

OREGON STATE FIRE MARSHAL

2024

URBAN SEARCH & RESCUE REPORT

HB 2484



PREPARED MAY 2024



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EXECUTIVE SUMMARY

Urban Search and Rescue (USAR) task forces provide trained personnel and specialized equipment to respond to large-scale events involving structural collapse. It is a multi-hazard discipline that involves the location, extrication, and initial medical stabilization of victims trapped in an urban area, including from structures or trenches collapsed because of natural disaster, war, terrorism, or accidents.

Oregon faces many risks and natural disaster threats from a Cascadia Subduction Zone event and tsunami to catastrophic wildfires, flooding, and ice storms. Statewide and regional incidents from Oregon's natural disaster risk profile will require USAR task forces and capability.

HISTORY OF USAR IN OREGON

In the wake of September 11, 2001, the Oregon State Fire Marshal (OSFM) implemented a USAR program at the request of the Oregon Fire Chiefs Association (OFCA). A federal grant program provided the dollars for the task force of highly trained personnel and specialized equipment for response to large-scale catastrophic events involving structural collapse. Program implementation was achieved through collaboration with fire agencies from across the state who provided personnel, equipment, and a commitment to serve as a part of the statewide response team.

The task force was a multi-jurisdictional team trained to assist at structural collapse and technical rescue incidents statewide when requested by the governor. It was organized into two regional teams (north and south) and deployable through the OSFM or the Oregon Emergency Response System. The teams were capable of deployment within 30 minutes of activation. The program was funded through federal grants.

In 2012, the statewide program was terminated when grant funding was no longer available, and it was determined more efficient to use USAR resources from the larger fire agencies for statewide responses. These agencies, mostly large metropolitan departments in the northwest part of the state, had their robust programs developed in concert with the OSFM. Their programs were further helped by assuming ownership of state USAR equipment once the state's program was dissolved.

HISTORY OF USAR IN OREGON

In 2023, [HB 2484](#) directed the Oregon Department of the State Fire Marshal to study the state’s needs related to urban search and rescue. The legislation required an assessment of the organizational structure for USAR and recommendations for funding with a report to the legislative assembly related to emergency management no later than September 15, 2024. This assessment was conducted through a subcommittee of the Governor’s Fire Service Policy Council.

ASSESSMENT OF THE USAR STRUCTURE

USAR, like other response functions, is nationally typed, which speaks to the resource capabilities. USAR has four different levels (Type 1 being the largest and most complex) that range in number of members, capabilities and complexities, and resources and equipment they bring to an incident. Having the ability to access regionalized Type 4 USAR capabilities within Oregon will increase response capability and decrease response time during the critical initial response period after an incident occurs. A state-level USAR capability will provide a benefit to all Oregonians.



RECOMMENDATIONS

1. The Oregon Department of the State Fire Marshal (OSFM) establish an Urban Search & Rescue program to provide support, standardization, equipment, and training to a minimum of 4 regional Type 4 Urban Search & Rescue Teams.
 - a. The program should fund two permanent full-time employees to conduct this work; one program analyst 3 and one public safety training specialist 2.
 - b. Start-up costs would be approximately \$6,561,528 and ongoing funding would be approximately \$4,306,887 per biennium.
2. The OSFM and the Department of Public Safety Standards and Training develop obtainable and appropriate training requirements for Type 4 personnel.
3. Once Type 4 teams are established, draw upon that capability to build a statewide Type 3 team.
 - a. Establishment of a Type 3 team would cost approximately \$2,483,600 in addition to the Type 4 program.
4. Provide ongoing funding through one or more of the following pathways:
 - a. General fund
 - b. Reallocation of State Preparedness & Incident Response Equipment (SPIRE) grant dollars
 - c. New revenue through fees or taxes

First biennium: \$6,561,528 to establish program

Second biennium: \$4,306,887 plus inflation to maintain program

Third biennium: \$6,790,487 plus inflation to build Type 3 team



INTRODUCTION

Urban Search and Rescue (USAR) task forces provide trained personnel and specialized equipment to respond to large-scale events involving structural collapse. It is a multi-hazard discipline that involves the location, extrication, and initial medical stabilization of victims trapped in an urban area, including from structures or trenches collapsed due to natural disaster, war, terrorism, or accidents.

While responding to an incident, USAR task forces can:

- Triage damaged structures; mark and identify streets and buildings.
- Perform reconnaissance duties.
- Assist in stabilization of damaged structures, including shoring and cribbing.
- Lift, cut, and breach wood, steel, unreinforced masonry, and reinforced concrete.
- Conduct physical/electronic search and rescue in damaged or collapsed structures.
- Bring equipment cache(s) necessary to support task force operations.

Typical missions for a USAR task force include hurricane response, wide geographic area searches (land and water), standby missions for national special security events, and building collapses as found during a natural or man-made disaster. Recent national examples of note include the Surfside condominium collapse in Surfside, FL in 2021 and the flooding disaster in eastern Kentucky in 2022.

Regionally, incidents that may require a USAR task force could include earthquake, tsunami, wildfire, or any significant event that would involve entrapment, structural collapse, or specialized rescue.



BACKGROUND

In the wake of September 11, 2001, the Oregon State Fire Marshal (OSFM) implemented a USAR program at the request of the Oregon Fire Chiefs Association (OFCA). The program provided trained personnel and specialized equipment for response to large-scale catastrophic events involving structural collapse. It was achieved by collaborating with fire agencies from across the state that could provide personnel, equipment, and a commitment to serve on the statewide response team.



The task force was a multi-jurisdictional team trained to assist at structural collapse and technical rescue incidents statewide when requested by the governor. It was organized into two regional teams (north and south) and deployable through the OSFM or the Oregon Emergency Response System. The teams were capable of deployment within 30 minutes of activation.

According to historical documents, the intent was to create a program to bridge the gap between a local response and the time it would take for federal assets to arrive if the incident required additional resources. The program was primarily funded by federal grants and had no sustainable funding source.

**SEARCH
AND
RESCUE**

In 2012, the statewide program was terminated when grant funding was no longer available, and it was determined to be more efficient to use USAR resources from the larger fire agencies for statewide responses. These agencies, mostly large metropolitan departments in the northwest part of the state, had their own robust programs developed in concert with the OSFM. Their programs were further helped by assuming ownership of state USAR equipment once the state's program was dissolved.

ORS 476.615 was added in 2023, giving the OSFM the responsibility to coordinate the urban search and rescue function of the state, including:

1. Coordinating the activities of local, state and federal agencies involved in urban search and rescue;
2. Establishing liaison with public and private organizations and agencies involved in urban search and rescue;
3. Assisting in developing training and education programs; and
4. Gathering and disseminating resource information of personnel, equipment and materials available for urban search and rescue.

ORS 401.930 authorizes the governor to mobilize county, city, and district personnel or equipment to respond to a structural collapse, or the imminent threat thereof, under the direction and command of the state fire marshal or their designee.

To ensure expenses are covered for responding agencies, ORS 401.935 and 401.938 establish that the state reimburse agencies for equipment and personnel costs. This created an unfunded mandate for both the OSFM and fire agencies who perform this work.

A sustainable funding mechanism established in law will ensure the program's viability. Such funding should cover responses, training, equipment, and administrative costs incurred by the state fire marshal.

CURRENT STATE OF RESPONSE CAPACITY

Larger metropolitan fire agencies in NW Oregon maintain USAR capabilities to one degree or another. These include Portland Fire, Gresham Fire, Clackamas County Fire Dist. #1, Tualatin Valley Fire and Rescue, Hillsboro Fire and Rescue, Eugene Springfield Fire, and Salem Fire Department.

The OSFM should build upon this current capacity to create the recommended statewide program.

Search and rescue in rural parts of the state generally refers to a broad spectrum of activities focused on assisting the lost and injured. Oregon Emergency Management (OEM) has a statewide search and rescue coordinator whose focus is to serve as a liaison between the state and the Oregon State Sheriffs' Association Search and Rescue Advisory Council. Search and rescue is a responsibility of the local sheriff.

NEEDS ASSESSMENT

Oregon has a demonstrated need for a USAR program. The subcommittee evaluated the various team types and capabilities and recommends a regional approach to ensure capability around the state. A type 4 team can conduct safe and effective search and rescue operations. This team structure could be created with a governance model similar to the OSFM’s Regional Hazardous Materials Emergency Response Teams and working with our partners in the Oregon fire service to staff the teams. The proposed program would be a partnership between the state and local agencies. A type 4 or type 3 team would be an excellent stopgap between the occurrence of a significant incident and the ability for a type 1 team to arrive from out of the area and would have the necessary expertise and training for any number of smaller, more common incidents.

FEMA USAR TEAMS

There are currently only nine FEMA USAR task forces on the West Coast:

State	Number	Organization
California	CA-TF1	Los Angeles City Fire Dept.
California	CA-TF2	Los Angeles County Fire Dept.
California	CA-TF3	Menlo Park Fire Protection District
California	CA-TF4	Oakland Fire Dept.
California	CA-TF5	Orange County Fire Authority
California	CA-TF6	City of Riverside Fire Dept.
California	CA-TF7	Sacramento Fire Dept.
California	CA-TF8	San Diego Fire-Rescue
Washington	WA-TF1	Pierce County Dept. of Emergency Management

Most of the California task forces are in the central and southern regions of the state. There is only one task force located in Washington, housed in Tacoma. The task forces are equipped and ready to deploy within six hours in various response models. When federal support is anticipated before an event such as a hurricane, system resources are often pre-positioned along with other federal responders to expedite support after the disaster.

Each NIMS Type 1 USAR task force is composed of 70 members specializing in search, rescue, medicine, hazardous materials, logistics and planning, including technical specialists such as physicians, structural engineers and canine search teams. The task forces can split into two NIMS type 3 USAR task forces with 35 members each to conduct around-the-clock search and rescue operations in 12-hour shifts.

FEMA USAR DEPLOYMENT IN OREGON

In 2020, FEMA USAR type 1 teams were deployed to Oregon as result of the Labor Day fires. These extremely large and fast-moving fires required large-scale search and rescue efforts in the impacted areas. The arrival of the resources took several days because of travel and complications related to the use of the Emergency Management Assistance Compact. The operations required type 1 USAR teams. This delay highlights the need for Oregon USAR capacity to be available to bridge the gap in response time.

POTENTIAL USAR NEEDS IN OREGON

Cascadia event

The Pacific Northwest is highly susceptible to a large earthquake along the Cascadia Subduction Zone that will devastate Oregon's coast and road systems. Most major infrastructure in Oregon was built before the seismic risks were fully understood. This aging infrastructure will pose major challenges to utility companies, fuel providers, and ports and make transportation of resources, including responders, throughout the state extremely difficult. Predictions indicate between 5,000 and 20,000 people will lose their lives from the resulting tsunami. Such an event will also impact Washington and Northern California, requiring them to be involved in their own search and rescue efforts. A lack of local USAR resources will be detrimental to life-safety and recovery efforts in Oregon.

Other hazard risks

In addition to a Cascadia event, there are other prominent natural threats to Oregon. These include winter storms, landslides, flooding, windstorms, earthquakes, distant tsunamis, and volcanic activity. Large wildfires continue to be a significant threat due to climatic conditions in the Pacific Northwest. An incident involving any of these hazards could require a USAR team deployment. Fire and water are the biggest threat to Oregonians, and both come with the potential need for USAR capability within the state.

ORGANIZATION STRUCTURE AND TEAM TYPING

AGENCY ROLES AND RESPONSIBILITIES

Establishing, operating, and maintaining an efficient statewide USAR program will, at a minimum, require strong partnerships and collaboration between the state fire marshal, local fire agencies, the Department of Emergency Management, local emergency managers, Fire Defense Boards, the Oregon State Police (OSP), the Oregon Department of Transportation (ODOT), and the Department of Public Safety Standards and Training (DPSST).

State Fire Marshal: Establish and administer program; provide equipment; recruit members; work with partners to establish training requirements; establish deployment process; process reimbursements.

Local fire agencies: Provide team members; arrange coverage for deployments and training; understand request and deployment processes; submit reimbursement requests to the OSFM for deployments and training as allowable under program guidelines.

Department of Emergency Management: Facilitate requests from local emergency managers for USAR resources; facilitate requests for USAR resources from other states under the Emergency Management Assistance Compact (EMAC). Local emergency managers – Work with local fire agencies and Fire Defense Board on requests for assistance.

Fire Defense Board: Work with the OSFM on requests for assistance; maintain resource availability data within their area of responsibility.

Oregon State Police: Provide major crime team response as victim location unit when requested by authority having jurisdiction.

Oregon Department of Transportation: Receive notification of USAR deployments; facilitate access to incident location by ensuring routes are cleared.

Department of Public Safety Standards and Training: Provide and facilitate USAR training and certifications.

USAR TEAM TYPING

As with all Incident Command System modules, consideration should be given for a scalable USAR program to respond to different types of incidents. Below is the standard USAR Team typing.

The US&R Type IV “Basic”: Operational level includes the equipment and personnel to conduct safe and effective search and rescue operations at incidents involving non-structural entrapment in non-collapsed structures.

The US&R Type III “Light”: Operational level includes equipment and personnel to conduct safe and effective search and rescue operations at structure collapse incidents involving the collapse or failure of light frame construction and/or low angle or one person load rope rescue.

The US&R Type II “Medium”: Operational level includes equipment and personnel to conduct safe and effective search and rescue operations at structure collapse incidents involving the collapse or failure of heavy wall construction, high angle rope rescue (not including highline systems), confined space rescue, and trench and excavation rescue.

The US&R Type I “Heavy”: Operational level includes equipment and personnel to conduct safe and effective search and rescue operations at structure collapse incidents involving the collapse or failure of heavy floor, pre-cast concrete and steel frame construction, high angle rope rescue (including highline systems), confined space rescue, and mass transportation rescue.

When considering how to best use resources for an incident, consideration should be given to integrating smaller teams for a larger isolated incident. When an incident involves a wide impact area, it may be best to support multiple smaller teams with local resources in the impacted area. The subcommittee’s recommendation to create 4 regional type 4 USAR teams would give the OSFM the ability to integrate multiple teams and provide for more robust response as necessary.



TRAINING REQUIREMENTS

The Department of Public Safety Standards & Training (DPSST) currently recognizes the positions listed below, aligned with FEMA's type I training standards. The committee recommends the OSFM partner with DPSST develop obtainable and appropriate training requirements for type 4 personnel.

To become trained to the level of an Urban Search and Rescue Technician in Oregon, the Department of Public Safety Standards and Training (DPSST) currently requires the following courses and certifications:

- I-200 – Basic ICS
 - Certified as:
 - NFPA Structural Collapse Rescue
 - NFPA Confined Space Rescue
 - NFPA Vehicle Rescue
 - NFPA Trench Rescue
 - NFPA Rope Rescue
 - NFPA Machinery Rescue
- FEMA Medical Specialist Course
 - Certified as:
 - USAR Rescue Technician
 - OHA Paramedic
- FEMA Rigging Specialist Course
- FEMA Technical Search Specialist Course

The amount and variety of coursework required is a testament to the depth and breadth of knowledge that USAR technicians must have in order to meet the minimum standard for this discipline.

Team members certified through DPSST as a NFPA Rope Rescue Technician, Trench Rescue Technician, Vehicle and Machinery Rescue Technician, and Confined Space Rescue Technician will have taken 160 total hours of specialized training.

The information below is based on the DPSST USAR application for certification dated March 2008 and FEMA resource typing definition for Mass Search and Rescue Operations dated September 2020. This does not include Oregon-specific classes.

TYPE 4 USAR TEAM: 22 TEAM MEMBERS

Task Force Leader (1)

- USAR Rescue Technician – 80 hours
- ICS Basic ICS – 4 hours (online)
- ICS 300 – 24 hours
- ICS for Structural Collapse Incidents – 16 hours
- FEMA Task Force Management & Coordination Course – Unable to locate this course
 - Total: 124 hours

Safety Officer (1)

- USAR Rescue Technician – 80 hours
- ICS 300 – 24 hours
- ICS for Structural Collapse Incidents – 16 hours
- NFA Incident Safety Officer – 16 hours
 - Total: 136 hours

NIMS Type 1 Structural Collapse Rescue Team Leader (2)

DPSST Search Team Manager

- USAR Rescue Technician – 80 hours
- ICS 300 – 24 hours
- ICS for Structural Collapse Incidents – 16 hours
- FEMA Technical Search Specialist Course – 16 hours (online)
 - Total: 136 hours/

NIMS Type 1 Structural Collapse Rescue Technician (10)

- USAR Rescue Technician – 80 hours
- ICS 200 – 4 hours (online)
 - Total: 84 hours/

NIMS Haz Mat Technician (2)

- State of Oregon Hazardous Materials Technician (160 hours)

NIMS Paramedic (2)

Must be trained in collapse compartment syndrome

Logistics Specialist (2)

Specialized training yet to be developed focused on Oregon's program

NIMS Communications Technician (COMT) (1)

IS-100 & 700

Completion of the National Qualification System Position Task Book

Plans Team Manager (1)

Qualified to serve as a Technical Information Specialist

TYPE 3 USAR TEAM: 33 TEAM MEMBERS

Task Force Leader (1)

- USAR Rescue Technician – 80 hours
- ICS Basic ICS – 4 hours (online)
- ICS 300 – 24 hours
- ICS for Structural Collapse Incidents – 16 hours
- FEMA Task Force Management & Coordination Course – Unable to locate this course
 - Total: 124 hours

Safety Officer (1)

- USAR Rescue Technician – 80 hours
- ICS 300 – 24 hours
- ICS for Structural Collapse Incidents – 16 hours
- NFA Incident Safety Officer – 16 hours
 - Total: 136 hours

NIMS Type 1 Structural Collapse Rescue Team Leader (1)

DPSST Search Team Manager

- USAR Rescue Technician – 80 hours
- ICS 300 – 24 hours
- ICS for Structural Collapse Incidents – 16 hours
- FEMA Technical Search Specialist Course – 16 hours (online)
 - Total: 136 hours

NIMS Type 1 Structural Collapse Search Technician (1)

- USAR Rescue Technician – 80 hours
- ICS 200 – 4 hours (online)
- FEMA Technical Search Specialist Course – 16 hours (online)
 - Total: 100 hours

NIMS Type 1 Canine Search Specialist, Disaster/ Structural Collapse – Live Canine Search Specialist can be requested and deployed as separate single resource(s) based on the need of the specific mission

NIMS Type 1 Structural Collapse Rescue Team Leader (3)

- USAR Rescue Technician – 80 hours
- ICS 300 – 24 hours
- ICS for Structural Collapse Incidents – 16 hours
- FEMA Technical Search Specialist Course – 16 hours (online)
 - Total: 136 hr





NIMS Type 1 Structural Collapse Rescue Technician (10)

- USAR Rescue Technician – 80 hours
- ICS 200 – 4 hours (online)
 - Total: 84 hours

Heavy Equipment Rigging Specialist (1)

- USAR Rescue Technician – 80 hours
- ICS 200 – 4 hours (online)
- FEMA Rigging Specialist Course – 32 hours
 - Total: 116 hours

NIMS Haz Mat Technician (5)

- State of Oregon Hazardous Materials Technician (160 hours)

Medical Team Manager (1)

- Must be a licensed physician who is board certified in Emergency medicine.

Medical Specialist (2)

- Subcommittee unable to determine position requirements.

Logistics Team Manager (1)

- USAR Rescue Technician – 80 hours
- ICS 300 – 24 hours
- ICS for Structural Collapse Incidents – 16 hours
 - Total: 120 hours

Logistics Specialist (2)

- Specialized training yet to be developed focused on Oregon's program

NIMS Communications Technician (COMT) (1)

- IS-100 & 700
- Completion of the National Qualification System Position Task Book

Planning Team Manager (1)

Technical Information Specialist (1)

Structures Specialist (1)

RECOMMENDED TEAM TYPES

The subcommittee recommends the initial establishment of four regionalized type 4 teams. The long-term plan would include building capacity to use those personnel to create a statewide type 3 team.

Based on the training as required by FEMA, personnel costs during training alone are estimated to be \$363,200 per team. With tuition and travel expenses, that estimate more than doubles to \$740,170. An estimated \$2,960,680 is necessary to train four regional type 4 teams to the required minimum standards.

An additional \$233,600 would be necessary to add type 3 capacity.

The Oregon fire service is facing significant, well-documented capacity challenges. Because of these challenges, we anticipate significant turnover within the program and would need to have stable funding to continuously train and exercise new team members.

EQUIPMENT CACHES

In 2003, FEMA published a list of required cache items for type 1 USAR teams which is attached as an amendment to this recommendation for reference.

Because the pricing was done in 2003, we can assume a cumulative price increase of 70.41%.

[FEMA Emergency Equipment Cache List](#)



FEMA Type 4 USAR Team Cache

- Search cameras
- Listening devices
- Mapping, global positioning system (GPS), and other victim locating equipment
- Shoring equipment for wood and prefabricated metal shoring, including saws and other construction equipment
- Concrete lifting and stabilization equipment
- Heavy rigging equipment for crane operations
- Rope rescue equipment for high-angle, low-angle, and confined space rescue
- Vehicle and machinery extrication equipment including air bags and hydraulic rescue equipment
- Litter basket or similar
- Litter wheel
- Adjustable bridle
- Patient harness system
- Medical equipment and pharmaceuticals necessary to care for entrapped victims and injured rescue personnel
- Atmospheric monitors and decontamination equipment necessary to conduct safe search and rescue operations
- Defensive water safety equipment and electric current detectors
- Portable radios; programmable or on incident frequencies
- Handi-mikes or earphones/headsets
- Helmets
- Headlamps
- Batteries
- Eye and hearing protection
- Breathing protection to include supplied air breathing apparatus and limited quantities of self-contained breathing apparatus
- Protective clothing
- Gloves
- Footwear
- Initial attack pack
- Personal medical kit
- Survival kit
- Foul weather clothing

FEMA Type 3 USAR Team Cache

- Type 3 cache includes all items carried by type 4, with the addition of:
- 100% of Type 1 USAR Cache for Technical Equipment (\$266,350.85)
- 100% of Type 1 USAR Cache for Rescue Equipment (\$557,257.86)
- 100% of Type 1 USAR Cache for Survivor Extrication Equipment (included previously)
- 50% of Type 1 USAR Cache for Medical Equipment (\$117,710.81)
- 50% of Type 1 USAR Cache for Hazardous Materials Equipment (included previously)
- 50% of Type 1 USAR Cache for Safety Equipment (included previously)
- 50% of Type 1 USAR Cache for Communications Equipment (\$482,640.65)
- 50% of Type 2 USAR Cache for PPE (\$776,918.79)
- 50% of Type 1 USAR Cache for Water Rescue Equipment (included previously)
- Concrete breaching and breaking equipment including concrete saws, jack hammers, and concrete drills and hammer drills
- Level C PPE which includes self-contained respiratory protection
- Gross decontamination wash and personal shower

Estimated total of Type 3 USAR cache: \$2.25 million

Estimated total of Type 4 USAR cache: \$750,000

CENTRALIZED TRAINING LOCATION

To support a statewide program, a centralized training location is needed. Previous work to develop a site at the DPSST facility in Salem was completed before the program disbanded. If a single centralized location cannot be identified, consideration should be given to regional locations. Training together before a response will ensure the regional teams have familiarity with one another before an incident.

Long-term investment would be needed for a training site and the cost for this investment is not included in this assessment.



DEPLOYMENT MODEL

The need for additional collapse rescue or other urban search and rescue (USAR) resources beyond a local region's response scope may suddenly occur due to an immediate incident, or it may evolve over time as the full scope of the incident is understood. In either case, the local fire agency or county representative could initiate a request for assistance in two ways.

OREGON STATE FIRE MARSHAL (OSFM) MOBILIZATION REQUEST

The Oregon Fire Service Mobilization Plan articulates how a request for assistance can be initiated by a region's Fire Defense Board chief either through their local OSFM regional mobilization coordinator or the Emergency Response Unit manager once the local fire agency and its mutual aid resources determine the incident is beyond their control.[i] This request could be routed to the Oregon Governor to invoke the Emergency Conflagration Act allowing for extraordinary assistance from local fire agency resources or the use of Immediate Response at the OSFM's request.

Based on an assessment from the regional mobilization coordinator, in consultation with the local fire chief, a request for a specific amount and type of USAR resources would be made to the Fire Defense Board chief. These resources would then be dispatched to the scene by the Agency Operations Center based on their proximity and availability. An OSFM incident management team (IMT) would likely be paired with the USAR resource to help manage the incident and support their USAR operations, depending on the scope and scale of the response. Without an IMT mobilization, the USAR team would function as a resource to the local authority having jurisdiction.

EMERGENCY MANAGEMENT REQUEST

The same type of request could be made through local or county emergency management offices. Additional USAR resources for an incident could be requested by the Oregon Emergency Response System (OERS). An emergency declaration may be requested by a county's governing body to the governor.[i] In either case, this would initiate a request for resources through the Oregon Department of Emergency Management and the Emergency Support Function 9 (Search & Rescue). The OSFM would be contacted to fill the request as a lead agency to this ESF.[ii] This process could route a request to the Oregon Governor to declare a State of Emergency, allowing for potential funding through state or federal grant programs. At this time, the local OSFM regional mobilization

coordinator would assess the resources needed in consultation with the local fire chief. The OSFM would then make a request for a specific amount and type of USAR resources. This resource order would be dispatched to the scene from around the state by the Agency Operations Center based on their proximity and availability. An OSFM incident management team (IMT) would likely be paired with the USAR resource to help manage the incident and support their USAR operations, depending on the scope and scale of the response. Without an IMT mobilization, the USAR team would function as a resource to the local authority having jurisdiction.

IDENTIFIED GAPS

To ensure the success of an efficient deployment model, the following gaps must be addressed:

- Stable funding streams must be identified to reimburse the fire agencies for their deployed resources. Outside of the Emergency Conflagration Act, without solidified funding sources that support this type of resource deployment to serve impacted communities, neither the OSFM fiscal budget nor individual fire agency budgets could sustain such a statewide deployable USAR program.
- Education and outreach to the Oregon fire service and emergency managers will be needed to familiarize them with the capabilities a statewide USAR program would offer them in their time of need. This could be accomplished through the OSFM, program staff, regional mobilization coordinators, and their public information team.
- The topic of USAR has not been addressed by Oregon Emergency Response System (OERS) in quite some time. Educating or involving the Oregon Department of Emergency Management in this deployment concept would help facilitate the request for assistance should such a request come through the emergency management route.



PROGRAM COSTS & POTENTIAL FUNDING SOURCES

Through HB 2484, the Oregon Department of the State Fire Marshal shall coordinate the urban search and rescue function of this state. USAR is currently an unfunded mandate for both the agency and the Oregon fire service. Oregon lawmakers have taken note of the need for seismic retrofitting and invested in prevention efforts, but that investment has not been matched in response capability.

The subcommittee recommends that the funds carry over across biennia to build a response fund.

STATE OF OREGON TECHNICAL RESCUE / USAR COST ESTIMATES

In order to create a sustainable program with 4 regional Type 4 USAR teams, the following would be needed each biennium:

Initial training: \$2,960,680

Initial equipment cache: \$3,000,000

OSFM staff: \$600,848

Total startup costs: \$6,561,528

Ongoing training and exercise: \$2,960,680

Ongoing equipment maintenance and replacement: \$750,000

OSFM staff: \$596,207

Total biennial budget: \$4,306,887

In order to create a single statewide Type 3 team, the below would be needed in addition:

Training: \$233,600

Equipment: \$2,250,000



STATE PREPAREDNESS AND INCIDENT RESPONSE EQUIPMENT (SPIRE) GRANT

In 2017, House Bill 2687 established the Resiliency Grant Fund to fund the State Preparedness Incident Response Equipment (SPIRE) grant program. In 2021, House Bill 2426 added new provisions to the Resiliency Grant Fund to prioritize equipping urban search and rescue teams. OEM worked with large fire agencies across the state to ensure the USAR equipment recommendations were in line with local needs.

As a result of these developments, entities were able to apply for a fully equipped USAR trailer or a side-by-side rescue vehicle with two types of trailers. Due to the restrictive nature of the current SPIRE grant program, Oregon has not seen significant increases in USAR response capacity from these investments. Oregon should explore the intent of the SPIRE grant and consider opportunities for those dollars to fund the statewide program rather than individual agency efforts.

FEE AND TAX BASED MODEL

A fee-based based model may draw from multiple funding sources. The subcommittee discussed fees or taxes associated with building materials such as building permits, steel, lumber, and concrete.

The subcommittee discussed the possibility of a percentage or retrofitting or other prevention dollars funding the program.



CONCLUSION & RECOMMENDATIONS

After much work and discussion by the subcommittee, the following recommendations have been put forth.

1. The Oregon State Fire Marshal (OSFM) establish an Urban Search & Rescue program to provide support, standardization, equipment, and training to a minimum of 4 regional Type 4 Urban Search & Rescue Teams.
 - a. The program should fund two permanent full-time employees to conduct this work; one Program Analyst 3 and one Public Safety Training Specialist
 - b. Start-up costs would be approximately \$6,561,528 and ongoing funding would be approximately \$4,306,887 per biennium.
2. OSFM and the Department of Public Safety Standards and Training develop obtainable and appropriate training requirements for Type 4 personnel.
3. Once Type 4 teams are established, draw upon that capability to build a statewide Type 3 team.
 - a. Establishment of a Type 3 Team would cost approximately \$2,483,600 in addition to the Type 4 program.
4. Provide ongoing funding one or more of the following pathways:
 - a. General fund
 - b. Reallocation of State Preparedness & Incident Response Equipment (SPIRE) grant dollars
 - c. New revenue through fees or taxes



APPENDIX

https://www.fema.gov/pdf/emergency/usr/usr equip_cache_list.pdf

This report was prepared by the Oregon State Fire Marshal and is endorsed by the
OREGON GOVERNOR'S FIRE SERVICE POLICY COUNCIL

