Level of Confidence in the Accuracy of the Capability Assessment: ___

5 is the highest level of confidence and 1 is the lowest level of confidence

Priority Placed on Sustaining and/or Building this Capability Target: ___

7. Forensics and Attribution

Description: Conduct forensic analysis and attribute terrorist acts (including the means and methods of terrorism) to their source, to include forensic analysis as well as attribution for an attack and for the preparation for an attack, in an effort to prevent initial or follow-on acts and/or swiftly develop counter options.

THIRA Step 3: Capability Target

Within **30 minutes** of a suspected terrorist attack, conduct outreach to the fusion center and Joint Terrorism Task Force (JTTF) in the community and identify **12** 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.

Context and Comments

The estimated 12 personnel represent a primary and alternate for each jurisdiction or organization (law enforcement for the jurisdiction in which the incident occurs, the Unified Police Department of the affected precinct, the County Sheriff's Office, Salt Lake Valley Emergency Communications Center (SL VECC), Civil Support Team (CST), the Utah State Bureau of Investigation, and the Salt Lake City FBI Field Office).

The goal is to inform these key stakeholders, the fusion center, and JTTF within 30 minutes of a *suspected* terrorist attack. Depending on the situation, it may take more than 30 minutes to assess whether a terrorist attack has occurred, but partner notification and identification of personnel will begin as soon as credible intel is received. The local jurisdiction will first contact the County, then the State, and then Federal entities. Once notice of a credible threat occurs, the impacted jurisdiction will notify partners within 30 minutes.

Special events and large public events may impede crime scene preservation, the collection and analysis of evidence, the identification of perpetrators, and the investigation.

The threat or hazard that most challenges the County's ability to achieve this capability target is an **Active Threat**.

SPR Overview

Assessment of Current Capability

Within ___ of a suspected terrorist attack, conduct outreach to the fusion center and Joint Terrorism Task Force (JTTF) in the community and identify ___ 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.

Quantitative Assessment

Metric	Capability Target	Capability Lost	Capability Sustained	Capability Built	Estimated Current Capability	Capability Gap
Personnel	12					

Qualitative Assessment

A qualitative assessment of the Forensics and Attribution capability was not provided. Questions related to how capability was lost, sustained, and built related to Forensics and Attribution were not answered on the survey or discussed during Planning Meeting #3 or throughout the SPR process.

Gaps in the POETE Areas

There were no gaps identified for the Forensics and Attribution capability. County personnel subject matter experts for this capability engaged during the THIRA process and helped develop the target capabilities, but did not provide feedback during the SPR process regarding this core capability.

Level of Confidence in the Accuracy of the Capability Assessment: ___

5 is the highest level of confidence and 1 is the lowest level of confidence

Priority Placed on Sustaining and/or Building this Capability Target: ___

8. Access Control and Identify Verification

Description: Apply and support necessary physical, technological, and cyber measures to control admittance to critical locations and systems.

THIRA Step 3: Capability Target

Within **3 hours** of an event, be prepared to accept credentials from **25** partner organizations involved in incident management.

Context and Comments

When an active threat situation initially occurs, officers will respond immediately and spring into action inside the stadium as quickly as possible. There will be no initial system for accepting or verifying the credentials of officers from different departments. The department/jurisdiction leading the accident will work to establish a perimeter and receive the credentials of officials working the scene on their way out of the stadium.

Partner organizations include multiple law enforcement agencies (city, county, and state), fire and EMS agencies, SWAT, Bomb Squad Units, the Civil Support Team, etc.

The lead agency on-scene will establish an Incident Command Post and County emergency management will support through the Emergency Coordination Center. These locations will also establish a system to accept credentials from other organizations, some of which may not have worked in the County before.

The threat or hazard that most challenges the County's ability to achieve this capability target is an **Active Threat**.

SPR Overview

Assessment of Current Capability

Within _____ of an event, be prepared to accept credentials from ___ partner organizations involved in incident management.

Quantitative Assessment

Metric	Capability Target	Capability Lost	Capability Sustained	Capability Built	Estimated Current Capability	Capability Gap
Partner Organizations	25					

Qualitative Assessment

A qualitative assessment of the Access Control and Identity Verification capability was not provided. Questions related to how capability was lost, sustained, and built related to Access Control and Identity Verification were not answered on the survey or discussed during Planning Meeting #3 or throughout the SPR process.

Gaps in the POETE Areas

There were no gaps identified for the Access Control and Identity Verification capability. County personnel subject matter experts for this capability engaged during the THIRA process and helped develop the target capabilities, but did not provide feedback during the SPR process regarding this core capability.

Level of Confidence in the Accuracy of the Capability Assessment: ___

5 is the highest level of confidence and 1 is the lowest level of confidence

Priority Placed on Sustaining and/or Building this Capability Target: ___

9. Cybersecurity

Description: Protect (and, if needed, restore) electronic communications systems, information, and services from damage, unauthorized use, and exploitation.

THIRA Step 3: Capability Target

Every **1 year**, appropriate authorities review and update cyber incident plans/annexes based on evolving threats covering **1,000** publicly managed and/or regulated critical infrastructure facilities.

Context and Comments

The goal of reviewing plans/annexes yearly is based on information in the County's CEMP which states plans/annexes should be reviewed annually. The County IT staff continuously reviews and updates the County's cybersecurity plans, policies, and documents. The County aims to review the cybersecurity plan in its entirety on a yearly basis.

The exact number of publicly managed and/or regulated critical infrastructure facilities is difficult to determine. For this THIRA/SPR, the County is defining critical infrastructure as public assets that are so important that their destruction or incapacitation would have a debilitating impact on the County's security, public health, and economy. This includes roads and traffic control, bridges, storm water control mechanisms, water and sewer treatment facilities, water disruption systems, police and fire stations, and power and gas distribution systems. Other important facilities include transportation (airport, bus, and light rail), jails, prisons, and communications.

The threat or hazard that most challenges the County's ability to achieve this capability target is an **Cyber Attack / Cyber Incident.**

SPR Overview

Assessment of Current Capability

Every _____, appropriate authorities review and update cyber incident plans/annexes based on evolving threats covering ____ publicly managed and/or regulated critical infrastructure facilities.

Quantitative Assessment

Metric	Capability Target	Capability Lost	Capability Sustained	Capability Built	Estimated Current Capability	Capability Gap

Publicly Managed and/or Regulated Critical Infrastructure Facilities	1,000		X		1,000	0

Qualitative Assessment

A qualitative assessment of the Cybersecurity capability was not provided. Questions related to how capability was lost, sustained, and built related to Cybersecurity were not answered on the survey or discussed during Planning Meeting #3 or the SPR process.

As noted during Planning Meeting #3, the County lacks an updated Cyber Threat Incident Annex/Procedures that is available to County employees. Without this plan, it is difficult to estimate the County's cybersecurity capabilities and ability to respond to a cybersecurity incident. The County is conducted a cybersecurity tabletop in December 2024.

Gaps in the POETE Areas

Gaps in the Cybersecurity capability include:

- A lack of a Cyber Threat Incident Annex/Procedures that is available to County employees. IT maintains a Technology Disaster Recovery Plan (ITDRP), but Emergency Management staff have not seen this plan.
- A lack of engagement with IT staff and lack of integration of Emergency Management in IT's planning for a cyber response.
- Lack of exercises on cybersecurity.

Level of Confidence in the Accuracy of the Capability Assessment: ___

5 is the highest level of confidence and 1 is the lowest level of confidence

Priority Placed on Sustaining and/or Building this Capability Target: ___

10. Physical Protective Measures

Description: Implement and maintain risk-informed countermeasures and policies protecting people, borders, structures, materials, products, and systems associated with key operational activities and critical infrastructure sectors.

THIRA Step 3: Capability Target

Within **1 year** of completing a risk and vulnerability assessment, appropriate authorities review and update physical security plans covering **1,000** publicly managed and/or regulated critical infrastructure facilities to incorporate new information from the assessment.

Context and Comments

Following the completion of this risk assessment, the County should review their physical security plans for critical infrastructure in the County to assess for accuracy and update as needed.

The exact number of publicly managed and/or regulated critical infrastructure facilities is difficult to determine. For this THIRA/SPR, the County is defining critical infrastructure as public assets that are so important that their destruction or incapacitation would have a debilitating impact on the County's security, public health, and economy. This includes roads and traffic control, bridges, storm water control mechanisms, water and sewer treatment facilities, water disruption systems, police and fire stations, and power and gas distribution systems. Other important facilities include transportation (airport, bus, and light rail), jails, prisons, and communications.

The threat or hazard that most challenges the County's ability to achieve this capability target is an **Earthquake** or **Active Threat**.

SPR Overview

Assessment of Current Capability

Within ___ of completing a risk and vulnerability assessment, appropriate authorities review and update physical security plans covering ___ publicly managed and/or regulated critical infrastructure facilities to incorporate new information from the assessment.

Quantitative Assessment

Metric	Capability Target	Capability Lost	Capability Sustained	Capability Built	Estimated Current Capability	Capability Gap
Publicly Managed and/or Regulated Critical Infrastructure Facilities	1,000					

Qualitative Assessment

A qualitative assessment of the Physical Protective Measures capability was not provided. Questions related to how capability was lost, sustained, and built related to Physical Protective Measures were not answered on the survey or discussed during Planning Meeting #3 or throughout the SPR process.

Gaps in the POETE Areas

There were no gaps identified for the Physical Protective Measures capability. County personnel subject matter experts for this capability engaged during the THIRA process and helped develop the target capabilities, but did not provide feedback during the SPR process regarding this core capability.

Level of Confidence in the Accuracy of the Capability Assessment: ___

5 is the highest level of confidence and 1 is the lowest level of confidence

Priority Placed on Sustaining and/or Building this Capability Target: ___

11. Risk Management for Protection Programs and Activities

Description: Identify, assess, and prioritize risks to inform Protection activities, countermeasures, and investments.

THIRA Step 3: Capability Target

Every **5 years**, appropriate authorities conduct a review of relevant physical and cyber threats and hazards, vulnerability, and strategies for risk management covering **1,000** publicly managed and/or regulated critical infrastructure facilities.

Context and Comments

The County Hazard Mitigation Plan is updated on a five-year cycle. At that time, the County should also review physical and cyber threats and hazards, vulnerabilities, and strategies for risk management.

The exact number of publicly managed and/or regulated critical infrastructure facilities is difficult to determine. For this THIRA/SPR, the County is defining critical infrastructure as public assets that are so important that their destruction or incapacitation would have a debilitating impact on the County's security, public health, and economy. This includes roads and traffic control, bridges, storm water control mechanisms, water and sewer treatment facilities, water disruption systems, police and fire stations, and power and gas distribution systems. Other important facilities include transportation (airport, bus, and light rail), jails, prisons, and communications.

Note: this capability could also be interpreted as how often the County intends to physically review/inspect key critical infrastructure (e.g., how often they inspect things like bridges, high-risk dams, etc.). So, if desired, the County can update this capability target to have a shorter timeframe (monthly, yearly) and update the number of critical infrastructure facilities to include those that are "high risk" and/or should be inspected regularly per the established timeframe.

The threat or hazard that most challenges the County's ability to achieve this capability target is an **Earthquake**.

SPR Overview

Assessment of Current Capability

Every ____, appropriate authorities conduct a review of relevant physical and cyber threats and hazards, vulnerability, and strategies for risk management covering ___ publicly managed and/or regulated critical infrastructure facilities.

Quantitative Assessment

Metric	Capability Target	Capability Lost	Capability Sustained	Capability Built	Estimated Current Capability	Capability Gap
Publicly Managed and/or Regulated Critical Infrastructure Facilities	1,000					

Qualitative Assessment

Over the last year, the County lost Risk Management for Protective Programs and Services as it no longer has an ESRI license, impacting the County's ability to use certain GIS functions and tools. The County sustained capability as many jurisdictions are working on some level of risk assessment, the County is in the process of updating the Multi-Jurisdictional Hazard Mitigation Plan, and the Health Department is working on hazard vulnerability documents. All of this impacts the County's ability to identify, assess, and prioritize risks.

Gaps in the POETE Areas

Gaps in the Risk Management for Protective Programs and Services capability include:

- A lack of hazard/vulnerability assessments and jurisdictional risk assessments throughout the County.

Level of Confidence in the Accuracy of the Capability Assessment: ___

5 is the highest level of confidence and 1 is the lowest level of confidence

Priority Placed on Sustaining and/or Building this Capability Target: ___

12. Supply Chain Integrity and Security

Description: Strengthen the security and resilience of the supply chain.

THIRA Step 3: Capability Target

Every **1 year**, engage **60** partner organizations involved in incident management to promote awareness of threats, dependencies, vulnerabilities, and strategies to support the restoration of private sector supply chain.

Context and Comments

This capability target should occur annually as part of the plan review process and/or the THIRA and SPR process.

The number of partner organizations includes all 24 jurisdictions, 9 County departments and agencies (as listed in the CEMP: County EM, Mayor's Office, Health Department, Information Services, Public Works, Human Services, Mayor's Office of Finance, Unified Police, and Unified Fire), the County's Sheriff's Office, SL VECC 911 Center, Salt Lake City 911 (Central Dispatch), State Division of Emergency Management, State Bureau of Investigation, FEMA, FBI, American Red Cross, Faith-Based Organizations (4), MOSAIC Inter-Faith Ministries, the Salvation Army, and Private Sector (~15, including utility companies).

Not all partner organizations that regularly participate in plan reviews and/or have a role in the County's emergency response plans have a direct role in supply chain integrity. However, all agencies should be aware of supply chain vulnerabilities and strategies to support restoration.

The threat or hazard that most challenges the County's ability to achieve this capability target is an **Earthquake**.

SPR Overview

Assessment of Current Capability

Every ____, engage ____ partner organizations involved in incident management to promote awareness of threats, dependencies, vulnerabilities, and strategies to support the restoration of private sector supply chain.

Quantitative Assessment

Metric	Capability Target	Capability Lost	Capability Sustained	Capability Built	Estimated Current Capability	Capability Gap
Partner Organizations	60					

Qualitative Assessment

A qualitative assessment of the Supply Chain Integrity and Security capability was not provided. Questions related to how capability was lost, sustained, and built related to Supply Chain Integrity and Security were not answered on the survey or discussed during Planning Meeting #3 or throughout the SPR process. However, information provided during the SPR process may indirectly impact Supply Chain Integrity and Security. For example, during Planning Meeting #3, staff noted a lack of full-time emergency management staff in many jurisdictions, competing priorities, difficulty getting buy-in from leadership, and difficulty engaging stakeholders. These identified gaps also impact the County's ability to engage stakeholders and partners to support the restoration of the supply chain.

Gaps in the POETE Areas

Gaps in the Supply Chain Integrity and Security capability include:

- Planning gaps include a lack of hazard/vulnerability assessments, jurisdictional risk assessments, standard operating procedures, and mutual aid agreements.
- Organization gaps include a lack of full-time emergency management staff in some jurisdictions, difficulty getting buy-in at all levels including leadership, lack of intelligence and information sharing, and difficulty engaging stakeholders and staff in planning efforts.
- Equipment gaps include a lack of a good resource management system and budget constraints that make it difficult to maintain an updated cache and purchase additional resources.

Level of Confidence in the Accuracy of the Capability Assessment: 3

5 is the highest level of confidence and 1 is the lowest level of confidence

Priority Placed on Sustaining and/or Building this Capability Target: Medium

13. Community Resilience

Description: Enable the recognition, understanding, communication of, and planning for risk, and empower individuals and communities to make informed risk management decisions necessary to adapt to, withstand, and quickly recover from future incidents.

THIRA Step 3: Capability Target – Part 1

Within **3 years**, **121,500** households are covered by risk-appropriate insurance, including homeowners, flood, windstorm, and seismic.

Context and Comments

There are an estimated 405,000 occupied housing units in Salt Lake County. Of those, 67.1% of households are occupied by the owner, with the remaining 32.9% of people renting their house. In the United States, approximately 90% of households have homeowners' insurance and most of these policies cover windstorm damage but do not cover flooding or seismic activity. In the United States, approximately 15% of households have flood and/or earthquake insurance. Additionally, about 40% of renters have renters' insurance, which generally does not cover flooding events or seismic activity.

Of the 405,000 housing units in SLCo, if approximately 15% have flood and/or earthquake insurance, that means 60,705 have these risk-appropriate insurances. The goal in the next 3 years is to double that number.

The threat or hazard that most challenges the County's ability to achieve this capability target is an **Earthquake**.

SPR Overview

Assessment of Current Capability

Within ____, _____ households are covered by risk-appropriate insurance, including homeowners, flood, windstorm, and seismic.

Quantitative Assessment

Metric	Capability Target	Capability Lost	Capability Sustained	Capability Built	Estimated Current Capability	Capability Gap
Households	121,500					

Qualitative Assessment

A qualitative assessment of the Community Resilience capability was not provided. Questions related to how capability was lost, sustained, and built related to Community Resilience were not answered on the survey or discussed during Planning Meeting #3 or throughout the SPR process.

Gaps in the POETE Areas

There were no gaps in the Community Resilience identified throughout the SPR process. Throughout the THIRA/SPR process, no one was involved who could speak to the County's risk-specific insurance rates. See the second half of this capability on the following page addressing outreach events for additional information on Community Resilience.

Level of Confidence in the Accuracy of the Capability Assessment: ___

5 is the highest level of confidence and 1 is the lowest level of confidence

Priority Placed on Sustaining and/or Building this Capability Target: ___

THIRA Step 3: Capability Target – Part 2

Every **1 year**, conduct **250** 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.

Context and Comments

Every year, the County aims to conduct at least 250 outreach events or activities to help better prepare the communities. These outreach events can be done by emergency management agencies, law enforcement, fire/EMS, healthcare organizations, volunteer organizations, and more. These events may include certain social media posts, CPR training, attending local community events and festivals, attending church events and passing out information, etc. Events may be done by any jurisdiction within the County.

The threat or hazard that most challenges the County's ability to achieve this capability target is an **Earthquake**.

SPR Overview

Assessment of Current Capability

Every **1 year**, conduct **150** 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.

Quantitative Assessment

Metric	Capability Target	Capability Lost	Capability Sustained	Capability Built	Estimated Current Capability	Capability Gap
Outreach Events or Activities	250					

Qualitative Assessment

A qualitative assessment of the Community Resilience capability was not provided. Questions related to how capability was lost, sustained, and built related to Community Resilience were not answered on the survey or discussed during Planning Meeting #3 or throughout the SPR process.

Gaps in the POETE Areas

Gaps in the Community Resilience capability include:

- A gap in planning for the Schools and Families in Emergencies (SAFE) program (just-in-time kits) as well as the need for SAFE program training.
- The need for general City Community Emergency Response Team (CERT) training.
- The lack of Countywide coordination with schools.

Level of Confidence in the Accuracy of the Capability Assessment: 3

5 is the highest level of confidence and 1 is the lowest level of confidence

Priority Placed on Sustaining and/or Building this Capability Target: Medium

14. Long-Term Vulnerability Reduction

Description: Build and sustain resilient systems, communities, critical infrastructure, and key resource lifelines so as to reduce their vulnerability to natural, technological, and human-caused threats and hazards by lessening the likelihood, severity, and duration of the adverse consequences.

THIRA Step 3: Capability Target

Every **3 years**, **24** jurisdictions review their building codes, and, if necessary, enact or update risk-appropriate, disaster resilient building codes.

Context and Comments

The County reviews its building codes every 3 years, which is in alignment with the frequency with which the state of Utah reviews its codes. The state of Utah is one of a handful of states where local jurisdictions may have their own building codes in addition to state codes. Thus, all jurisdictions should review their local codes.

The Greater Salt Lake Municipal Services District (MSD) utilizes the state building codes. The MSD provides plan review, building inspection, and code enforcement services to our 6 member cities/towns and the unincorporated county. Their 7 members have not adopted additional amendments, but one or more of the other 17 municipalities in the County may have done so. Additionally, jurisdictions may update their codes in the future or make more stringent codes than the state of Utah has, thus making it important to maintain a 3-year review cycle.

Building codes could largely impact earthquakes as the County has a high percentage of unreinforced masonry (URM) buildings. Updating building codes and the buildings themselves to ensure they meet this code is a great way to build a more resilient community.

The threat or hazard that most challenges the County's ability to achieve this capability target is an **Earthquake**.

SPR Overview

Assessment of Current Capability

Every ____, _____ jurisdictions review their building codes, and, if necessary, enact or update risk-appropriate, disaster resilient building codes.

Quantitative Assessment

Metric	Capability Target	Capability Lost	Capability Sustained	Capability Built	Estimated Current Capability	Capability Gap
Jurisdictions	24					

Qualitative Assessment

A qualitative assessment of the Long-Term Vulnerability Reduction capability was not provided. Questions related to how capability was lost, sustained, and built related to Long-Term Vulnerability Reduction were not answered on the survey or discussed during Planning Meeting #3 or throughout the SPR process.

Gaps in the POETE Areas

Gaps in the Long-Term Vulnerability Reduction capability include:

- Planning gaps include a lack of hazard/vulnerability assessments, jurisdictional risk assessments, and mutual aid agreements.
- Organization gaps include a lack of full-time emergency management staff in all jurisdictions, difficulty getting buy-in at all levels, including leadership, and difficulty engaging stakeholders and staff in planning efforts.

Level of Confidence in the Accuracy of the Capability Assessment: ___

5 is the highest level of confidence and 1 is the lowest level of confidence

Priority Placed on Sustaining and/or Building this Capability Target: ___

15. Risk and Disaster Resilience Assessment

Description: Assess risk and disaster resilience so that decision-makers, responders, and community members can take informed action to reduce their entity's risk and increase its resilience.

THIRA Step 3: Capability Target

Every **5 years**, after identifying threats and hazards of concern, model the impacts of the **15** threat and hazard scenarios to incorporate into planning efforts.

Context and Comments

The County's Hazard Mitigation Plan (HMP) is on a 5-year update cycle. Each time this plan is updated, the County should identify threats and hazards of concern and model the impact of these threats and hazards. The current HMP includes 15 threats or hazards (avalanche, dam failure, drought, earthquake, flooding, landslide, and slope failure, radon, severe weather, severe winter weather, tornado, civil disturbance, cyber-attack, hazardous materials incident, terrorism, and wildfire).

All local jurisdictions are included in the County's multi-jurisdictional HMP and participate in the identification and modeling of each threat and hazard scenario as it impacts their jurisdiction.

A cyberattack or active threat are the most challenging scenarios to model as there are no tools such as HAZUS or inundation maps to assist with modeling these scenarios. Since these threats are human-caused, the factors that impact the severity of the situation are highly variable.

The threat or hazard that most challenges the County's ability to achieve this capability target is an **Active Threat or Cyberattack/ Cyber Incident**.

SPR Overview

Assessment of Current Capability

Every **5 years**, after identifying threats and hazards of concern, model the impacts of the **15** threat and hazard scenarios to incorporate into planning efforts.

Quantitative Assessment

Metric	Capability Target	Capability Lost	Capability Sustained	Capability Built	Estimated Current Capability	Capability Gap
Threat and Hazard Scenarios	15		X		15	0

Qualitative Assessment

Over the last year, the County lost Risk and Disaster Resilience Assessment capability as there have been staffing shortages and vacancies within SLCo EM and with other jurisdictions. The County sustained capability as it is working on updating the Multi-Jurisdiction Hazard Mitigation Plan (HMP), which includes coordinating with local jurisdictions and stakeholders, identifying threats and hazards of concerns, and modeling the impacts of at least 15 of these threats/hazards. Additionally, the Health Department has been working on hazard vulnerability documents. The County built capability by completing the THIRA/SPR process for the first time since 2014 in addition to updating the HMP and working with County stakeholders to increase knowledge of the similarities and differences between the two processes.

Gaps in the POETE Areas

Gaps in the Risk and Disaster Resilience Assessment capability include:

- Planning gaps include a lack of hazard/vulnerability assessments, jurisdictional risk assessments, and several hazard-specific plans and documents.
- Organization gaps include a lack of full-time emergency management staff in all jurisdictions, difficulty getting buy-in at all levels including leadership, and difficulty engaging stakeholders and staff in planning efforts.
- An Equipment gap exists as the County lost its ESRI license (a la carte now), which may impact its ability to map out potential impacts of threats and hazards.

Level of Confidence in the Accuracy of the Capability Assessment: 3

5 is the highest level of confidence and 1 is the lowest level of confidence

Priority Placed on Sustaining and/or Building this Capability Target: Medium

16. Threats and Hazard Identification

Description: Identify the threats and hazards that occur in the geographic area; determine the frequency and magnitude; and incorporate this into analysis and planning processes so as to clearly understand the needs of a community or entity.

THIRA Step 3: Capability Target

Every **3 years**, engage with **24** jurisdictions and **60** partner organizations involved in incident management to assess the threats and hazards that are realistic and would significantly impact your communities.

Context and Comments

The County will conduct the THIRA process every 3 years and at that time assess the threats and hazards that are realistic and would significantly impact the community.

All 24 jurisdictions (cities/towns/the County) should be involved in this process.

The 60 partner organizations are the approximate number of the ones determined in the CEMP: all 24 jurisdictions, 9 County departments and agencies (as listed in the CEMP: County EM, Mayor's Office, Health Department, Information Services, Public Works, Human Services, Mayor's Office of Finance, Unified Police, and Unified Fire), the County's Sheriff's Office, SL VECC 911 Center, Salt Lake City 911 (Central Dispatch), State Division of Emergency Management, State Bureau of Investigation, FEMA, FBI, American Red Cross, Faith-Based Organizations (4), MOSAIC Inter-Faith Ministries, the Salvation Army, and Private Sector (~15, including utility companies).

The threat or hazard that most challenges the County's ability to achieve this capability target is an **Earthquake**.

SPR Overview

Assessment of Current Capability

Every **5 years**, engage with **24** jurisdictions and **60** partner organizations involved in incident management to assess the threats and hazards that are realistic and would significantly impact your communities.

Quantitative Assessment

Metric	Capability Target	Capability Lost	Capability Sustained	Capability Built	Estimated Current Capability	Capability Gap
Partner Organizations	60			X	60	0
Jurisdictions	24			X	24	0

Qualitative Assessment

Over the past year, the County indicated that it built Threat and Hazard Identification capability as it is completing the THIRA/SPR process for the first time since 2014. Survey respondents indicated in their assessment of the County's current capability that the County assesses threats and hazards every 5 years. This assessment occurs every 5 years with the Hazard Mitigation Plan, however, the County plans to complete the THIRA every 3 years, thus, 3 years is the target for this capability. The County indicated that capability was not lost over the last year. The County sustained its capability by continuing to offer training and exercises and maintaining its equipment.

Gaps in the POETE Areas

Gaps in the Threat and Hazard Identification capability include:

- Planning gaps include a lack of hazard/vulnerability assessments, jurisdictional risk assessments, and several hazard-specific plans and documents.
- Organization gaps include staffing shortages or vacancies in emergency management positions, difficulty engaging partners and stakeholders, and difficulty getting buy-in from leadership.
- An Equipment gap exists as the County lost its ESRI license (a la carte now), which may impact its ability to map out potential impacts of threats and hazards.

Level of Confidence in the Accuracy of the Capability Assessment: 4

5 is the highest level of confidence and 1 is the lowest level of confidence

Priority Placed on Sustaining and/or Building this Capability Target: Medium

17. Infrastructure Systems

Description: Stabilize critical infrastructure functions, minimize health and safety threats, and efficiently restore and revitalize systems and services to support a viable, resilient community.

THIRA Step 3: Capability Target

Within **90 days** of an incident, restore service to **279,000** customers without water service.

Within **90 days** of an incident, restore service to **270,000** customers without wastewater service.

Within **30 days** of an incident, restore service to **540,000** customers without communication service.

Within **30 days** of an incident, restore service to **306,000** customers without power service.

Context and Comments

All impacts listed in this capability target come from the earthquake scenario as those were the highest numbers of customers impacted. For the target capability, 90% of each estimated impact is used to provide the number of customers with restored service in the given timeframe.

Per the estimated numbers in the County's HMP, most of the County will have services restored within a week, but some customers may not have service for 30-90 days. The County's target goal is to restore 90% of communications and power services within 30 days, and the remaining 10% within 90 days. The target goal for restoring water and wastewater services is 90% of customers within 90 days and the remaining 10% within 180 days.

Maximum Capability:

Within **180 days** of an incident, restore service to **310,000** customers without water service.

Within **180 days** of an incident, restore service to **300,000** customers without wastewater service.

Within **90 days** of an incident, restore service to **600,000** customers without communication service.

Within **90 days** of an incident, restore service to **340,000** customers without power service.

The threat or hazard that most challenges the County's ability to achieve this capability target is an **Earthquake**.

SPR Overview

Assessment of Current Capability

Within ____ of an incident, restore service to ____ customers without water service.

Within ____ of an incident, restore service to ____ customers without wastewater service.

Within ____ of an incident, restore service to ____ customers without communication service.

Within ____ of an incident, restore service to ____ customers without power service.

Quantitative Assessment

Metric	Capability Target	Capability Lost	Capability Sustained	Capability Built	Estimated Current Capability	Capability Gap
Customers without Water Service	279,000					
Customers without Wastewater Service	270,000					
Customers without Communication Service	540,000					
Customers without Power Service	306,000					

Qualitative Assessment

A qualitative assessment of the Infrastructure Systems capability was not provided. Questions related to how capability was lost, sustained, and built related to Infrastructure Systems were not answered on the survey or discussed during Planning Meeting #3 or the SPR process.

Gaps in the POETE Areas

Gaps in the Infrastructure Systems Capability include:

- Planning gaps include the need for a Large-Scale Power Outage Plan, updated Continuity plans and documents throughout the County, and an updated Recovery Plan.
- Equipment gaps include the need for additional backup generators, backup power for communications equipment, satellite phones, radios, a Countywide mass notification system, and cell phones with the capability to tie into satellite. While

these gaps may not impact the ability of utility providers to restore services throughout the County, they may impact the County's ability to respond to a large event that results in long-term disruptions to utilities and communications infrastructure.

Level of Confidence in the Accuracy of the Capability Assessment: ___

5 is the highest level of confidence and 1 is the lowest level of confidence

Priority Placed on Sustaining and/or Building this Capability Target: ___

18. Critical Transportation

Description: Provide transportation (including infrastructure access and accessible transportation services) for response priority objectives, including the evacuation of people and animals and the delivery of vital response personnel, equipment, and services into the affected areas.

THIRA Step 3: Capability Target – Part 1

Within **30 minutes** notice of an incident, complete the evacuation of **30,000** people requiring evacuation, including **7,500** people with access and functional needs (requiring evacuation).

Context and Comments

This capability target is hard to determine as it is difficult to define "evacuation" in an earthquake scenario. Following an earthquake, individuals may have to evacuate buildings based on their conditions, including facilities such as jails, hospitals, or nursing homes. Others will wish to evacuate the County altogether, specifically those who were visiting the County when the earthquake occurred. Following an earthquake, individuals may not be evacuated all at once and may evacuate from inside to outside a building, rather than miles away from the area of impact. While the earthquake scenario estimated that 100,000 people would require some type of evacuation, the scenario that the County is using for this capability target is a dam failure.

The dam failure scenario requires the evacuation of 60,000 individuals and allows for 30 minutes from the time the dam breaches and a mandatory evacuation is ordered until people need to have left the area. In comparison to an earthquake, the individuals impacted by a dam failure would be evacuated in the more traditional sense of the word—the County would have little warning to evacuate the individuals and, in turn, individuals would have little warning to evacuate. While 60,000 individuals live in the area and would need to be evacuated, some individuals will have voluntarily done so in the days leading up to the dam breach. Of the 30,000 that are estimated to be in the area at the time, many will self-evacuate and/or seek higher ground if unable to evacuate the area. Once a mandatory evacuation is ordered, County responders and transportation assets will have little time to mobilize resources and assist with evacuating the area.

Throughout the THIRA/SPR process, the County estimated 25% of the population has AFN.

The threat or hazard that most challenges the County's ability to achieve this capability target is a **Dam Failure**.

SPR Overview

Assessment of Current Capability

Within _____ notice of an incident, complete the evacuation of _____ people requiring evacuation, including _____ people with access and functional needs (requiring evacuation).

Quantitative Assessment

Metric	Capability Target	Capability Lost	Capability Sustained	Capability Built	Estimated Current Capability	Capability Gap
People Requiring Evacuation	30,000					
People with AFN Requiring Evacuation	7,500					

Qualitative Assessment

A qualitative assessment of the Critical Transportation capability was not provided. Questions related to how capability was lost, sustained, and built related to Critical Transportation were not answered on the survey or discussed during Planning Meeting #3 or the SPR process. As noted during Planning Meeting #3, the County lacks a Countywide Evacuation Plan. Without an Evacuation Plan, it is difficult to estimate the County's current evacuation capacity and timeline.

Gaps in the POETE Areas

Gaps in the Critical Transportation capability include:

- The lack of a Countywide Evacuation Plan.

Level of Confidence in the Accuracy of the Capability Assessment: ___

5 is the highest level of confidence and 1 is the lowest level of confidence

Priority Placed on Sustaining and/or Building this Capability Target: ___

THIRA Step 3: Capability Target – Part 2

Within **30 days** of an incident, clear **300** miles of road affected, to enable access for public, private, and non-profit emergency responders.

Context and Comments

One of the County's first priorities will be to clear and assess major transportation routes to provide access to the County, allowing outside resources to enter the County. The County will ***clear*** roadways, but these roads may still be damaged, need major repairs, or need to be assessed before they are safe to drive on. The County will clear debris to allow for emergency vehicles, which includes street sweepers and solid waste trucks, but repairing roads and ***removing*** debris will take additional time.

The FEMA Region 8 Wasatch Plan states that the Utah Department of Transportation has developed detailed plans (Task Force Blade) for route clearance following an earthquake. Task Force Blade should be able to provide route clearance at the rate of approximately 10 miles per day. This includes filling road cavities, providing initial compaction, and removing debris.

Maximum Capability:

The estimated impact in an earthquake was that 1,000 miles of road would be affected. Some of these roads will take months to restore thus the maximum requirement is to clear 1,000 miles of road within 12 months.

Note: this standard impact language does not work well for an earthquake because roads may be *cleared* of debris but may not be safe to drive on (especially bridges) or repaired.

Within **12 months** of an incident, ***restore*** **1,000** miles of road affected, to enable access for public, private, and non-profit emergency responders.

The threat or hazard that most challenges the County's ability to achieve this capability target is an **Earthquake** or **Active Threat**.

SPR Overview

Assessment of Current Capability

Within _____ of an incident, clear _____ miles of road affected, to enable access for public, private, and non-profit emergency responders.

Quantitative Assessment

Metric	Capability Target	Capability Lost	Capability Sustained	Capability Built	Estimated Current Capability	Capability Gap
Miles of Road Affected	300					

Qualitative Assessment

A qualitative assessment of the Critical Transportation capability was not provided. Questions related to how capability was lost, sustained, and built related to Critical Transportation were not answered on the survey or discussed during Planning Meeting #3 or the SPR process. As noted during Planning Meeting #3, the County lacks a Countywide Evacuation Plan. Without a Debris Management Plan, it is difficult to estimate the County's current capacity and timeline to clear roads following an incident.

Gaps in the POETE Areas

Gaps in the Critical Transportation capability include:

- The lack of an updated Debris Management Plan.

Level of Confidence in the Accuracy of the Capability Assessment: ___

5 is the highest level of confidence and 1 is the lowest level of confidence

Priority Placed on Sustaining and/or Building this Capability Target: ___

19. Environmental Response / Health and Safety

Description: Conduct appropriate measures to ensure the protection of the health and safety of the public and workers, as well as the environment, from all hazards in support of responder operations and the affected communities.

THIRA Step 3: Capability Target – Part 1

Within **2 weeks** of an incident, assess, contain, and begin cleaning up hazardous material releases from **500** hazmat release sites.

Context and Comments

The earthquake scenario will produce the highest number of hazmat release sites in the County and present the most challenges in containing and cleaning up the hazmat release sites due to the competing priorities the County will face following an earthquake and damage to other critical infrastructure. The County aims to begin cleaning up of all hazmat release sites within 2 weeks of a catastrophic earthquake.

The threat or hazard that most challenges the County's ability to achieve this capability target is an **Earthquake**.

SPR Overview

Assessment of Current Capability

Within ____ of an incident, assess, contain, and begin cleaning up hazardous material releases from ____ hazmat release sites.

Quantitative Assessment

Metric	Capability Target	Capability Lost	Capability Sustained	Capability Built	Estimated Current Capability	Capability Gap
Hazmat Release Sites	500					

Qualitative Assessment

Over the past year, the County lost capability as many municipal agencies have reduced or eliminated their HazMat capabilities with only two agencies in Salt Lake County considered a Type 1 HazMat resource (SLCFD and UFA). The County has sustained capability by offering training and refreshers, updating equipment as the budget allows, and hosting the HazMat Technician School (every other year). The County built capability by obtaining additional equipment for its cache, developing a ToxMedic program, and completing multi-agency and community partner training.

The survey respondent indicated that UFA is capable of assessing, mitigating, and containing HazMat incidents, but the clean-up is not part of their response. They may be able to assist with gross decontamination of individuals in some instances, but there is not a definitive number to include for their current capability as it is incident specific. SLCo EM may consider the use of contractors or other clean-up companies to assist following a hazardous materials incident.

Gaps in the POETE Areas

Gaps in the Environmental Response / Health and Safety capability include:

- A gap in communication between UFA, fire prevention bureaus, emergency management, and the State on high-hazard locations.
- A lack of HazMat training for emergency management staff.

Level of Confidence in the Accuracy of the Capability Assessment: 4

5 is the highest level of confidence and 1 is the lowest level of confidence

Priority Placed on Sustaining and/or Building this Capability Target: Medium

THIRA Step 3: Capability Target – Part 2

Within **6 hours** of a hazmat incident, complete decontamination procedures for **11,000** exposed individuals (hazmat-related incidents).

Context and Comments

The Hazmat scenario includes 11,000 people potentially exposed to isooctane (and potentially other hazardous materials released from other tank cars in the area) based on the population and estimated number of workers in the surrounding area. A majority of these are in the evacuation area but were not in immediate proximity to the incident. These individuals may be able to quickly self-decontaminate by removing themselves from the situation and breathing fresh air or removing contaminated clothing and rinsing the skin. Those who were close to the exposure site will likely need medical care and/or assistance decontaminating. These individuals will either be transported to a healthcare facility or self-transport. The goal is to have identified and decontaminated all individuals within 6 hours.

The threat or hazard that most challenges the County's ability to achieve this capability target is a **Hazardous Materials** Incident.

SPR Overview

Assessment of Current Capability

Within ____ of a hazmat incident, complete decontamination procedures for _____ exposed individuals (hazmat-related incidents).

Quantitative Assessment

Metric	Capability Target	Capability Lost	Capability Sustained	Capability Built	Estimated Current Capability	Capability Gap
Exposed Individuals	60					

Qualitative Assessment

Over the past year, the County lost capability as many municipal agencies have reduced or eliminated their HazMat capabilities with only two agencies in Salt Lake County considered a Type 1 HazMat resource (SLCFD and UFA). The County has sustained capability by offering training and refreshers, updating equipment as the budget allows, and hosting the HazMat Technician School (every other year). The County built capability by obtaining additional equipment for its cache, developing a ToxMedic program, and completing multi-agency and community partner training.

The survey respondent indicated that UFA is capable of assessing, mitigating, and containing HazMat incidents, but the clean-up is not part of their response. They may be able to assist with gross decontamination of individuals in some instances, but there is not a definitive number to include for their current capability as it is incident specific.

Gaps in the POETE Areas

Gaps in the Environmental Response / Health and Safety capability include:

- A gap in communication between UFA, fire prevention bureaus, emergency management, and the State on high-hazard locations.
- A lack of HazMat training for emergency management staff.

Level of Confidence in the Accuracy of the Capability Assessment: 4

5 is the highest level of confidence and 1 is the lowest level of confidence

Priority Placed on Sustaining and/or Building this Capability Target: Medium

20. Fatality Management Services

Description: Provide fatality management services, including decedent remains recovery and victim identification, and work with local, state, tribal, territorial, insular area, and Federal authorities to provide mortuary processes, temporary storage or permanent internment solutions, sharing information with mass care services for the purpose of reunifying family members and caregivers with missing persons/remains, and providing counseling to the bereaved.

THIRA Step 3: Capability Target

Within **18 months** of an incident, complete the recovery, identification, and mortuary services, including temporary storage services, for **2,700** fatalities.

Context and Comments

The pandemic scenario results in the most fatalities (88,000); however, these fatalities are spread out over one to two years and occur throughout the County, mostly in hospitals or long-term care facilities. Thus, there is not an issue with the identification or recovery of remains.

The fatalities in an earthquake, while a smaller number, may be more challenging for the County to respond to. The timeframe of 18 months is the target capability and is heavily reliant on the State Medical Examiner's (ME's) Office as all identity verification goes through the State ME's Office.

Given an earthquake scenario, some individuals may be buried under debris and collapsed buildings, and it may take months to recover these individuals. Individuals will then have to be identified which will take additional time and will rely on things like fingerprinting, dental records, or DNA. Additionally, in Utah, all identity verification is done through the State ME's Office.

Note: due to the County's reliance on the State Medical Examiner's Office to complete this capability, this target is not assessing just the County's capabilities.

The threat or hazard that most challenges the County's ability to achieve this capability target is an **Earthquake**.

SPR Overview

Assessment of Current Capability

Within _____ of an incident, complete the recovery, identification, and mortuary services, including temporary storage services, for _____ fatalities.

Quantitative Assessment

Metric	Capability Target	Capability Lost	Capability Sustained	Capability Built	Estimated Current Capability	Capability Gap
Fatalities	2,700					

Qualitative Assessment

A qualitative assessment of the Fatality Management capability was not provided. Questions related to how capability was lost, sustained, and built related to Fatality Management were not answered on the survey or discussed during Planning Meeting #3 or the SPR process. During Planning Meeting #3, it was noted that public health and emergency management preparedness capabilities were lost over the last year, but this was not specific to Fatality Management.

Gaps in the POETE Areas

Gaps in the Fatality Management capability include:

- The lack of adequate public health warehouse space.
- The need to increase coordination between public health and emergency management and clarify the public health organizational structure.

Level of Confidence in the Accuracy of the Capability Assessment: ___

5 is the highest level of confidence and 1 is the lowest level of confidence

Priority Placed on Sustaining and/or Building this Capability Target: ___

21. Fire Management and Suppression

Description: Provide structural, wildland, and specialized firefighting capabilities to manage and suppress fires of all types, kinds, and complexities while protecting the lives, property, and environment in the affected area.

THIRA Step 3: Capability Target

Within **1 week** of an incident, conduct firefighting operations to suppress and extinguish **250** structure fires.

Context and Comments

The estimated number of structure fires in the earthquake scenario is 500. It will be difficult to access all these fires as critical infrastructure (transportation, communication, utilities) will be greatly impacted. The firefighting resources from the County and neighboring jurisdictions will be completely overwhelmed with competing priorities. The County will rely heavily on mutual aid resources to assist in putting out these fires. These resources will not be immediately available. Within 1 week, with the resources available from the County and through mutual aid, the County aims to extinguish half of the fires that occurred because of the earthquake. By this time, many of the original fires will have self-extinguished.

The threat or hazard that most challenges the County's ability to achieve this capability target is an **Earthquake**.

SPR Overview

Assessment of Current Capability

Within ____ of an incident, conduct firefighting operations to suppress and extinguish ___ structure fires.

Quantitative Assessment

Metric	Capability Target	Capability Lost	Capability Sustained	Capability Built	Estimated Current Capability	Capability Gap
Structure Fires	250					

Qualitative Assessment

A qualitative assessment of the Fire Management and Suppression capability was not provided. Questions related to how capability was lost, sustained, and built related to Fire Management and Suppression were not answered on the survey or discussed during Planning Meeting #3 or the SPR process.

Gaps in the POETE Areas

There were no gaps specific to Fire Management and Suppression discussed throughout the SPR process. During Planning Meeting #3, attendees discussed the complicated emergency management organizational structure between UFA, local EM, and the fire community which, mixed with jurisdictional staffing shortages, causes a significant gap in policies, procedures, and organization. While this is not specific to Fire Management and Suppression, ironing out the relationship between these entities and their competing priorities may improve Fire Suppression and Management capabilities county-wide.

Level of Confidence in the Accuracy of the Capability Assessment: ___

5 is the highest level of confidence and 1 is the lowest level of confidence

Priority Placed on Sustaining and/or Building this Capability Target: ___

22. Logistics and Supply Chain Management

Description: Deliver essential commodities, equipment, and services in support of impacted communities and survivors, to include emergency power and fuel support, as well as the coordination of access to community staples. Synchronize logistics capabilities and enable the restoration of impacted supply chains.

THIRA Step 3: Capability Target

Within **7 days** of an incident, identify and mobilize life-sustaining commodities, resources, and services to **58,500** people requiring shelter and **450,000** people requiring food and water. Maintain distribution system for **12 months**.

Context and Comments

In an earthquake, most of the resources and logistical support needed for shelters will come from outside of the impacted area. While resources may begin arriving before 7 days, the timeframe of 7 days is the goal to set up multiple shelters that can house 58,500 individuals and staging areas or distribution sites that can provide food and water to 450,000.

While not all these individuals will need care for a full 12 months, sheltering and food/water distribution activities must continue until all individuals leave the shelters, are transferred to more permanent long-term housing solutions, or have reliable access to food/water at their place of residence. Not all individuals who need shelter, food, or water may arrive at either a shelter or point of distribution within 7 days, however, the County aims to have resources available within 7 days.

The estimated numbers of people needing food, water, and shelter are calculated using estimates from the *FEMA Region 8 Wasatch Plan*.

The threat or hazard that most challenges the County's ability to achieve this capability target is an **Earthquake**.

SPR Overview

Assessment of Current Capability

Within ____of an incident, identify and mobilize life-sustaining commodities, resources, and services to ____ people requiring shelter and ____ people requiring food and water. Maintain distribution system for ____.

Quantitative Assessment

Metric	Capability Target	Capability Lost	Capability Sustained	Capability Built	Estimated Current Capability	Capability Gap
People Requiring Shelter	58,500					
People Requiring Food and Water	450,000					

Qualitative Assessment

Over the past year, the County lost Logistics and Supply Chain Management capability as it lost a Health Department warehouse and sheltering locations and equipment. Some agencies within the County also reported a diminishing of cache supplies as resources are utilized or become outdated. Due to the splitting of the Unified Police Department (UPD) and Salt Lake County Sheriff's Office (SLCOSO), the two agencies had to purchase additional equipment. Nothing specific was identified as sustaining or building Logistics and Supply Chain Management capability.

Gaps in the POETE Areas

Gaps in the Logistics and Supply Chain Management capability include:

- A lack of Mutual Aid Agreements and Memorandums of Understanding (MAAs/MOUs)
- Planning gaps related to Point of Distribution (POD) planning and a Homeless Feeding Plan.
- Equipment gaps include a lack of a mobile command/communications unit(s), MAC vehicles, HazMat equipment, backup generators, backup power for communications equipment, radios, satellite phones, durable medical equipment for homebound individuals, and more.

Level of Confidence in the Accuracy of the Capability Assessment: ___

5 is the highest level of confidence and 1 is the lowest level of confidence

Priority Placed on Sustaining and/or Building this Capability Target: ___

23. Mass Care Services

Description: Provide life-sustaining and human services to the affected population, including hydration, feeding, sheltering, temporary housing, evacuee support, reunification, and distribution of emergency supplies.

THIRA Step 3: Capability Target

Within **4 days** of an incident, provide sheltering, food, and water for **58,500** people requiring shelter and **450,000** people requiring food and water, including **14,000** people with access and functional needs (requiring accessible shelter) and **112,000** people with access and functional needs (requiring food and water), and **25,000** animals requiring shelter, food, and water. Maintain for **12 months**.

Within **12 months** of an incident, move **2,000** people requiring temporary, non-congregate housing, including **500** people with access and functional needs (requiring accessible, temporary, non-congregate housing) from congregate care to temporary housing.

Context and Comments

While not all resources and supplies needed to run a shelter will be present in the County within 4 days of a catastrophic earthquake, the County can still begin to establish these shelters so that individuals have a safe, dry place to be. The source of the impacts in these capability targets are detailed on the Impacts Worksheets and come from the County HMP and FEMA Region 8 Wasatch Plan.

The target of setting up shelters within 4 days is for spontaneous shelters that the County can get set up as quickly as possible. As the incident evolves and buildings are inspected, shelter locations will likely change. While initial shelters will be available within 4 days, not everyone needing shelter will seek shelter immediately or will be able to access the shelters right away.

While 4 days is the target to have sheltering operations up and running, the County recognizes that it will be difficult to shelter 25,000 animals within 4 days.

The threat or hazard that most challenges the County's ability to achieve this capability target is an **Earthquake**.

SPR Overview

Assessment of Current Capability

Within _____ of an incident, provide sheltering, food, and water for _____ people requiring shelter and _____ people requiring food and water, including _____ people with access and functional needs (requiring accessible shelter) and _____ people with access and functional needs (requiring food and water), and _____ animals requiring shelter, food, and water. Maintain for _____.

Within _____ of an incident, move _____ people requiring temporary, non-congregate housing, including _____ people with access and functional needs (requiring accessible, temporary, non-congregate housing) from congregate care to temporary housing.

Quantitative Assessment

Metric	Capability Target	Capability Lost	Capability Sustained	Capability Built	Estimated Current Capability	Capability Gap
People Requiring Shelter	58,500					
People Requiring Food and Water	450,000					
People with AFN Requiring Accessible Shelter	14,000					
People with AFN Requiring Food and Water	112,000					
Animals Requiring Shelter	25,000					
People Requiring Temporary,	2,000					

Non-Congregate Housing						
People with AFN Requiring Accessible, Temporary, Non-Congregate Housing	500					

Qualitative Assessment

Over the past year, the County lost Mass Care Services capability as the County lost health department warehouse capacity and lost sheltering locations and equipment. Nothing specific was identified as sustaining or building Mass Care Services capability.

Gaps in the POETE Areas

Gaps in the Mass Care Services capability include:

- Point of Distribution (POD) planning and a need to deconflict POD/sheltering locations.
- Insufficient public health warehouse space.
- Lack of durable medical equipment for homebound individuals.
- Lack of cooling and warming centers with generators to support critical infrastructure.

Level of Confidence in the Accuracy of the Capability Assessment: ___

5 is the highest level of confidence and 1 is the lowest level of confidence

Priority Placed on Sustaining and/or Building this Capability Target: ___

24. Mass Search and Rescue Operations

Description: Deliver traditional and atypical search and rescue capabilities, including personnel, services, animals, and assets to survivors in need, with the goal of saving the greatest number of endangered lives in the shortest time possible.

THIRA Step 3: Capability Target

Within **2 weeks** of an incident, conduct search and rescue operations for **15,000** people requiring rescue.

Context and Comments

The estimated number of individuals requiring rescue following an earthquake is 15,000 people. Individuals have been found to survive for more than two weeks trapped under rubble if they have access to water. However, most search and rescue attempts are halted around a week after a disaster if no one has been found alive in the previous day or two. The County will continue search and recovery operations for as long as possible.

Salt Lake County is home to a federal search and rescue team – Utah Task Force One. The County also maintains search and rescue operations through the Unified Fire Authority as well as capabilities and resources with city fire/EMS services. The County would request mutual aid to assist in search and rescue operations, including federal urban search and rescue teams. At a minimum, it will take 24-36 hours for outside resources to arrive.

The threat or hazard that most challenges the County's ability to achieve this capability target is an **Earthquake**.

SPR Overview

Assessment of Current Capability

Within **72 hours** of an incident, conduct search and rescue operations for **3,500** people requiring rescue.

Quantitative Assessment

Metric	Capability Target	Capability Lost	Capability Sustained	Capability Built	Estimated Current Capability	Capability Gap
People Requiring Rescue	15,000		X	X	3,500	11,500

Qualitative Assessment

Salt Lake County reported that there was not a loss in Mass Search and Rescue Operations capability over the last year. The County sustained capability as it maintained internal guidance, policies, record systems, and staffing levels; conducted training in major functional areas (i.e., rescue, medical, search, canine, water/boat, hazmat, etc.); and continued exercises and/or deployments for ESF9 members. The County built capability as it completed website database improvements; completed projects to upgrade security in UT-TF1 headquarters; and provided new members an opportunity to train at a Center of Excellence (TEEX).

The survey respondent that the capability exists but is dependent on travel, logistics, and transportation to get certified rescue teams from other areas into the affected area. There is a discrepancy between the target capability and current capability, which may be due to an inaccurate estimate of the impacts related to an earthquake and inaccurate target capability (THIRA Step 2 and 3). Future THIRA/SPR processes should reassess the number of people potentially needing to be rescued following an earthquake and the target capability for this core capability.

Gaps in the POETE Areas

Gaps in the Mass Search and Rescue Operations capability include:

- The need to develop a comprehensive library of all ESF9 assets in the state, including typing smaller components at the agency (fire, police, etc.) level.
- The need for additional support with funding to actively manage the development and sustainment of the SUSAR network in Utah.
- The lack of a plan to support in-state and national-level incidents and the need to practice/vet the newly approved MOA that details in-state deployments.
- No approved plan to get all ESF9 assets qualified, trained, and response-ready.

Level of Confidence in the Accuracy of the Capability Assessment: 4

5 is the highest level of confidence and 1 is the lowest level of confidence

Priority Placed on Sustaining and/or Building this Capability Target: Medium

25. On-Scene Security, Protection, and Law Enforcement

Description: Ensure a safe and secure environment through law enforcement and related security and protection operations for people and communities located within affected areas and also for response personnel engaged in lifesaving and life-sustaining operations.

THIRA Step 3: Capability Target

Within **12 hours** of an incident, provide security and law enforcement services to protect emergency responders and **1,100,000** people affected.

Context and Comments

In the earthquake scenario, the largest number of people would be impacted (1,100,000) as well as the largest geographic area. Additionally, the impacts on critical infrastructure systems will greatly hinder emergency responder's ability to arrive on the scene and set up some type of security to protect responders and the public.

In an earthquake scenario, there is not a defined perimeter within which law enforcement can provide security and other services. The scope of services needed from security and law enforcement in an earthquake is unknown until an event occurs. Security and law enforcement personnel cannot be responsible for protecting every single individual following an earthquake due to the magnitude of the incident, status of critical infrastructure, availability of personnel, and inability of outside resources to quickly arrive in the County.

For this target capability, the County noted that within the first operational period (goal of 12 hours), it will complete an assessment to deploy available security and law enforcement assets to areas of highest priority. This will be reassessed with each operational period based on available resources and the current status.

The threat or hazard that most challenges the County's ability to achieve this capability target is an **Earthquake**.

SPR Overview

Assessment of Current Capability

Within ____ of an incident, provide security and law enforcement services to protect emergency responders and ____ people affected.

Quantitative Assessment

Metric	Capability Target	Capability Lost	Capability Sustained	Capability Built	Estimated Current Capability	Capability Gap
People Affected	1,100,000					

Qualitative Assessment

A qualitative assessment of the On-scene Security, Protection, and Law Enforcement capability was not provided. Questions related to how capability was lost, sustained, and built related to Public Information and Warning were not answered on the survey or discussed during Planning Meeting #3 or the SPR process.

Gaps in the POETE Areas

There were no gaps in the On-scene Security, Protection, and Law Enforcement capability identified on the surveys or discussed during Planning Meeting #3 or the SPR process. County personnel and subject matter experts for this capability engaged during the THIRA process and helped develop the target capabilities, but did not provide feedback during the SPR process regarding this core capability.

Level of Confidence in the Accuracy of the Capability Assessment: ___

5 is the highest level of confidence and 1 is the lowest level of confidence

Priority Placed on Sustaining and/or Building this Capability Target: ___

26. Operational Communications

Description: Ensure the capacity for timely communications in support of security, situational awareness, and operations, by any and all means available, among and between affected communities in the impact area and all response forces.

THIRA Step 3: Capability Target

Within **24 hours** of an incident, establish interoperable communications across **24** jurisdictions affected and with **100** partner organizations involved in incident management. Maintain for **30 days**.

Context and Comments

Establishing interoperable communications as quickly as possible across all jurisdictions will allow for a more effective response. Communications will be difficult to establish as systems, cell towers, and Internet service will be down throughout a majority of the County. The County will rely on non-traditional forms of communication such as radios.

While the impacts estimate that 200 partner organizations will be involved in incident management, not all of these partners will need to be notified and communicated with within 24 hours of an incident. Within the County, 24 impacted jurisdictions will need to communicate with one another. The County Emergency Management will have to establish communication with County leadership and other County agencies/departments, neighboring counties, and state and federal partners.

The incident response will last more than 30 days, however, communication needs and resources will change drastically from day 1 to day 30 with more resources becoming available as time goes on.

The threat or hazard that most challenges the County's ability to achieve this capability target is an **Earthquake**.

SPR Overview

Assessment of Current Capability

Within **12 hours** of an incident, establish interoperable communications across **24** jurisdictions affected and with **50** partner organizations involved in incident management. Maintain for **30 days**.

Quantitative Assessment

Metric	Capability Target	Capability Lost	Capability Sustained	Capability Built	Estimated Current Capability	Capability Gap
Partner Organizations	100				50	50
Jurisdictions Affected	24		X		24	0

Qualitative Assessment

When assessing this capability, staff noted that interoperability following an incident relies heavily on the State Radio System. Emergency Management staff within SLCo EM will have no control over the jurisdictions affected and the time needed to restore Communications after an event.

Over the past year, the County lost Operational Communications capability as some resources in the County's cache are depleting due to concerns over interoperability of communications equipment as changeover occurs. The County sustained Operational Communications capability as it has maintained much of its equipment with little to no change, including Satellite phones and its mobile command vehicle. The County built Operational Communications capability by purchasing new equipment when possible, replacing many portable radios, and conducting a variety of exercises that allowed the County to test capabilities.

Gaps in the POETE Areas

Gaps in the Operational Communication capability include:

- Planning gaps include the lack of a Countywide Communications Plan.
- Organization gaps include a lack of understanding throughout the County of the common response processes and procedures, Incident Command System, and the development of a common operating picture.
- Equipment gaps include a lack of mobile communications unit(s), backup power for communications systems, a Countywide mass notification system, Starlink equipment, and more.
- Training gaps include the need for additional communications-related training, including the capabilities of various resources, how to use these resources, and which authorities individuals/agencies/jurisdictions have within these systems.
- Exercise gaps include a lack of Countywide exercises that test the interaction between all response partners and jurisdictions.

Level of Confidence in the Accuracy of the Capability Assessment: 4

5 is the highest level of confidence and 1 is the lowest level of confidence

Priority Placed on Sustaining and/or Building this Capability Target: Medium

27. Public Health, Healthcare, and Emergency Medical Services

Description: Provide lifesaving medical treatment via Emergency Medical Services and related operations, and avoid additional disease and injury by providing targeted public health, medical, and behavioral health support and products to all affected populations.

THIRA Step 3: Capability Target

Within **7 days** of an incident, complete triage, begin definitive medical treatment, and transfer to an appropriate facility **13,000** people requiring medical care.

Context and Comments

Locally, triage and basic medical treatment will begin immediately.

The County will work to contact all affected hospitals in the County, determine their level of capability, and assess any major damages that may prohibit the use of their facilities. The goal is to complete this task within 4 days of an incident.

The goal is to have transferred all individuals requiring medical care to an appropriate facility within 7 days—this metric is dependent on available beds in healthcare facilities as well as the condition of the roads. Note: some individuals will self-transport to a healthcare facility, thus, the County is not responsible for transporting every injured individual.

The estimated impact in the earthquake scenario is that about 7,700 people will be requiring hospitalization and another 21,000 will be injured but do not require hospitalization. The target is to provide medical care to all 7,700 plus about a fourth of those who are injured within the week.

The threat or hazard that most challenges the County's ability to achieve this capability target is an **Earthquake**.

SPR Overview

Assessment of Current Capability

Within ___ of an incident, complete triage, begin definitive medical treatment, and transfer to an appropriate facility ____ people requiring medical care.

Quantitative Assessment

Metric	Capability Target	Capability Lost	Capability Sustained	Capability Built	Estimated Current Capability	Capability Gap
People Requiring Medical Care	13,000					

Qualitative Assessment

Over the past year, the County lost Public Health, Healthcare, and EMS capability due to a loss of public health warehouse space and a loss in public health and emergency management preparedness capabilities. The County sustained capability as the Health Department has been developing hazard vulnerability preparedness materials. The County did not indicate that Public Health, Healthcare, and EMS capability was built in the past year.

Gaps in the POETE Areas

Gaps in the Public Health, Healthcare, and EMS capability include:

- A lack of understanding of emergency management organization and operations, including the organizational structure and coordination with public health.
- A lack of durable medical equipment for homebound individuals and insufficient health department warehouse space.

Level of Confidence in the Accuracy of the Capability Assessment: ___

5 is the highest level of confidence and 1 is the lowest level of confidence

Priority Placed on Sustaining and/or Building this Capability Target: ___

28. Situational Assessment

Description: Provide all decision makers with decision-relevant information regarding the nature and extent of the hazard, any cascading effects, and the status of the response.

THIRA Step 3: Capability Target

Within **3 hours** of an incident, and on a **12–24-hour (ops period)** cycle thereafter, provide notification to leadership and **100** partner organizations involved in incident management of the current and projected situation. Maintain for **30 days**.

Context and Comments

The County will initially establish contact as quickly as possible with leadership and response partners. This will be challenging due to the anticipated status of the communications infrastructure. This target capability does not mean that interoperable communication is established within 3 hours (see Interoperable Communication Core Capability), just that initial notification is made, particularly to County leadership within 3 hours.

Throughout the incident, County leadership may be updated more frequently than all partner organizations, however, at minimum, all response partners will be updated every operational period. The length of an operational period will change throughout the incident. The County aims to maintain the ability to update partners every 24 hours (once per ops period) for the first 30 days. After the initial 30 days, the length of an operational period will likely increase.

The threat or hazard that most challenges the County's ability to achieve this capability target is an **Earthquake**.

SPR Overview

Assessment of Current Capability

Within **3 hours** of an incident, and on a **6–24-hour (each operational period)** cycle thereafter, provide notification to leadership and **25** partner organizations involved in incident management of the current and projected situation. Maintain for **30+ days**.

Quantitative Assessment

Metric	Capability Target	Capability Lost	Capability Sustained	Capability Built	Estimated Current Capability	Capability Gap
Partner Organizations	100		X		25	75

Qualitative Assessment

For this capability, the County is confident that it can meet the target capability of notifying leadership and partner organizations at least once per operational period. Depending on the incident, the operational period may be anywhere from 6 hours to several days. The County can maintain this rhythm for 30 days or more if needed. Additionally, the County noted that it will be difficult to inform all 100 partner organizations within 3 hours of an incident as some partners may not be initially identified or needed there may be issues with communications infrastructure in the immediate aftermath. The County can notify leadership and approximately 25 partner organizations within the first 3 hours of an incident but may not inform all 100 partner organizations until it has established a coordinated response.

Over the past year, the County lost Situational Awareness capability due to a lack of exercises and training that allowed them to develop and test this capability. The County sustained capability as they continued to conduct weekly operational briefings regardless of changing personnel and gaps in staffing. The County built capability by creating the Intelligence group/section within SLCo EM. The County also filled emergency management-related positions that had been vacant.

Gaps in the POETE Areas

Gaps in the Situational Awareness capability include:

- A lack of Countywide training and exercises that allow all jurisdictions and partners to test their capabilities and communicate and coordinate with one another.
- A lack of training and exercises on the ECC/EOC activation, County communication and coordination systems, ICS, and WebEOC.
- Several plans that are either not updated or have never been developed. All of these may impact the County's ability to maintain situational awareness and a common operating picture during an event and notify leadership and partners.

Level of Confidence in the Accuracy of the Capability Assessment: 4

5 is the highest level of confidence and 1 is the lowest level of confidence

Priority Placed on Sustaining and/or Building this Capability Target: Medium

29. Economic Recovery

Description: Return economic and business activities (including food and agriculture) to a healthy state, and develop new business and employment opportunities that result in an economically viable community.

THIRA Step 3: Capability Target

Within **18 months** of an incident, reopen **6,375** businesses closed due to the incident.

Context and Comments

In the earthquake scenario provided, 8,500 businesses closed due to the incident. However, FEMA estimates that about 25% of businesses do not reopen after a disaster (Stay in Business after a Disaster by Planning Ahead | FEMA.gov). Using this national data, the County's target is to reopen 75% of the businesses. The timeframe for reopening businesses is consistent with the target capabilities regarding infrastructure systems that estimate it will take up to 18 months to restore utility services to the County. The maximum requirement would be to reopen 80% of closed businesses

Maximum Requirement:

Within **2 years** of the incident, reopen **6,800** businesses closed due to the incident.

The threat or hazard that most challenges the County's ability to achieve this capability target is an **Earthquake**.

SPR Overview

Assessment of Current Capability

Within ___ of an incident, reopen ___businesses closed due to the incident.

Quantitative Assessment

Metric	Capability Target	Capability Lost	Capability Sustained	Capability Built	Estimated Current Capability	Capability Gap
Businesses Closed	6,375					

Qualitative Assessment

A qualitative assessment of the Economic Recovery capability was not provided. Questions related to how capability was lost, sustained, and built related to Economic Recovery were not answered on the survey or discussed during Planning Meeting #3 or the SPR process.

The County lacks an updated Recovery Plan. Without an updated Recovery Plan, it is difficult to have an accurate assessment of economic recovery capabilities and the ability of businesses to reopen following a large-scale incident.

Gaps in the POETE Areas

Gaps in the Economic Recovery capability include:

- The lack of an updated Recovery Plan, Debris Management Plan, and Damage Assessment Annex/Procedures.

Level of Confidence in the Accuracy of the Capability Assessment: ___

5 is the highest level of confidence and 1 is the lowest level of confidence

Priority Placed on Sustaining and/or Building this Capability Target: ___

30. Health and Social Services

Description: Restore and improve health and social services capabilities and networks to promote the resilience, independence, health (including behavioral health), and well-being of the whole community.

THIRA Step 3: Capability Target

Within **12 months** of an incident, restore functions at **650** affected healthcare facilities and social service organizations.

Context and Comments

Following an earthquake, ideally, the County can get as many healthcare facilities operating as soon as possible. The focus will be on hospitals, urgent care facilities, and large healthcare systems. Of the 800 healthcare and social service organizations estimated as impacted during an earthquake, many of these are smaller facilities (doctor's offices, long-term care facilities, community centers, etc.), which will take longer to recover. Additionally, many of the healthcare facilities are privately owned and will have to rely on insurance, loans, etc. to make the necessary repairs, all of which take time. Approximately 20% of facilities will not reopen.

The County could also create an additional target capability surrounding hospitals and large healthcare systems. This capability may state "Within 14 days of an incident, restore 60% of functions at 14 hospitals throughout the County." This assumes that hospitals will not be fully functional within 14 days, but that they can all be back operating at partial status by that time. Similarly, another target capability may estimate the percentage of hospital beds restored (i.e., "Within 14 days, restore 60% of the impacted beds count at all 14 hospitals in the County").

The threat or hazard that most challenges the County's ability to achieve this capability target is an **Earthquake**.

SPR Overview

Assessment of Current Capability

Within ____ of an incident, restore functions at ____ affected healthcare facilities and social service organizations.

Quantitative Assessment

Metric	Capability Target	Capability Lost	Capability Sustained	Capability Built	Estimated Current Capability	Capability Gap
Affected Healthcare Facilities and Social Service Organizations	650					

Qualitative Assessment

A qualitative assessment of the Health and Social Services capability was not provided. Questions related to how capability was lost, sustained, and built related to Health and Social Services were not answered on the survey or discussed during Planning Meeting #3 or the SPR process. During Planning Meeting #3, it was noted that the Health Department is working on hazard vulnerability documents, which may contribute to sustaining Health and Social Services capability.

The County lacks an updated Recovery Plan. Without an updated Recovery Plan, it is difficult to have an accurate assessment of the County's ability to restore functions at affected healthcare facilities and social service organizations.

Gaps in the POETE Areas

Gaps in the Health and Social Services capability include:

- The lack of an updated Recovery Plan, Debris Management Plan, and Damage Assessment Annex/Procedures.

Level of Confidence in the Accuracy of the Capability Assessment: ___

5 is the highest level of confidence and 1 is the lowest level of confidence

Priority Placed on Sustaining and/or Building this Capability Target: ___

31. Housing

Description: Implement housing solutions that effectively support the needs of the whole community and contribute to its sustainability and resilience.

THIRA Step 3: Capability Target

Within **12 months** of an incident, **8,000** people requiring long-term housing, including **2,000** people with access and functional needs (requiring accessible long-term housing), find and secure long-term housing.

Context and Comments

It is difficult to determine the need for long-term housing as many factors go into this equation. The earthquake scenario estimated that 8,000 people would need long-term housing and this was based on many factors, including the percentage of buildings and residential homes that sustained extensive or complete damage.

The timeframe of 12 months was established as individuals may be in general shelters or temporary, non-congregate housing before that. It will take time to find long-term housing solutions for all 8,000 individuals when the entirety of the Salt Lake Valley is recovering from an earthquake. Before residential homes can be inspected and rebuilt, critical infrastructure (transportation/roadways, utilities, healthcare facilities, etc.) will have to be re-established. The County will likely have an insufficient number of construction workers, inspectors, and those providing technical assistance to rebuild.

The threat or hazard that most challenges the County's ability to achieve this capability target is an **Earthquake**.

SPR Overview

Assessment of Current Capability

Within ____ of an incident, _____ people requiring long-term housing, including _____ people with access and functional needs (requiring accessible long-term housing), find and secure long-term housing.

Quantitative Assessment

Metric	Capability Target	Capability Lost	Capability Sustained	Capability Built	Estimated Current Capability	Capability Gap
People Requiring Long-Term Housing	8,000					
People with AFN Requiring Accessible, Long-Term Housing	2,000					

Qualitative Assessment

A qualitative assessment of the Housing capability was not provided. Questions related to how capability was lost, sustained, and built related to Housing were not answered on the survey or discussed during Planning Meeting #3 or the SPR process.

As noted during Planning Meeting #3, the County lacks an updated Recovery Plan. Without an updated Recovery Plan, it is difficult to estimate the County's capability to provide long-term housing. Throughout the SPR process, there were also multiple conversations about the difficulty of housing people following a major disaster, such as a large earthquake, due to the number of unreinforced masonry buildings that will likely be destroyed and the already saturated housing market in Salt Lake.

Gaps in the POETE Areas

Gaps in the Housing capability include:

- The lack of an updated Recovery Plan, Debris Management Plan, and Damage Assessment Annex/Procedures.
- The County needs to update and create additional documents to the CEMP, including the sheltering plan/guidance.

Level of Confidence in the Accuracy of the Capability Assessment: ___

5 is the highest level of confidence and 1 is the lowest level of confidence

Priority Placed on Sustaining and/or Building this Capability Target: ___

32. Natural and Cultural Resources

Description: Protect natural and cultural resources and historic properties through appropriate planning, mitigation, response, and recovery actions to preserve, conserve, rehabilitate, and restore them consistent with post-disaster community priorities and best practices and in compliance with applicable environmental and historic preservation laws and Executive orders.

THIRA Step 3: Capability Target

Within **5 years** of an incident, restore **400** damaged natural and cultural resources and historic properties registered in the jurisdiction.

Context and Comments

This capability target is hard to determine as there is a lack of consolidated data on existing natural and cultural resources. There is also a lack of comprehensive analysis of potential disaster impacts on these resources as many are not well-defined or included in disaster modeling.

Restoration will not be possible for all natural and cultural resources. Due to the large portion of the older, historic buildings in the County being of unreinforced masonry and particularly susceptible to damage from an earthquake, unfortunately, some facilities will not be restored. While some facilities are privately owned and may be restored on their own timeline, other County-owned resources and facilities, such as recreation areas, will not be the County's first priority. Of the estimated 500 natural and cultural resources that will sustain damage from an earthquake, 20% (100) will not be restored.

Restoring these facilities requires assistance from technical specialists and subject matter experts to complete damage assessments and/or many facilities will have to undergo FEMA's Environmental and Historic Preservation process to receive Public Assistance funding.

The threat or hazard that most challenges the County's ability to achieve this capability target is an **Earthquake** or **Active Threat**.

SPR Overview

Assessment of Current Capability

Within ____ of an incident, restore ____ damaged natural and cultural resources and historic properties registered in the jurisdiction.

Quantitative Assessment

Metric	Capability Target	Capability Lost	Capability Sustained	Capability Built	Estimated Current Capability	Capability Gap
Natural and Cultural Resources and Historic Properties	400					

Qualitative Assessment

A qualitative assessment of the Natural and Cultural Resources capability was not provided. Questions related to how capability was lost, sustained, and built related to Housing were not answered on the survey or discussed during Planning Meeting #3 or the SPR process.

As noted during Planning Meeting #3, the County lacks an updated Recovery Plan. Without an updated Recovery Plan, it is difficult to estimate the County's capability to restore natural and cultural resources and historic properties.

Gaps in the POETE Areas

Gaps in the Natural and Cultural Resources capability include:

- The lack of an updated Recovery Plan, Debris Management Plan, and Damage Assessment Annex/Procedures.

Level of Confidence in the Accuracy of the Capability Assessment: ___

5 is the highest level of confidence and 1 is the lowest level of confidence

Priority Placed on Sustaining and/or Building this Capability Target: ___

VI. SPR Assessment Summary

To complete the Stakeholder Preparedness Review (SPR) assessment, individual surveys were created and distributed to emergency management partners and stakeholders. One survey was created for each of the 32 core capabilities. Responses were received for 13 of the core capabilities. A total of 43 responses were received. The lack of responses to the SPR surveys created several gaps in the overall SPR assessment.

Of the surveys that were completed, respondents indicated that Planning and Operational Coordination capabilities are a high priority for the County to sustain and build. No capability was listed as a low priority. All other capabilities that were addressed in the surveys were considered a medium priority by respondents: Public Information and Warning, Mass Search and Rescue Operations, Operational Communications, Situational Assessment, Interdiction and Disruption, Supply Chain Integrity and Security, Risk and Disaster Resilience Assessment, and Threats and Hazards Identification.

1. Planning Meeting Discussion

Planning Meeting #3 focused on identifying gaps and ways to address these gaps in each of the POETE areas. Discussions during this meeting were not specific to any of the capabilities. Attendees provided information on gaps and recommendations based on their knowledge and expertise. Therefore, the information gathered during the meeting is a reflection of the attendees and may not apply to all core capabilities, agencies/departments, or jurisdictions within the County. Common themes from the planning meeting are presented in **Table 1: Planning Meeting #3 Summary**. Note this is not all-inclusive of the discussions during Planning Meeting #3, detailed notes from this meeting are available upon request.

To collect additional SPR data, planning meeting attendees were each asked to assess whether they believe capability was lost, sustained, or built for each of the 32 core capabilities. This was a quick assessment and is not as detailed as the full SPR assessment, but it provides a snapshot into how attendees feel the County's capabilities have changed over the year. This information is presented in **Table 2: Core Capability Assessment**.

Table 1: Planning Meeting #3 Summary.

POETE Area	Capability Gaps	Recommendations
Planning	Lack of plans/procedures or outdated documents, including the Recovery Plan, Debris Management Plan, Damage Assessment Annex, Cyber Threats Incident Annex, Public Information Plan, Evacuation Plan, Communications Plan, and more.	Update or create plans/procedures as time and resources allow.
		Conduct an annual review of plans/procedures.
		Deconflict plans/procedures.
Organization	Staffing gaps or vacancies in emergency management positions and lack of full-time emergency management staff in some jurisdictions.	Conduct a survey or assessment for the jurisdictions to determine staffing levels and gaps.
	Competing priorities and difficulty getting buy-in on emergency preparedness activities.	Engage leadership in more activities so that they have a better understanding of emergency management.
	Lack of understanding of common response processes, ICS, what emergency management does, and what an individual or agency's role in emergency management is.	Enhance coordination by conducting weekly operations briefings, provide information during the Countywide onboarding process on roles in emergency management, and provide additional training on these topics.
Equipment	Lack of a good resource management system.	Develop a record management system for equipment or improve the current processes for tracking equipment.
	A Countywide mass notification system and equipment.	Purchase a Countywide mass notification system.

POETE Area	Capability Gaps	Recommendations
	Gaps include backup power for communications equipment, backup generators, HazMat equipment, mobile command/communications units, Satellite phones, evacuation equipment, Starlink equipment, and more.	Purchase the equipment as resources and funding allow. Prioritize need.
Training	An outdated Integrated Preparedness Plan.	Update the Integrated Preparedness Plan, creating a realistic schedule for training and exercises.
	In general, a lack of training was reported on a variety of topics, including public information, communications, EOC/ECC activation and operations, incident response, ICS training, etc.	Conduct additional training as time and resources allow. Prioritize need. Engage leadership in the training process.
Exercises	An outdated Integrated Preparedness Plan.	Update the Integrated Preparedness Plan, creating a realistic schedule for training and exercises.
	A lack of exercises that test the interaction and coordination between jurisdictions, special districts, and the County.	Conduct Countywide exercises that test the interplay between partner organizations and address operational communication.
	In general, a lack of exercises was reported. Attendees would like to see the following topics addressed in future exercises: communications, evacuation, public information, regional and countywide coordination, EOC/ECC activation, Continuity, Recovery, etc.	Conduct additional exercises as time and resources allow. Prioritize need. Engage leadership in the exercises.

Table 2: Core Capability Assessment.

Core Capability	Lost	Sustained	Built	Unknown
Planning		6	3	1
Public Information and Warning		6	3	1
Operational Coordination	1	4	3	1
Forensics and Attribution		2		7
Intelligence and Information Sharing	1	3	2	3
Interdiction and Disruption		1		8
Screening, Search, and Detection		3		6
Access Control and Identify Verification		2	1	5
Physical Protective Measures		4	1	4
Cybersecurity		4	2	4
Supply Chain Integrity and Security		3		6
Risk Management for Protection Programs and Activities	1	4		3
Risk and Disaster Resilience Assessment	1	2	3	2
Community Resilience	1	5		2
Long-term Vulnerability Reduction	1	2	2	3
Threats and Hazards Identification		3	5	1
Environmental Response / Health and Safety	1	4		3
Critical Transportation	2	5		1
Situational Assessment	1	3	1	3
Fatality Management Services	1	3	1	3
Fire Management and Suppression		7		2
Infrastructure Systems	1	4		3
Logistics and Supply Chain Management	1	4	1	3
Mass Care Services		5	1	2
Mass Search and Rescue Operations		3	2	3
On-Scene Security, Protection, and Law Enforcement		4	1	4
Operational Communications	2	5	1	1
Public Health, Healthcare, and Emergency Medical Services		6		2
Health and Social Services		4	1	3
Economic Recovery	1	2		4
Natural and Cultural Resources		2	1	5

Housing	2	2		4

2. Funding Sources

Table 3 provides an overview of SPR Step 3, which estimates the degree to which various funding sources impacted the building and sustainment of the capabilities assessed by the capability targets.

Table 3: SPR Step 3 Funding Sources.

	Funding Source	State, Territory, or Tribe	Local	Privte-sector or Non-Profit	AFG	CCTA	CSEPP	CTP	EMPG	FMA	HMPG	IBSGP	IPR	NSGP	OPSG	PDM	PRPA	PSGP	RCPGP	REPP	SHSP	THSGP	TSGP	UASI	Other
Cross-Cutting	Planning		P						A		A					A									
	Public Information and Warning		P																						
	Operational Coordination		P		A																A				
Prevention & Protection	Forensics and Attribution		U																						
	Intelligence and Information Sharing		P																						
	Interdiction and Disruption		P																		A				
	Screening, Search, and Detection		P																		A				
	Access Control and Identify Verification		P																						
	Physical Protective Measures		P																		A				
	Cybersecurity		P																		A				
	Supply Chain Integrity and Security		P																						
	Risk Management for Protection Programs and Activities		P																						
Mitigation	Risk and Disaster Resilience Assessment								A												P				
	Community Resilience										A										P				
	Long-term Vulnerability Reduction										P														
	Threats and Hazards Identification																				P				
Response	Environmental Response / Health and Safety		A																		P				
	Critical Transportation																								
	Situational Assessment		A																						
	Fatality Management Services		P																						
	Fire Management and Suppression		P																						
	Infrastructure Systems		A								P														
	Logistics and Supply Chain Management		P																						
	Mass Care Services		P																						
	Mass Search and Rescue Operations													A							A				P*
	On-Scene Security, Protection, and Law Enforcement		A																						P*
	Operational Communications		P																						
	Public Health, Healthcare, and Emergency Medical Services		A																						P
Recovery	Health and Social Services																								P
	Economic Recovery		A																						P
	Natural and Cultural Resources	A	A								P														
	Housing		A																						P

P = Primary Funding Source (>50%)
A = Additional Funding Source (<50%)
U = Unknown (not a known source)

*The other funding source is the FEMA US&R Cooperative Agreement

VII. Recommendations

The following recommendations are based on the information available to the planning team during the THIRA/SPR process.

1. Develop a Strategic Plan for Salt Lake County Emergency Management.

The Strategic Plan should utilize the information gathered during the THIRA/SPR process to set programmatic goals and prioritize emergency management activities. For each of the POETE areas, multiple gaps were identified. It is unrealistic for the County to address all these gaps in the next year before the next SPR assessment. The County should review all gaps for each POETE area and based on staffing, funding, resources, times, and other factors deemed important by County leadership, prioritize preparedness and mitigation activities for the coming years. The County should develop timeframes for completing these preparedness activities and develop SMART—specific, measurable, achievable, relevant, and time-bound—objectives for the coming years.

2. Develop an Integrated Preparedness Plan (IPP).

Throughout the process, staff noted that the County is planning to develop and/or update its Integrated Preparedness Plan within the next year. Several gaps in training and exercises were identified during the THIRA/SPR process. Salt Lake County Emergency Management should assess their training and exercise gaps, prioritize needs, and incorporate this into the County's IPP. The IPP should be reviewed and updated at least annually.

3. Regularly Engage Emergency Management Stakeholders.

A major factor in an effective emergency management response is the ability to coordinate and communicate with response partners. Developing and nurturing these relationships during normal operating conditions will enhance response capabilities. In the THIRA/SPR process, County staff noted a lack of understanding of their individual or departmental role in emergency management, confusion over the County's emergency management organizational structure, inconsistent plans/procedures between jurisdictions, and a lack of Countywide exercise opportunities. Progress could be made in these gaps and others by engaging partner organizations more regularly and utilizing existing platforms and groups to share information and conduct training and exercises.

4. Complete the THIRA/SPR Process Regularly.

The County should continue to complete the THIRA/SPR process routinely. The THIRA should be completed every 3 years, with the next one scheduled for 2027. The SPR assessment should be completed annually. In future years, both the THIRA and SPR process should be less time-consuming as there is now existing material from which to build.

VIII. Acronyms

AFN	Access and Functional Needs
CDC	Centers for Disease Control and Prevention
CEMP	Comprehensive Emergency Management Plan
CERT	Community Emergency Response Team
CST	Civil Support Team
DHHS	Utah Department of Health and Human Services
ECC	Emergency Coordination Center
EOC	Emergency Operations Center
FEMA	Federal Emergency Management Agency
HMP	Hazard Mitigation Plan
IPP	Integrated Preparedness Plan
ITDRP	Information Technology Disaster Recovery Plan
JTTF	Joint Terrorism Task Force
LEP	Limited English Proficiency
ME	Medical Examiner
MOA	Mutual Aid Agreements
MOU	Memorandums of Understanding
PIO	Public Information Officer
POD	Point of Distribution
POETE	Planning, Organization, Equipment, Training, and Exercises
RFW	Red Flag Warnings
RRCC	Regional Response Coordination Center
SAFE	Schools and Families in Emergencies
SL VECC	Salt Lake Valley Emergency Communications Center
SLCFD	Salt Lake City Fire Department
SLCo	Salt Lake County
SLCo EM	Salt Lake County Emergency Management
SLCOSO	Salt Lake County Sheriff's Office
SPR	Stakeholder Preparedness Review
SWE	Snow Water Equivalent
THIRA	Threat and Hazard Identification and Risk Assessment
UFA	Unified Fire Authority
UPD	Unified Police Department
URM	Unreinforced Masonry
USGS	United States Geological Survey
UT-TF1	Utah Task Force One
WCIF	Whole Community Input Form
WHO	World Health Organization