State of Oregon

Cascadia Rising 2016 Exercise
Catastrophic Earthquake & Tsunami Scenario

June 7 – 10, 2016

Statewide After-Action Final Report

This After-Action Report (AAR) provides an overview of Oregon's statewide participation in the Cascadia Rising 2016 Exercise. It describes activities that occurred during the exercise, identifies key assessment findings, and provides recommendations for the enhancement of local, tribal and state-level emergency management programs with a focus on coordination and mutual support.

Developed by Oregon Office of Emergency Management

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HANDLING INSTRUCTIONS

1. The title of this document is Cascadia Rising 2016 Exercise State of Oregon After-Action Report (AAR).

2. At a minimum, this document, upon approval and promulgation, will be disseminated to local, tribal, state and federal government agencies, non-governmental organizations, associated private sector entities and other interested parties. It will also be posted on the Office of Emergency Management (OEM) website for public consumption.

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FOREWORD

Are we prepared?

Cascadia Rising was the largest exercise the State of Oregon has ever conducted. The four days of exercise play in June, 2016 was merely one step in a process that began in 2014 and will continue for years to come as recommendations are implemented and lessons learned are put into practice.

There are several outcomes one hopes for when developing and conducting an exercise of this scope and scale. First and foremost, that exercise controllers, evaluators, and players make it through exercise play without things getting too far off the rails, limiting the benefit of the exercise. There were many opportunities in the conduct of this exercise where the panic button could have been pressed and the years of planning come crashing down around us. Oregon, however, is fortunate to have some of the most skilled, talented, and experienced emergency management professionals and volunteers I have ever had the pleasure of working with. Despite the challenges of this exercise, each obstacle was met with the determination, flexibility, and creativity to go around, dig under, jump over, or push through to a solution and move on to the next one. That observation alone was enough to make this exercise valuable, but our take-aways from this experience were many, and it is my hope that most of them are captured in this report.

Exercises, like emergency or disaster responses, progress through moments of "uh-oh" and "oh-no". Hopefully we reach "ah-ha", and occasionally, "ta-da". Below are some of the "ah-ha" moments I experienced, some of which surprised me, but they all made me better positioned for the next emergency or disaster, and I hope that sharing them will provide additional insight beyond the recommendations of this report into how emergency management at the state level in Oregon is working to address the threats facing our state.

All state agencies become emergency management agencies. This is probably true across local, tribal and federal government, and includes our private sector and non-profit partners. The challenge of Cascadia exceeds a single agency, discipline, sector, or level of government. We must refine our ability to coordinate in austere environments and ensure that, at least initially, every action, resource, and movement is doing one of two things: save or sustain lives and obtain or maintain situational awareness. If you have a role to play during the first two weeks of a disaster of this magnitude, think about what you and your resources can bring to support those missions. We must continue to find opportunities to plan, train, and exercise together. Once every few years is not enough. I am encouraged by the momentum this exercise has created, the commitment of the Governor's Disaster Cabinet, which first convened during this exercise and has already re-convened to revisit the Cabinet's role in recovery, and commit the Oregon Office of Emergency Management to increasing the frequency and breadth of our training and exercise program to include as diverse a group of partners as possible.

Communication wins the day. We are all accustomed to instant connectivity. Even during an emergency, we expect immediate responses to text messages, to pull up our social media platform of choice and find pictures or streaming video from the emergency scene, or hit the telephone icon on our smart phones and instantly be connected to our liaison at a command post for a situation report. This level of connectivity cannot be relied upon for an event like Cascadia. I learned quickly that a satellite phone is different from a cell phone, and not in a good way. Amateur radio may be our only reliable communications link for days, if not weeks. Get your amateur radio license and a radio, and find out who your amateur radio operators are in your community. Our ability to send resources where they can do the most good is in many ways predicated on timely and accurate situational awareness. We need more robust secondary means of communications. And we probably need back-up systems for those. We also need to practice using these systems. Often.

Resources are coming. We will be getting a lot of stuff from across the country and eventually around the world. We need to make sure we are prepared to receive these resources and deploy them quickly, without adding to the confusion or chaos in the impacted areas. To effectively handle this influx of people and things, we need to ensure we have well thought out (and well-practiced) continuity of operations plans and facilities, robust pre-scripted mission assignments and mission-ready packages for expected resource needs, and the ability to establish communications and, if needed, command, in jurisdictions that may not have those elements available.

Benchmarks are important. Measuring outcomes can be a tricky prospect in the world of emergency management and response. Every disaster is different, and unique circumstances make replicating our actions difficult. For a disaster like Cascadia, however, our ability to assess our progress towards reaching objectives that are SMART (specific, measurable, action-oriented, realistic, and time-sensitive) will be important as we struggle to allocate finite resources to a situation that may feel infinite. As we work to measure progress for the implementation of improvement actions outlined in this report, we should take a similar approach to our planning process. What are our expected outcomes an hour after the ground starts shaking? Six hours? Two days? Two weeks? Having these benchmarks of critical, time-sensitive tasks will help decision-makers make smarter decisions about where to allocate or re-allocate resources.

My final "ah-ha", is the realization that there is always more to do. Preparedness is a journey, not a finish line. It is important, however, that we take action to candidly assess our gaps, and address those gaps so that none of us (emergency managers and responders, community leaders, or policy makers) ever have to say we knew a gap existed and did nothing. Throughout this state a significant amount of time and treasure has been invested to ensure our communities are prepared for, can mitigate against, respond to, and recover from any emergency or disaster, regardless of cause.

Are we prepared? More than we were yesterday.

We need to continue to add resources to our developing and existing capabilities, build capacity and reinforce a culture of preparedness so we can continue to say without hesitation we are more prepared today than we were yesterday, and we will be more prepared tomorrow.

To those who participated in or supported this exercise, I thank you. To those who learned something from the exercise or this report, I look forward to working together so that when the ground shakes, the wind blows, or the rain falls we can save the lives of those who have entrusted us to do just that.

Andrew J. Phelps
Director
Oregon Office of Emergency Management

EXECUTIVE SUMMARY

STATEWIDE SIGNIFICANT FINDINGS

Major Strengths

From a statewide perspective, several major strengths were identified during this exercise:

- Jurisdictions of varying size and complexity activated and coordinated internal operations with limited preparedness and training.

- Partners leveraged existing relationships to inform decision-making and facilitate information sharing.

- Auxiliary amateur radio communications were established quickly throughout the state and were maintained throughout the exercise.

- Exercise development provided participating jurisdictions with significant data regarding risks, vulnerabilities, capabilities, and operational considerations prior to and during exercise play.

- The exercise provided an extraordinary opportunity for the state, FEMA, and other agencies and organizations to practice their response to a catastrophic event and to identify gaps in individual and collective capabilities.

Areas of Improvement

Throughout exercise planning and play, several areas for improvement in Oregon's ability to respond to a Cascadia Subduction Zone earthquake and tsunami event were identified. Some of the more notable identified gaps are:

- Oregon's transportation, communication and energy networks, essential to an effective catastrophic event response and lifesaving and life sustaining efforts, are vulnerable in many areas of the state following a catastrophic earthquake/tsunami event.

- Space, operational resources and staff limitations within the Oregon ECC hindered the State's response and its ability to coordinate with local, tribal, regional, and federal partners.

- Gaps in plans, procedures and staff institutional knowledge at all levels of government identified the need for further incident planning and training.

- The resource requesting and fulfillment processes from local/tribal jurisdictions, through the state, and onto the federal government were not fully documented and understood at all levels, and left requesters unsure of the progress of their requests.

- Existing auxiliary amateur radio processes are slow and not capable of handling the large volumes of traffic expected during an event of this size, mostly due to radio bandwidth issues.

Section 1
EXERCISE OVERVIEW

EXERCISE FACTS

EXERCISE NAME	Cascadia Rising 2016 - Catastrophic Earthquake Functional Exercise
EXERCISE DATES	June 7-10, 2016
SCOPE	This exercise was planned and presented as a Functional Exercise with limited operational field play conducted over a four-day period, at multiple venues throughout Oregon.
MISSION AREA(S)	Response
OVERARCHING OBJECTIVES & CORE CAPABILITIES	1. Operational Communications 2. Public Health and Medical Services 3. Mass Care Services 4. Situational Assessment 5. Critical Transportation 6. Operational Coordination
THREAT OR HAZARD	Earthquake and tsunami
EXERCISE SCENARIO	A 9.0 magnitude earthquake along the entire 700-mile Cascadia Subduction Zone (CSZ) with subsequent tsunamis and aftershocks directly impacting Oregon and Washington.
SPONSORS	• Oregon Military Dept. Office of Emergency Management • Federal Emergency Management Agency – Region 10 • Washington Military Dept. – Emergency Management Division • Idaho Military Division – Idaho Bureau of Homeland Security • U.S. Department of Defense – Northern Command • U.S. Department of Defense – Transportation Command • FEMA – National Exercise Division and Office of Response and Recovery
PARTICIPATING ORGANIZATIONS	City, county, state and federal jurisdictions, tribal nations, non-governmental organizations, and private sector entities. (Refer to Appendix-B for a complete list of participating communities and agencies.

INTRODUCTION

Cascadia Rising 2016 was a multi-state Functional Exercise, developed to test jurisdictional and agency Operational Communications, Public Health and Medical Services, Mass-Care Services, Situational Assessment, Critical Transportation, and Operational Coordination capabilities. The State of Oregon participated through a full activation of the State ECC, with participation from over 15 state agencies, and local EOCs activated in 18 counties, 3 cities, and all 9 Oregon tribes, as well as several non-governmental organizations (NGOs) and private sector partners.

The exercise identified many areas for improvement and, from this perspective, was viewed as a success that help align future financial and administrative processes with jurisdictional/agency priorities. Subsequent planning, training and exercises should focus on building coordination capabilities and streamlining the resource requesting and fulfillment processes.

AAR PURPOSE & SCOPE

This report analyzes statewide exercise results, identifies strengths to be maintained and built upon, identifies areas for further improvement, and supports development of future jurisdictional/agency corrective action/improvement plans.

This AAR is an assessment of exercise performance from a state perspective and incorporates generalized findings that affect state, tribal and local government catastrophic event preparedness and response.

OVERARCHING OBJECTIVES

Oregon and Washington Emergency Management each surveyed their local, state and tribal governments to identify the top five *Core Capabilities* which they felt should be tested as part of a functional Cascadia Subduction Zone exercise. Entities within both states identified the same top six Core Capabilities, which became the basis for the planning for exercise planning. Oregon, Washington and FEMA Region X exercise planners then identified six *Overarching Objectives* linked to the Core Capabilities for the exercise.

Core Capabilities:

1. Operational Communications
2. Public Health and Medical Services
3. Mass Care Services
4. Situational Assessment
5. Critical Transportation
6. Operational Coordination

Section 2
AFTER-ACTION METHODOLOGY

OREGON EXERCISE DATA COLLECTION

The Cascadia Rising post-exercise data collection process is comprised of two sources of information: exercise evaluators and exercise participants. The collected information was analyzed by state exercise planners and is summarized in the strategic and operational/core capability findings contained in this report.

Evaluator Data

Exercise Evaluation Guides (EEGs) were created for each of the six overarching objectives for this exercise. The EEGs contained joint objectives and critical tasks for each of the overarching objectives to guide evaluators in assessing each core capability. Participating jurisdiction/agency evaluators were provided these EEGs to complete and submit to the State OEM After-Action Evaluation Team after the exercise. In addition to the EEGs, all evaluators received After-Action Report (AAR) *Input Forms and Evaluator Logs* to record data.

Exercise Participant Data

All exercise participants (including players, controllers, evaluators, and observers) were asked to submit feedback throughout the exercise. Participants at each venue were instructed to document exercise strengths and areas for improvement on *Participant Feedback Forms*. In addition, many players participated in hot washes on the final day of the exercise and in the following weeks.

Evaluators conducted the hot washes and captured key discussion points to submit to the After-Action Evaluation Team at the conclusion of the exercise. Finally, exercise participants were asked to complete an online post-exercise *Participant Survey*. The *Participant Survey* solicited feedback about the value of exercise activities leading up to Cascadia Rising, including the effectiveness of exercise design and pre-exercise training needs. In total, 593 participants completed a *Participant Survey*.

REGIONAL AAR DEVELOPMENT

The regional Cascadia Rising After-Action Evaluation Team included representatives from the states of Oregon, Idaho, and Washington and from the Federal Emergency Management Agency (FEMA) and University of Washington. Following the exercise, the regional AAR Evaluation Team collected and analyzed the submitted evaluation materials; conducted follow-up interviews with exercise participants as needed; and then prepared the regional AAR. Pertinent information from the regional AAR is included in the State of Oregon AAR.

Section 3
STRATEGIC FINDINGS & RECOMMENDATIONS

OVERVIEW

The complexity and duration of the Cascadia Rising 2016 Exercise provided an unprecedented opportunity to examine and assess response and emergency management practices, and identify gaps/weaknesses. The focus for these findings and recommendations is statewide, with assessments pertaining only to participant response operations in Oregon.

STATEWIDE STRATEGIC FINDINGS

Strategic findings were identified as a result of the exercise, both during exercise planning and actual play. The findings have a direct bearing on statewide preparedness, response capability and resilience following a catastrophic event. Strategic findings represent collective exercise assessments statewide.

STATEWIDE STRATEGIC RECOMMENDATIONS

The strategic recommendations for statewide action are associated with the findings from the Cascadia Rising Exercise. Recommendations are broad in scope, multi-jurisdictionally focused and keyed to the six overarching objectives. This is not an all-inclusive list, nor does it detail strategies to be considered and implemented at the local/tribal/agency level.

STRATEGIC OBSERVATION #1:	**Current emergency planning is not adequate or comprehensive enough to effectively address catastrophic disasters and their impact on the whole community within Oregon.**
STRATEGIC RECOMMENDATION #1:	**Government should conduct more robust and detailed catastrophic planning, build and maintain sustainable readiness capabilities, collaborate with all aspects of the community, and regularly exercise response plans and operational assumptions. Consideration should be given to the efficacy of the organization of the Cascadia Playbook and whether or not alternative structures (e.g. time-based plays versus function-based plays or incorporating SMART objectives) should be used. The Governor's Disaster Cabinet should continue to be engaged in the disaster response and recovery process through regularly scheduled exercises. Consideration should be given to expanding the Oregon Emergency Response System (OERS) agencies to include all agencies with a primary or supporting Emergency Support Function (ESF) role.**

STRATEGIC OBSERVATION #2:	The state is at significant risk from a catastrophic CSZ earthquake because of the scope and scale of impact to the population statewide; widespread and significant damage to critical infrastructure; loss of local/tribal/state response capability; and substantive impact to and disruption of local/tribal/state government continuity and operational integrity.
STRATEGIC RECOMMENDATION #2:	The State should continue to lead and facilitate statewide preparedness and response planning, and to formulate appropriate mechanisms to support local emergency management activities and efforts. The State's "Two Weeks Ready" preparedness message, which recommends individuals, families, and businesses have enough supplies to be self-sustaining for at least two weeks following a disaster, should be as robust and comprehensive as current three-days/72-hours preparedness messages elsewhere.

STRATEGIC OBSERVATION #3:	Government, at all levels, is ill prepared and equipped to implement effective Continuity of Operations (COOP) and Continuity of Government (COG) operations based upon the level of impact identified during the exercise. Government's stability, post-disaster, poses a direct impact to both response operations and recovery efforts.
STRATEGIC RECOMMENDATION #3:	Government cannot respond and provide essential functions if it is not able to quickly organize following a disaster. In order to accomplish that mission, it is vital that local, tribal and state government agencies develop realistic and effective plans and capabilities relating to both COOP and COG for catastrophic events. These plans must be regularly exercised and staff must be trained to perform critical COOP and COG functions. Agencies must develop depth through mentoring, cross-training, and other staff development to ensure COOP plans can be implemented.

STRATEGIC OBSERVATION #4:	The exercise identified that the current approach to catastrophic event preparedness and response planning, at various levels of government within the state, is in need of re-evaluation and re-focusing. The response emphasis was on an event that, while impactful, was manageable with existing resources.
STRATEGIC RECOMMENDATION #4:	Jurisdictions and organizations should make catastrophic planning for emergency preparedness a critical priority within Oregon. This includes actions to be taken by individuals/families, private sector, community organizations, and governments that increase the opportunity for survivability.

STRATEGIC OBSERVATION #5:	**The exercise showed that government's ability to effectively communicate critical warnings, direction and preparedness information to the public was greatly reduced because of impacts to standard communication systems and networks. This impact to communication infrastructure presents a significant obstacle to government attempts in the timely dissemination of essential disaster information during a catastrophic event.**
STRATEGIC RECOMMENDATION #5:	**Greater emphasis should be directed to the hardening of vulnerable local and state communications infrastructure, development of redundant communication pathways and enhanced coordination between all sectors of government. This would help to ensure that critical warning and preparedness information can be quickly disseminated within impacted regions. Alternative communication methods should be exercised regularly.**

STRATEGIC OBSERVATION #6:	**The exercise showed that the State ECC was not equipped, staffed, or structurally designed to provide the level of sustained emergency management required in response to a catastrophic event.**
STRATEGIC RECOMMENDATION #6:	**The State ECC, as the central point of coordination within Oregon for emergency management, requires additional space, information and communications systems, trained personnel, and operational resources to meet the immediate and expanded requirements of a catastrophic event. Increased focus should be given to the ECC's planning function and the products developed by the ECC during activations, including ECC Action Plans and developing Situation Reports.**

STRATEGIC OBSERVATION #7:	**The exercise showed that additional planning and relationships are required to effectively integrate the statewide community to manage and support both event and post-impact aspects of a catastrophic event.**
STRATEGIC RECOMMENDATION #7:	**Government and the private sector should work collaboratively to enhance the resiliency of critical infrastructure systems, networks and services to ensure resilience and interoperability in preparation for a future catastrophic event. Critical infrastructure systems and networks must work to further mitigate risk, implement protective measures and increase operating redundancies.**

STRATEGIC OBSERVATION #8:	**The exercise showed that there exists no integrated plan among local, tribal, state, or federal agencies to manage the staging and further deployment of intrastate mutual aid response resources into Oregon following a catastrophic event. Although federal and military mobilization initiatives did exist, they were not effectively integrated into state and local operational plans.**
STRATEGIC RECOMMENDATION #8:	**Governments at all levels should identify joint protocols and processes to support the reception, organization, deployment, and operational support of massive quantities of response and life sustaining resources as may be deployed to Oregon from other states and across the nation. Such planning should include local/tribal jurisdictions that will be directly impacted by the sudden impact of such resource mobilization operations. ESFs should develop mission-ready packages to quickly mobilize external resources, establishing pre-scripted mission assignments for internal resources. Exercises should be designed to include complex resource request processes, such as the use of the Emergency Management Assistance Compact (EMAC) or Pacific Northwest Emergency Management Arrangement (PNEMA). The state should consider its ability to leverage external leadership resources to fill key roles, similar to the "Sister Community" program between Tillamook and Umatilla Counties.**

STRATEGIC OBSERVATION #9:	**The exercise showed that one of the fundamental impacts for Oregon associated with a catastrophic earthquake is the probable loss of established fuel storage and distribution capacity. Such an impact would significantly impair statewide response and life sustainment operations immediately following a catastrophic earthquake, and significantly delay the start of immediate recovery efforts.**
STRATEGIC RECOMMENDATION #9:	**The State, in cooperation with local and private sector partners, should develop a comprehensive and integrated plan for importing critical fuel supplies to support emergency response, life sustainment, critical infrastructure functioning, and immediate post-impact recovery operations. A plan should be developed that would identify all available methods of transporting fuel into the state, storing it in bulk and employing an organized distribution process until a sustainable supply pathway can be developed.**

STRATEGIC OBSERVATION #10:	**The exercise demonstrated that a catastrophic earthquake and tsunami event would produce adverse effects well beyond conceptual impacts to life safety, property, infrastructure, and heightened response complexities. Traditional situational assessment techniques and response resource strategies were shown to be ineffectual given the level of impact and unconventional issues encountered as the scenario played out during the exercise.**
STRATEGIC RECOMMENDATION #10:	**All levels of government within Oregon need to reconsider potential impacts associated with a Cascadia Subduction Zone rupture. Future response and recovery planning must take into account next tier impacts and operational needs such as the occurrence of urban conflagrations; statewide fuel supply limitations; concurrent movement of evacuees with incoming mutual aid resources; interoperable communications among all response forces; sustainability of emergency management facilities; organizational COOP requirements; and implementation of extraordinary executive actions under emergency declaration authorities.**

Section 4
OPERATIONAL/CORE CAPABILITY FINDINGS

CORE CAPABILITY ASSESSMENT APPROACH

Aligning exercise objectives and core capabilities provides a consistent pathway for evaluation that transcends individual exercises to support preparedness reporting and trend analysis. The following section provides an overview of the performance related to each exercise objective and associated core capability, highlighting strengths and areas for improvement.

POETE ELEMENT INTEGRATION

Recommendations for improvement are linked to suggested program assessment elements designed to support core objectives. These elements – planning, organizing, equipping, training, and exercising make up the POETE system, which is used to guide emergency management program coordination. Each of the recommendations listed in this AAR have corresponding suggested POETE elements that indicate what category the improvement effort best represents. These POETE elements are suggestions and may be further refined as individual jurisdictional/organizational efforts begin implementing identified corrective actions.

Planning: Development of operational plans, policies, procedures, protocols, and procedures that support the emergency management mission areas/core capabilities.

Organizing: Development of organizational structures, coordination pathways and strategies that enhance whole community integration and capability.

Equipping: Identifying and procuring operational and support resources.

Training: Development and presentation of skill/capability building training courses and resources for emergency management personnel.

Exercising: Development and presentation of goal-linked exercises to evaluate
Evaluating operational capability, plans, skill, and functional effectiveness.

Core Capability 1: Operational Communications

OVERARCHING EXERCISE OBJECTIVE

> *Demonstrate the ability of Emergency Operations Centers (EOCs) to establish and sustain voice and data communications with other EOCs and with the general public to include basic restoration of communications infrastructure within the impacted area to support response operations and coordinated public messaging.*

JOINT STATE EXERCISE OBJECTIVES

The following Oregon Joint State Exercise Objectives were developed for the testing of this core capability during the exercise:

A. Demonstrate the ability of EOCs at all levels to operate in a degraded communications environment by utilizing HF, VHF, and UHF radio systems/networks, amateur radio, satellite equipment, and other back-up systems to communicate with other EOCs, simulated field responders, and media outlets to ensure interoperability and manage the incident.

B. Demonstrate the ability to coordinate post-disaster assessments of communications infrastructure in order to develop a common operating picture of communication system damages, and coordinate with infrastructure owners to prioritize basic repairs to the communications infrastructure to support life-saving/sustaining response operations.

C. Demonstrate the ability to relay critical messages to the public in a degraded communications environment utilizing means other than television and the Internet.

D. Demonstrate the ability to communicate disaster related information to the public utilizing (mock) social media platforms to include the monitoring of social media for trends, and developing communication strategies and operational remedies to address those trends.

E. Demonstrate the ability of the public affairs community across all EOCs to collaborate on the development of accurate, timely and consistent joint public messaging, with an emphasis on access and functional needs populations to aid disaster survivors and engender trust in government.

STATE EMERGENCY SUPPORT FUNCTIONS (ESF)

The following State ESFs are responsible for the management of response actions for this core capability:

- ESF-2: Communications
- ESF-14: Public Information

OBSERVATIONS & FINDINGS

The strengths and areas for improvement for each core capability aligned to this objective are described in this section.

Strengths

OBSERVATION 1.1:	**While resource requesting illustrated many areas for improvement, direct calls between resource requesters and providers helped to quickly and clearly fill information gaps and strengthened relationships.**

OBSERVATION 1.2:	**Where available, the statewide amateur radio network was utilized very successfully by many local/tribal jurisdictions and the State ECC as alternative modes of communications. Satellite phones were also utilized by various jurisdictions and agencies to supplement traditional telecom capabilities, with mixed results.**

Areas for Improvement

OBSERVATION 1.3:	**Traditional communication systems were disrupted for the first four hours during the exercise to test alternative methods. The exercise showed that many jurisdictions and state agencies were unable to communicate with external partners because of limited access to contact information and knowledge of back-up capabilities.**
ANALYSIS:	Throughout the exercise, many jurisdictions found the contact information within their communication plans was either inaccurate or unavailable. The deficiency can be attributed to a number of factors including: incomplete communications plans; lack of continuity with external communications staff; inexperience with alternative communications mechanisms (e.g., satellite phones, amateur radio, OpsCenter, etc.); and overburdened staff lacking time to practice sufficient communications. For example, several jurisdictions indicated their amateur radio teams lacked the knowledge of which frequencies to use, and others indicated the "communications out" period (the first four hours of Day 1) illustrated a lack of planning for prioritized back-up methods of communication.

	RECOMMENDATION:
POETE Action Focus **Plan**	*Greater emphasis is needed to develop capable, sustainable, effective, and dependable alternate communications systems and operating protocols. Assigned and volunteer personnel should be trained to effectively activate and utilize alternative systems in support of emergency communications.*

OBSERVATION 1.4:	**Public information personnel supporting the State ECC lacked connectivity with other emergency management staff and were reactive as opposed to proactive in public messaging efforts.**
ANALYSIS:	The Joint Information Center (JIC), activated within and in support of the State ECC, was not properly integrated into the activities of other exercise staff. Communications between the two relied upon runners. This led to multiple problems, most notably, a lack of pertinent public messaging. In addition, public information largely relied on injects to tell staff what information was appropriate for release to the public. These entities should have anticipated likely impacts and sought out updates on these needs from management and operations staff that engaged in exercise play.
	RECOMMENDATION:
POETE Action Focus **Plan**	*Greater effort should be spent building a responsive and coordinated joint information system statewide to ensure that disaster messaging can be effectively integrated and managed. Continued development of SOPs, providing training, and focusing exercises on JIC structures is needed.*

OBSERVATION 1.5:	**The use of acronyms and highly technical terminology led to confusion among public and private sector partners.**
ANALYSIS:	The use of emergency response and military jargon confused players and highlighted the need to minimize such language in an ECC setting. Jargon among various agencies and partners does not always align. While an acronym may be understood as one thing by the military or OEM, it may mean something entirely different to other supporting agencies. Use of clear text and plain language, except when necessary to communicate a technical condition or information, would have simplified the process and resulted in more expedient communication at many levels.

RECOMMENDATION:		
POETE Action Focus	**Plan**	*The use of acronyms and technical terminology should be limited when communicating critical information to external partners, especially within the private sector. When appropriate, plain language and clear text practices should be implemented.*

Core Capability 2: Public Health and Medical Services

OVERARCHING OBJECTIVE

Demonstrate the ability to organize, coordinate, and deliver targeted public health and medical services to disaster survivors to include temporary medical facilities, medical surge operations, and patient evacuation and transport to save lives and reduce the suffering of disaster survivors.

JOINT STATE EXERCISE OBJECTIVES

The following Oregon Joint State Objectives were developed for the testing of this core capability during the exercise:

A. Demonstrate the ability of EOCs to assess damages to health care facilities, ascertain capacity to care for the injured, and develop a common operating picture on the status of the health care system.

B. Demonstrate the ability of EOCs to coordinate the rapid expansion of the health care system to include external medical professional staff, the establishment of field triage and alternate care facilities, and the provision of medical equipment and supplies.

C. Demonstrate the ability of EOCs to coordinate the establishment and resourcing of patient points of embarkation and the multi-modal transportation of patients to non-impacted medical facilities for treatment.

D. Demonstrate the ability of EOCs to initiate planning for fatality management including family assistance centers.

E. Demonstrate the ability of EOCs to assess public health and environmental impacts (water, air, food) and damage to facilities such as potable water systems, wastewater/solid waste facilities, and food storage and processing facilities.

STATE EMERGENCY SUPPORT FUNCTIONS (ESF)

The following State ESF is responsible for the management of response actions for this core capability:

- ESF-8: Health and Medical

OBSERVATIONS & FINDINGS

The strengths and areas for improvement for each core capability aligned to this objective are described in this section.

Areas for Improvement

OBSERVATION 2.1:	**Lack of coordination between local, state, and federal health and medical agencies resulted in reduced efficiency and delayed deployment of needed response resources to impacted communities.**
ANALYSIS:	Pre-established federal and state missions were not coordinated with local needs and knowledge. This led to state and federal agencies being prepared to provide resources and services either not identified as a need for locals, or not planned for by the locals. Local jurisdictions were often unaware of which state and federal agencies were involved in the exercise and how best to collaborate.
	In some cases, pre-established missions tasked ESF 8 (public health and medical agencies) with ESF 6 mass-care activities, despite a need for public health and medical resources and support at the local level. This led to conflicting missions between ESF 6 (Mass Care) and ESF 8 (Health and Medical).

RECOMMENDATION:		
POETE Action Focus	**Organize**	*Greater focus on inter-organizational coordination, as it relates to health and medical responses should be built into plans, tested within future readiness exercises, and emphasized at all government levels.*

OBSERVATION 2.2:	**Agencies were sometimes unable to fill public health and medical resource requests because of a lack of identified staging areas at the local level.**
ANALYSIS:	Without pre-identified staging areas, agencies were unable to deploy needed resources because they were unsure of where to send them. Additionally, they were not provided with local plans showing how they would protect and store the resources. Through direct phone-to-phone communication with local emergency managers, some of these resources were able to be deployed. However, that ease of communications may not be realistic in a real incident.

		RECOMMENDATION:
POETE Action Focus	**Plan**	*A list of pre-identified and preferred sites to be utilized as staging areas statewide should be developed that would provide response agencies and organizations with an expedited process to confirm availability of and accessibility to these areas.*

Core Capability 3: Mass Care Services

OVERARCHING OBJECTIVE

Demonstrate the ability to coordinate and deliver life-sustaining services to disaster survivors with a focus on hydration, feeding, emergency sheltering, evacuations, and donations and volunteer management.

JOINT STATE EXERCISE OBJECTIVES

The following Oregon Joint State Objectives were developed for the testing of this core capability during the exercise:

A. Demonstrate the ability of EOCs to coordinate with the whole community, a multi-pronged, mass care strategy with supporting staff, equipment and supplies, that provides for congregate care shelters, tent shelters and other shelter options to meet projected scenario demands for human survivors, household pets and service animals.

B. Demonstrate the ability of EOCs to determine life-sustaining commodity requirements for both shelter and non-shelter disaster survivors.

C. Demonstrate the ability of EOCs to collaborate on disaster survivor protective action decision-making policies and actions (e.g. sheltering or evacuation).

D. Demonstrate the ability to provide timely, accurate and effective public messaging on life supporting actions, shelter information and mass care expectations.

STATE EMERGENCY SUPPORT FUNCTIONS (ESF)

The following State ESFs are responsible for the management of response actions for this core capability:

- ESF-6:   Mass Care
- ESF-11:   Food & Water
- ESF-14:   Public Information
- ESF-15:   Volunteers and Donations
- ESF-17:   Agriculture and Animal Protection

OBSERVATIONS & FINDINGS

The strengths and areas for improvement for each core capability aligned to this objective are described in this section.

Strengths

OBSERVATION 3.1:	**Integration of community and volunteer organizations within local EOCs and the State ECC provided more direct coordination and communication pathways, thereby reducing time and conflict.**

OBSERVATION 3.2:	**Oregon Health Authority and American Red Cross began developing plans to assess the safety of shelters and the medical needs of shelter residents. Having well developed relationships and coordination plans at the local and state levels enhanced connectivity and resulted in rapid shelter activation within many impacted areas.**

Areas for Improvement

OBSERVATION 3.3:		**A lack of effective coordination between ESF 6 and 11 providers compounded the mass-care service delivery mission at various jurisdictional levels.**
ANALYSIS:		Incomplete plans and procedures, coupled with unfamiliar working relationships, led to a lack of coordination in mobilizing, assigning and deploying mass-care resources. ESF agencies responsible for mass care (ESF 6) and for the provision of food and water (ESF 11), did not always work together to determine shelter sites and sustainment needs. This can be attributed to a lack of knowledge of plans, procedures and requesting forms.
RECOMMENDATION:		
POETE Action Focus	**Plan**	*Government and community service providers should develop more robust operational plans, collaborative working agreements, pathways of communication, and staff training to ensure that mass care support flows quickly and effectively among all involved organizations.*

OBSERVATION 3.4:	**A lack of information sharing among state agencies and between state and local partners led to a lack of understanding of the needs, and a delay in the allocation of resources.**
ANALYSIS:	Resources were often allocated on an as-needed basis, because of a lack of resource requests received at the State ECC. A lack of reliable communications with many affected areas led to uncertainty over whether resources were being deployed to areas with the highest need. The lack of a structured mass care response mission assignment system resulted in unnecessary delays in identifying human impacts and providing needed assistance quickly and effectively.
RECOMMENDATION:	

POETE Action Focus	Plan	*Integrated plans and protocols should be developed that provides for a prioritized deployment and allocation of governmental and community mass care services and resources into impacted areas to minimize response delays, conflicts and confusion.*

OBSERVATION 3.5:	**Movement/mass sheltering of evacuees and patients via ground, air and port transportation routes required greater coordination and planning with local/tribal jurisdictions, NGOs, transportation operators, and federal response organizations.**
ANALYSIS:	Local, state and federal emergency management organizations were not synchronized when it came to prioritizing movement and mass sheltering of simulated patients and casualties from impacted areas. The delay was often a result of inadequate communication, non-existent integrated plans, poorly defined operational parameters, and a failure to organize and coordinate responses quickly enough to manage effective responses.
RECOMMENDATION:	

POETE Action Focus	Plan	*Government at all levels should identify priorities, resources, capabilities, and anticipated needs to establish effective operational plans for addressing the movement/sheltering of patients and evacuees using suitable ground/rail/port transportation methods*

Core Capability 4: Situational Assessment

OVERARCHING OBJECTIVE

Demonstrate the ability of EOCs at all levels to provide decision-makers and EOC officials with relevant information regarding the extent of disaster damages to critical infrastructures and other facilities, cascading effects, and the status of ongoing response operations, and share this information with other EOCs and critical stakeholders.

OREGON JOINT STATE EXERCISE OBJECTIVES

The following Oregon Joint State Exercise Objectives were developed for the testing of this core capability during the exercise:

ESF-5: Information and Planning

A. Continuously collect situational awareness information under both normal and degraded communication environments from common and other sources.

B. Prioritize situational awareness information to establish and share a Common Operating Picture (COP) between internal and external partners at all levels, and update or revise this COP using Essential Elements of Information (EEIs) and/or Critical Information Requirements (CIRs), or similar processes.

C. Demonstrate the ability of EOCs to collaborate on the analysis of critical infrastructure damage information and provide forecasts to decision-makers on future supplies and services shortages/problems that will affect both response operations and the public at-large.

D. Demonstrate the ability of EOCs to coordinate the prioritization, staffing, and equipment needs necessary to perform field damage assessments of critical infrastructure lifelines.

STATE EMERGENCY SUPPORT FUNCTIONS (ESF)

The following State ESF is responsible for the management of response actions for this core capability:

- ESF-5: Information and Planning

OBSERVATIONS & FINDINGS

The strengths and areas for improvement for each core capability aligned to this objective are described in this section.

Strengths

OBSERVATION 4.1:	**Web-based tools supported the simultaneous and collaborative sharing of situational information and real-time operational updates with multiple partners statewide. The State RAPTOR tool (situational mapping system) was well-utilized and allowed many jurisdictions to share GIS data efficiently with external partners.**

Areas for Improvement

OBSERVATION 4.2:	**Although the exercise planning process and development of jurisdictional/agency ground truth documents helped to create evidence-based situational awareness and incident-specific solutions, it was not universally successful, nor were data collection efforts standardized for all jurisdictions/agencies.**
ANALYSIS:	The exercise ground truth development process was new and generally unfamiliar to most local/tribal jurisdictions, and participating state agencies. This resulted in some confusion and a lost opportunity to gain substantive insight into local/tribal government anticipated impacts, and state agency response capabilities.
	Although effort was made by both the state and FEMA to communicate with and guide participants about making the ground truth planning effort meaningful and successful, the process was labor intensive and the data returns were often conflicting and non-standardized.
	The ground truth process is a good development tool, both for exercises as well as event planning for understanding local/agency impacts. It should be included in jurisdictional/agency risk assessment efforts.
RECOMMENDATION:	

POETE Action Focus	**Plan**	*Local, tribal and state emergency management agencies should work to develop realistic and detailed risk assessments associated with catastrophic earthquakes to establish baselines of anticipated jurisdictional impacts and response capabilities.*

OBSERVATION 4.3:	While RAPTOR was utilized, excessive data displayed obscured important information.
ANALYSIS:	Many jurisdictions and state agencies accessed RAPTOR during the week of play and this led to large amounts of information being shared. According to the RAPTOR AAR, 28 organizations or entities created 368 total features through RAPTOR, which led to over 1,000 map viewings. With this heavy usage came concerns over the authenticity of information. Many authors did not indicate who they were and generally did not provide a source for their information. In addition, much of the displayed information was irrelevant (non-actionable) to users and only served to "cloud" the display. There is a need to either limit this information from being uploaded in the first place, or create a tool to temporarily remove it from a user's display (e.g., an "event switcher").
RECOMMENDATION:	

| POETE Action Focus | Plan | *The existing statewide geo-spatial capability should be enhanced to provide a more robust data management capacity to address anticipated elevated input levels following a catastrophic event. Such enhancements might include expanded bandwidth, bridging with other geo-spatial systems, statewide adoption of standardized mapping symbology, and greater utilization of RAPTOR products within the State ECC planning/situation analysis process.* |

OBSERVATION 4.4:		**Multiple situational management tools were used at local, state and federal levels, which hindered integration of operational information.**
ANALYSIS:		A wide variety of information systems were utilized including OpsCenter, Web EOC, offline ArcGIS software, WISE, and RAPTOR. While this led to a wealth of information, it also led to a lack of consistency across tools. A player may have used RAPTOR and assumed the information being displayed was all encompassing. However, other jurisdictions may have only been updating information offline (i.e., ArcGIS or paper maps), or utilizing another above mentioned software. As a result, resource and information requests were inconsistent among the various levels of government and across geographies. This was complicated by a lack of interoperability, as situational information could not easily be transferred from one software application to the other requiring manual transfer of data.
RECOMMENDATION:		
POETE Action Focus	**Organize**	*Integration and de-confliction of disparate geo-spatial data management systems should be undertaken to improve their functionality and reliability in the future.*
	Equip	*The State, in collaboration with local, tribal, and state partners, should conduct a needs assessment for ECC/EOC management, situational awareness, and common operating picture software platforms. This should be followed by an evaluation of platforms currently in use and what platforms are available. This should lead to the use of a common platform among all jurisdictions in Oregon.*
OBSERVATION 4.5:		**Identified priorities at the state level were not in place to address the immediate needs of severely impacted jurisdictions when insufficient situational intelligence or reduced communications exist.**
ANALYSIS:		Significant time was wasted while the State ECC awaited confirmation from potential jurisdictions within hazards areas as to severity of impact and extent of immediate lifesaving and life sustaining needs. This lag was an outcome of standard protocol that requires the State to await notification of impact and a formal request for assistance.

	RECOMMENDATION:	
POETE Action Focus	**Plan**	*The State, in concert with local and tribal jurisdictions, and specific critical infrastructure organizations should formulate event triggers which would automatically generate action on the part of state government and other response partners. This protocol would greatly reduce the time spent in attempting to gather formal impact data from locales that might not be available to contact the State ECC.*

OBSERVATION 4.6:	**Emergency management staff must be trained and assigned to effectively manage the situational analysis function within local/tribal jurisdiction EOCs and the State ECC to ensure development of an accurate Common Operating Picture during catastrophic events.**
ANALYSIS:	All response actions, regardless of the level of government or non-governmental organizational operations, require the rapid collection, assessment and integration of Essential Elements of Information (EEI) to aid in the identification of threats, impacts, needs, and priority operational decision-making. Situational analysis is time-consuming, labor intensive, complex, and requires trained personnel that are skilled in compiling and analyzing operational data. The State ECC and many local/tribal government EOCs lack that staffing level in depth. Future catastrophic response operations will be dependent upon situational analysis for the development of integrated Common Operating Pictures, and for deploying resources in the most effective manner possible.

	RECOMMENDATION:	
POETE Action Focus	**Train**	*The State and local/tribal governments should increase the number of trained personnel who can effectively manage situation information analysis and development of integrated statewide Common Operating Pictures, such as situation reports and incident action planning templates. New formats for situation reports should also be considered.*

Core Capability 5: Critical Transportation

OVERARCHING OBJECTIVE

Demonstrate the ability of EOCs to coordinate the establishment of access into impacted areas via appropriate ground, air, and maritime transportation corridors to deliver response teams, equipment, and disaster relief supplies to meet the basic needs of disaster survivors and stabilize the incident.

JOINT STATE EXERCISE OBJECTIVES

The following Oregon Joint State Objectives were developed for the testing of this core capability during the exercise:

A. Demonstrate the ability of EOCs at all levels to develop a common operating picture on the status of damages and route openings/closures for all modes of transportation infrastructure.

B. Demonstrate the ability of EOCs at all levels to coordinate the establishment of alternate transportation routes and inform responders and the public of these route detours.

C. Demonstrate the ability of EOCs to coordinate the prioritization of route clearance and restoration, debris management equipment and resources, and temporary debris storage for all transportation modes.

D. Demonstrate the ability of EOCs to coordinate and evaluate damage assessments of all modes of transportation infrastructure, and to prioritize the re-establishment of these modes.

STATE EMERGENCY SUPPORT FUNCTIONS (ESF)

The following State ESF is responsible for the management of response actions for this core capability:

- ESF-1: Transportation

OBSERVATIONS & FINDINGS

The strengths and areas for improvement for each core capability aligned to this objective are described in this section.

Strengths

OBSERVATION 5.1:	**Similar to the strength listed in the Situational Assessment capability, RAPTOR allowed many jurisdictions to efficiently share the status of critical transportation routes with external partners and the State ECC.**

OBSERVATION 5.2:	**The presence of many transportation stakeholders within the State ECC reinforced the process of providing an opportunity for multiple levels of government to coordinate damage assessment and other transportation-related activities.**

Areas for Improvement

OBSERVATION 5.3:		**Incoherent and contradictory situation reports were being circulated statewide regarding the status of critical ground transportation infrastructure.**
ANALYSIS:		Ground transportation routes and associated critical infrastructure were often reported to be operational without confirmation. This issue may have been the result of an errant inject. De-confliction of damage assessment did not occur with great regularity and therefore contradictory information was directing resource allocation and situational awareness.
		Local/tribal and state transportation agencies need to communicate and coordinate before event onset to identify route prioritization, shared operational responsibilities, anticipated impacts, and collective resource needs to minimize conflicts and launch response efforts in an integrated manner.
RECOMMENDATION:		
POETE Action Focus	**Plan**	*State and local governments should develop integrated critical transportation infrastructure operational plans and protocols to reduce confusion and de-conflict damage assessment collection.*

OBSERVATION 5.4:	**Contradictory situation and damage assessment reports indicated that selected major airports and aviation support facilities were operational, in spite of ground truth data to the contrary. This resulted in a significant confusion on the part of emergency managers and operational logisticians who were attempting to formulate a realistic aviation asset Common Operating Picture statewide.**
ANALYSIS:	Portland International Airport (PDX) was reported operational on the final day of the exercise, despite the Ground Truth Document stating that would be highly unlikely. Additional confusion existed pertaining to other airports throughout the state, including those that had been pre-identified as staging areas for incoming federal and military assistance.
RECOMMENDATION:	

POETE Action Focus	**Plan**	*Information relating to the survivability/operability of priority aviation, transportation facilities needs to be standardized and disseminated to all stakeholders to avoid conflict and to ensure that associated response plans are properly coordinated.*

Core Capability 6: Operational Coordination

OVERARCHING OBJECTIVE

Demonstrate the ability to establish operational control and coordination structures within the impacted region to include the mobilization, employment, and sustainment of critical internal and external response resources to meet basic survivor needs and stabilize the incident.

JOINT STATE EXERCISE OBJECTIVES

The following Oregon Joint State Exercise Objectives were developed for the testing of this core capability during the exercise:

A. Demonstrate the ability of EOCs, at all levels of government and partners, to identify, prioritize, request, receive, stage, transport, and track resources to meet incident management objectives.

B. Demonstrate the ability of EOCs to identify and employ all hazard Incident Management Teams (IMTs) to augment EOC staff and other IMTs to meet field-level incident command objectives.

C. Demonstrate the ability of EOCs to identify, assign and employ extra-jurisdictional emergency management staff into impacted EOC organizations.

D. Demonstrate the ability of EOCs to develop or implement plans to organize and manage incoming donations, and existing and spontaneous volunteers.

E. Demonstrate the State's ability to establish a Unified Coordination Group (UCG) and develop geographic branches and divisions, including all military forces conducting domestic disaster operations under Defense Support of Civil Authorities.

F. Demonstrate the State's ability to activate and utilize the Emergency Management Assistance Compact (EMAC) when requesting or providing intra-state mutual aid.

STATE EMERGENCY SUPPORT FUNCTIONS (ESF)

The following State ESFs are responsible for the management of response actions for this core capability:

- ESF-5:   Information and Planning
- ESF-7:   Resource Support
- ESF-13:   Military Support

OBSERVATIONS & FINDINGS

The strengths and areas for improvement for each core capability aligned to this objective are described in this section.

Strengths

OBSERVATION 6.1	**The exercise provided multiple local jurisdictions and state agencies the opportunity to work with each other and identify resources they did not know were available. This knowledge was used in the implementation of existing mutual aid agreements, which saved time and reduced resource ordering conflicts.**

OBSERVATION 6.2	**Jurisdictions of varying size and capacity successfully activated their respective EOCs and coordinated internal operations with limited preparedness and training. The value of the exercise was that players were faced with a variety of new situations and complications, and were able to initiate effective response measures within the scope of available resources.**

Areas for Improvement

OBSERVATION 6.3	**While some local EOCs were adequately staffed for the conditions simulated during exercise play, many were not, which severely hampered the level of operational realism. Although the State ECC was fully activated, internal personnel capacities and total staffing levels were determined to be grossly inadequate to fully manage an event having statewide impact.**
ANALYSIS:	Concerns over staffing levels are not new, but the exercise provided evidence that missions within many local EOCs and the State ECC require substantially more coordination and leadership staff. The lack of adequate staffing represented a meaningful impact to the handling of resource requests; processing of critical situational information; managing of emergency public information; coordination of inter-jurisdictional mission assignments; provision of assistance to at-risk populations; and addressing senior leadership concerns and the need for integrated decision-making Within the State ECC, government liaisons were frequently overwhelmed with resource requests, situation reports from local jurisdictions, and assisting ESF partners in gathering information from local jurisdictions. Additionally, some ESF partners did not have sufficient staffing levels available to accomplish effective planning, situation reporting, and attend various briefings.

	RECOMMENDATION:	
POETE Action Focus	**Organize**	*Staffing levels at the State ECC and local/tribal EOCs should be augmented and enhanced with trained personnel to provide sufficient organizational depth to manage the multiple emergency management activities conducted within activated facilities following a catastrophic event. Additional efforts to further divide the ESFs into groups/divisions should be taken to develop sustainable scale.*

OBSERVATION 6.4	**A disconnect between the Oregon ECC and off-site state agency locations led to an inability to properly coordinate critical state response decision-making.**
ANALYSIS:	Off-site state agencies were not properly integrated into the exercise, which led to under-utilization and confusion over mission assignments. The deficiency can be attributed to state agency staff not being placed on the Situation Report distribution list and confusion as to which agencies were activated and participating in the exercise. An effective working relationship was not in existence between some state organizations at the time of the exercise, which adversely impacted staff understanding of the role certain agencies were playing. Ultimately, this resulted in a disconnect among the state agencies that were mission tasked with specific response assignments, the State ECC, and those jurisdictions needing and requesting state assistance.

	RECOMMENDATION:	
POETE Action Focus	**Plan**	*Emphasis should be placed on the development and maintenance of plans and protocols pertaining to integration and collaboration between the State ECC and supporting state agencies.*

OBSERVATION 6.5	**The resource requesting process within OpsCenter information management system was slow and left requesters unsure of whether the request had been filled, or its status in the system.**
ANALYSIS:	Several state agencies and local jurisdictions reported going through Day 4 of the exercise without ever determining if their resource requests had been filled. State agencies were locked into using OpsCenter and some reported frustration with not being able to simply request resources in person, while assigned within the ECC. Agencies reported the OpsCenter interface left users confused as to what part of the process the request was currently in, and did not allow users to include pertinent attachments to their requests. Many state agencies had new users to the system responding to the ECC who were unfamiliar with processes used within OpsCenter to track the progress of submitted resource requests. No printed documentation exists to guide new users through the process and not all OEM staff are familiar with all aspects of the process. In addition, not all local jurisdictions are familiar with how to check the status of resource requests.

	RECOMMENDATION:	
POETE Action Focus	**Equip**	*The current information management system (OpsCenter) used by the State and many local jurisdictions, should be re-evaluated as to functionality, interoperability, sustainability, and capacity. Emphasis should be placed on issues of training, procedures, integration, and more effective user interface to determine appropriate system enhancements or modifications to facilitate improved statewide operational coordination.*

OBSERVATION 6.6	**The lack of familiarity with incorporating national IMAT resources into the State ECC structure led to operational confusion, organizational conflicts, delays in mission processing of federal resource requests, and uncertainty of request status on the part of ECC representatives and local partners.**
ANALYSIS:	Although a necessary artificiality for exercise play, the sudden appearance of a fully mobilized national IMAT at the State ECC caused significant difficulty with the processing of federal resource requests, the role of FEMA in supporting state response operations, integration of state-federal positional responsibilities, and joint decision making efforts. The IMAT came ready to engage and function at a level beyond the capability and experience of the State ECC, which hindered a timely integration of that support resource.

		The primary cause for the confusion arose out of a lack of prior state planning; inaccurate assumptions on the part of the IMAT; lack of state experience with national or regional IMAT deployments; a lack of clarity of the role of the IMAT; and significant differences in organizational structure, function and nomenclature between the IMAT and State ECC.
	RECOMMENDATION:	
POETE Action Focus	**Plan**	*The State should engage FEMA to develop a full understanding of the role of a deployed federal IMAT following a catastrophic event, including how such a resource will function in support of state response operations. In addition, OEM should develop a coordination plan for the effective integration of federal assets that may be deployed, and to communicate expectations and established protocol to all partners. The State should also develop mission-ready packages to further expedite the IMAT integration and resource request process.*
	Train	*The State should consider conducting IMT/ECC Interface training with ECC and FEMA Region X staff.*
	Exercise	*The State ECC should conduct regular exercises with national or regional IMATs, and consider opportunities to deploy staff to other states when IMATs are supporting response operations. The State should also incorporate high-volume resource requests into exercise scenarios.*

Appendix-A
ACRONYMS

AAR	After Action Report
CR16	Cascadia Rising 2016 Exercise
CSZ	Cascadia Subduction Zone
ECC	Emergency Coordination Center
EEG	Exercise Evaluation Guide
EMAC	Emergency Management Assistance Compact
EOC	Emergency Operations Center
ESF	Emergency Support Function
FEMA	Federal Emergency Management Agency
GIS	Geographic Information System
IMAT	Incident Management Assistance Team
JIC	Joint Information Center
OEM	Office of Emergency Management (State of Oregon)
PNEMA	Pacific Northwest Emergency Management Arrangement
POETE	Planning, Organizing, Equipping, Training & Exercise/Evaluating
RAPTOR	Real Time Assessment and Planning Tool for Oregon
SMART	Specific, Measurable, Action-oriented, Realistic, and Time Sensitive
UCG	Unified Coordination Group

Appendix-B
EXERCISE PARTICIPANTS

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