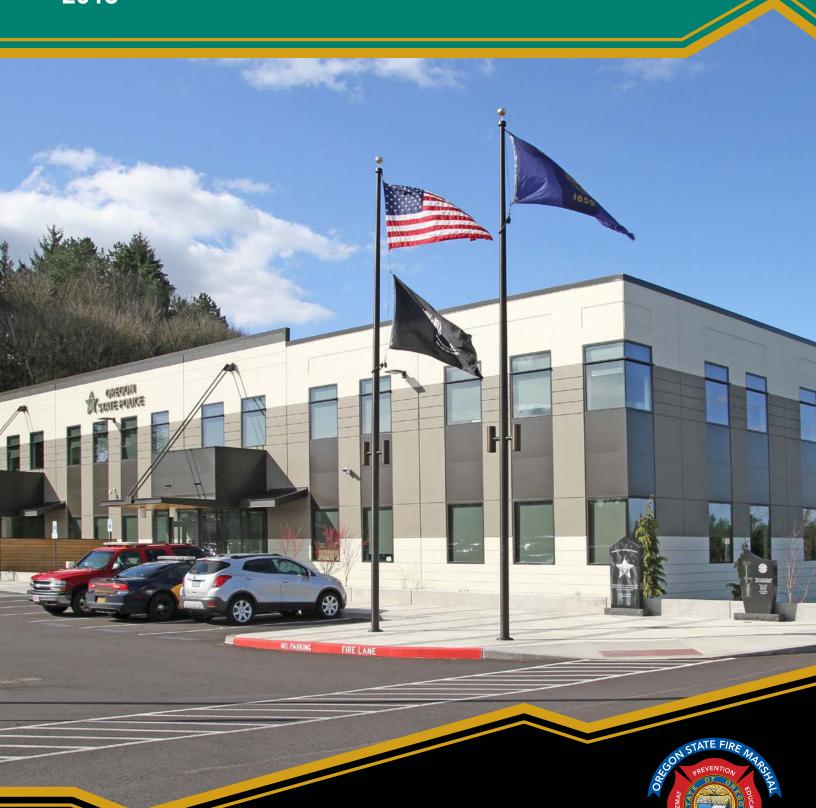
# OREGON OFFICE OF STATE FIRE MARSHAL ANNUAL REPORT 2016





### **Mission**

Protecting citizens, their property and the environment from fire and hazardous materials.

### **Vision**

Premier Public Safety Services.

### Values

### **PROFESSIONALISM**

We are a highly skilled and competent workforce.

#### **CREDIBILITY**

We demonstrate trust and accountability through our actions.

#### **COLLABORATION**

We partner with others to achieve our mission.

### **LEADERSHIP**

We are dedicated to an environment for success.

#### **DEDICATION**

We believe our mission is worthy of our efforts.

Statutory Authority Oregon Revised Statutes: Chapters 336, 453, 470, 476, 478, 479, 480

# A Message from the Oregon State Fire Marshal



This annual report represents the accomplishments and continuing efforts of the OSFM in the second year of our 2015-2019 Strategic Plan.

In that plan we focused on three overriding strategic themes:

- · Partnerships and Collaboration
- · Leading Edge
- · Strengthen and Diversify

These are key areas in which the OSFM must excel to achieve our vision and mission and to successfully deliver exceptional services to our customers.

As you read the report, you will notice these themes are woven throughout our achievements and ongoing efforts and projects. From the tremendous success of our partnership with Oregon fire agencies and the American Red Cross on our Smoke Alarm Installation Program, through our outreach project to every Oregon fire agency on our Plan of Cooperation agreement, our success comes from the valued partnerships we build and nourish.

We have also made strides to stay on the leading edge by incorporating current technology to reduce paper use and expand the capability of our data collection and analysis.

For some time, the OSFM has been operating as a very lean agency with a number of unfilled positions. In 2016, we were able to fill positions that will allow us to increase the quality of customer service. This is especially true with our Fire and Life Safety Services Branch where we were able to fill crucial deputy state fire marshal and compliance specialist positions.

I am proud of the entire OSFM staff and their hard work to achieve our 2016 goals. All of us are excited to push forward with our efforts to become the best at what we achieve individually and as an agency.

Thank you for your continued support.

and hall

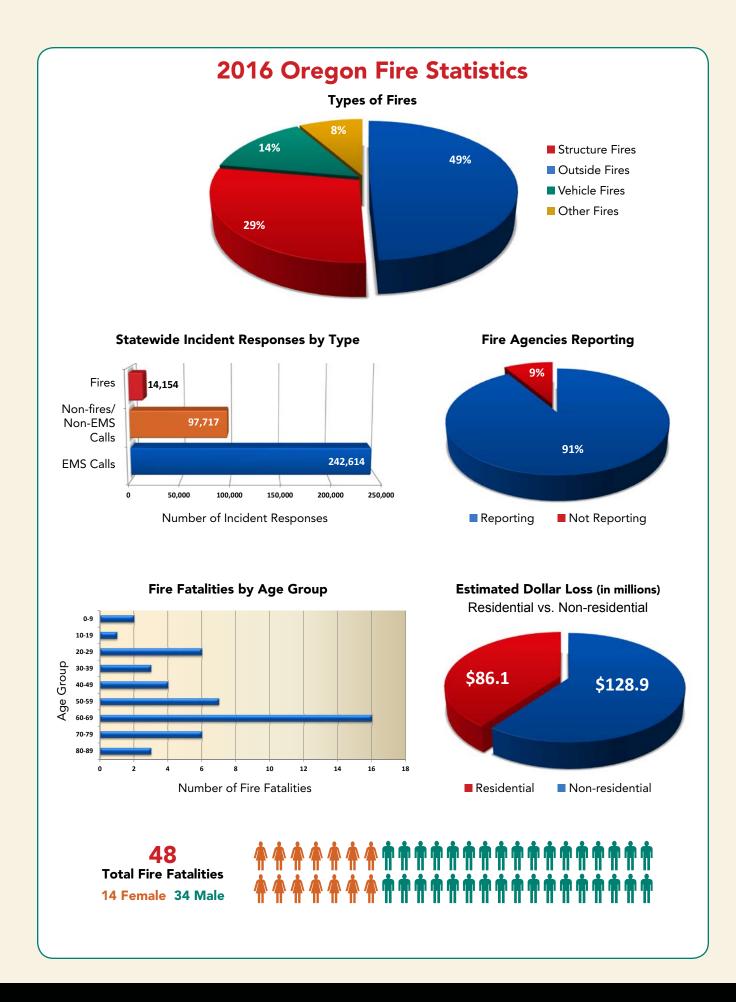
Jim Walker

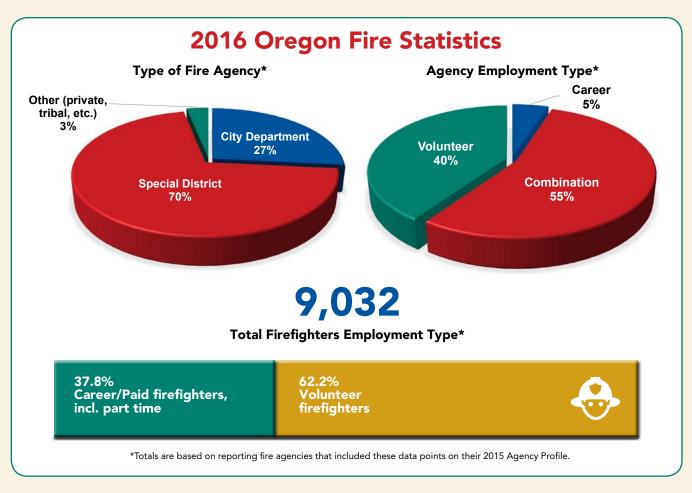
Oregon State Fire Marshal

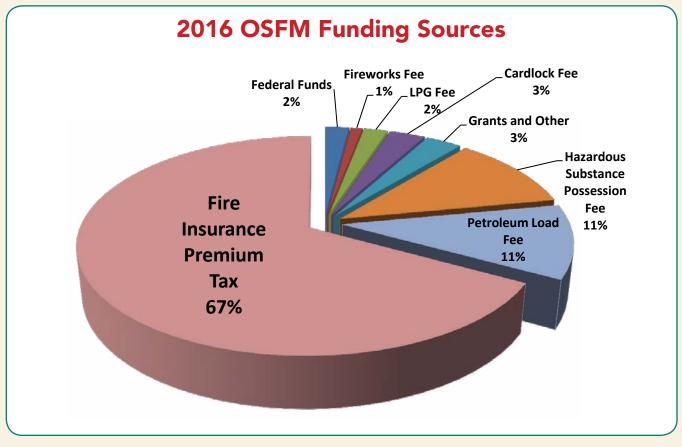
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## **OSFM SIGNIFICANT EVENTS FROM 2016**

The OSFM Regional Hazmat Teams Program delivered the first new generation Heavy Rescue January 25 Unit to Hermiston Fire District HM #10. This replacement project will replace the aging fleet within the program. The 7th annual Fire Service Appreciation Day recognized the Oregon fire service for their efforts. January 27 February 17 Youth Fire Prevention and Intervention completed the distribution of the upgraded Do the Drill- A School Resource Guide for Safety Planning to all fire chiefs, fire marshals, school resource officers, school superintendents, Oregon Education Service Districts, and school principals in Oregon. The OSFM co-hosted the 2016 Oregon Fire Prevention Workshop and provided structural and February 19 wildland fire prevention educational sessions for 114 attendees from around Oregon. The OSFM hosted the first Task Force Leader (TFL) symposium in Eugene. The symposium February 23 focused on training TFLs on mobilization, conflagration processes, and how to work within an incident management team framework. Over 80 TFLs from around the state attended the two-day event. March 16 The OSFM presented the Golden and Silver Sparky Awards to Captain Jim Kusz from North Lincoln Fire & Rescue and the American Red Cross, Cascades Chapter. March 31 The Inspection and Approval Process for the Construction of Healthcare Facilities - Final Recommendation Report was completed. It provided immediate and long-term actionable steps that could be taken by Oregon Health Authority and OSFM to improve the operation of the State's Centers for Medicare and Medicaid life safety plan review and survey program. The OSFM focused on new technology solutions and adopted LaserFiche resulting in the April 1 electronic storage of over 1,000,000 pages of documentation previously stored in 140 file cabinets. The OSFM released the first Prepare. Act. Survive. beverage coaster with messages focusing on **May 15** residents creating a home fire escape map. The OSFM relocated to a new building in south Salem. The building includes headquarters for the June 1 Oregon State Police and consolidated several OSP facilities in Salem. June 3 A unit train transporting 94 tank carloads of Bakken crude oil derailed in the town of Mosier. Sixteen cars derailed resulting in four which caught fire. The OSFM mobilized resources, and assisted the local fire districts with cooling the oil tank cars. Staff participated in Cascadia Rising, an exercise highlighting the critical need for effective June 7 coordination and integration of public and private entities during the aftermath of a large-scale incident. The Akawana Fire was declared a conflagration and the OSFM Green Incident Management Team June 8 mobilized along with four task forces. Approximately 912 homes were threatened by the lightningcaused fire, which burned approximately 2,094 acres. The fire was contained by June 14th. The OSFM released two new fire safety brochures focusing on cooking safety, and yard debris July 1 removal and equipment use. Cooking fires are the top cause of residential fires in Oregon. From 2011-2015, there were 4,146 reported cooking fires causing 231 injuries and 10 deaths. The Wasson Pond Fire was the second declared conflagration. The OSFM Green Incident July 4 Management Team mobilized with two task forces. Approximately 10 homes and other structures

were threatened. The fire burned 170 acres and was contained by July 6th.

tactical response for all-hazards events.

The OSFM took delivery of a new mobile command vehicle. This new vehicle is designed to assist

mobilized crews with establishing a location for incident management teams to develop plans and

July 5

- The OSFM offered its first train-the-trainer session for fire agency representatives to be qualified July 12 and trained to teach the certified courses on smoke and carbon monoxide alarm requirements to real estate agencies.
- July 21 The OSFM delivered the first of eight firefighting foam trailers donated by Union Pacific and BNSF railroads to the Eugene/Springfield Fire Department Hazmat Team #2. Later in the year, trailers were delivered to Gresham Fire and Emergency Services Hazmat Team #3, Klamath County Fire District #1 Hazmat Team #4, Ontario Fire Department Hazmat Team #14, Portland Fire and Rescue Hazmat Team #7, Salem Fire Department Hazmat Team #13, Pendleton Fire Department and Ambulance Service, and Redmond Fire and Rescue.
- OSFM deputies conducted a fire investigation in Vale. A family of five was transported out of state July 27 for medical care. The cause was determined to be accidental from a possible appliance failure. The fire resulted in the death of one youth.
- The OSFM released its first of four window clings featuring Oregon State University and University August 1 of Oregon logos. The cling promotes the message Protect your Home from Wildfire.
- OSFM deputies assisted Newport Fire with the investigation of a multiple fatality fire at the City August 5 Center Motel. The fire resulted in four fatalities, multiple injuries, and more than \$1.1 million in property loss.
- Oregon celebrates its 100th Firewise community in Deschutes County and recognized the August 12 commitment of local residents in taking personal responsibility for their wildfire preparedness.
- As a result of the hard work and success of Oregon fire agencies and the American Red Cross September 1 Cascades Chapter, the OSFM reached its two-year goal for residential smoke alarm installations.
- The OSFM and Oregon fire agencies promoted the Fire Prevention Month 2016 theme Don't wait, October 1 Check the Date! Replace Smoke Alarms Every 10 Years. Resources focused on education of the public about the importance of having working smoke alarms, and checking your smoke alarms to make sure they are less than ten years old.
- October 19 OSFM deputies assist the Astoria Fire Department with investigation of an explosion and fire at a marijuana extraction plant. The incident resulted in two civilian injuries and more than \$2 million in property loss.
- The OSFM introduced the first Joint Policy Bulletin in collaboration with the Oregon Fire Chiefs October 28 Association, and the Oregon Fire Marshals Association. Joint Policy Bulletins provide information to the Oregon fire service aiding in consistent and concise application of fire prevention and life safety regulations.
- OSFM staff, the American Red Cross Cascades Chapter, Tualatin Valley Fire & Rescue, Corvallis October 29 Fire Department, Eugene/Springfield Fire & Rescue, and Philomath Fire Department teamed up to promote fire safety awareness to Oregon State University and University of Oregon fans at a home football game for each team.
- November 17 The OSFM Fire & Life Safety Services Branch introduced the Plan of Cooperation to the Oregon fire service. This collaboration and communication tool will improve the OSFM's understanding of the capacity of local fire prevention/investigation programs and outline the support the OSFM can provide to each agency. Wy'East Fire department signed the first agreement on December 6th.
- November 19 OSFM deputies conducted an investigation of a warehouse fire in Baker City. No injuries were reported, but the fire resulted in a \$400,000 property loss.
- December 27 OSFM deputies conducted an investigation of a fire at Looking Glass Elementary School in Douglas County. No injuries reported, but the fire resulted in \$2.4 million in property loss.

### FIRE & LIFE SAFETY EDUCATION

The Fire & Life Safety Education Branch includes the Analytics and Intelligence Unit, the Adult Fire Prevention and Safety Unit, and the Youth Fire Prevention and Intervention Unit. Through combined efforts, the branch works toward its mission of reducing Oregon's residential fire casualties and property loss.

### **Smoke Alarm Installation Program**

The Smoke Alarm Installation Program provides smoke alarms to Oregon fire agencies to install in unprotected residences. From July 2013 through December 2016, the OSFM provided 14,556 smoke alarms to 72 fire agencies, the Oregon Youth Authority, and the American Red Cross. The OSFM has documented 12,980 installations, 962 returned smoke alarms, and 614 missing or kept smoke alarms, or no record of installation. Most of the returned alarms were redistributed to the American Red Cross for installation. During 2016, the American Red Cross installed their 10,000th smoke alarm in the Cascades Region, with the OSFM providing over half of these alarms. The OSFM continues to make modifications to the program to increase project completion and improve the documentation for installations.

### Smoke and Carbon Monoxide Alarm Law Training

In 2016, the OSFM began delivering real estate courses as a continuing education provider through the Oregon Real Estate Agency. The educational presentations provide information on Oregon's smoke and carbon monoxide (CO) alarm laws to real estate agents involved with selling or buying residences and includes brief information about rentals. Staff provided training to 448 real estate agents or property managers. This training helps Oregonians by increasing awareness and compliance of the smoke and CO alarm laws and ensuring that adequate smoke alarm protection is installed in homes when selling or renting.



### Structural and Wildland Fire Prevention

The OSFM partnered with the U.S. Department of the Interior - Bureau of Indian Affairs and Bureau of Land Management, Department of Agriculture – U.S. Forest Service, Oregon Department of Forestry, Keep Oregon Green, and the Pacific Northwest Wildfire Coordinating Group to host the 2016 Oregon Fire Prevention Workshop. The workshop provided structural and wildland fire prevention educational sessions for 114 attendees.

The OSFM and the Oregon Department of Public Safety Standards and Training hosted two National Fire Academy courses focusing on the wildland-urban interface and Fire Adapted Communities. The training helps fire agencies educate individuals who live in highrisk wildfire areas and the wildland-urban interface on how to best prepare themselves and their properties against the threat of fire.

The OSFM participates annually with Keep Oregon Green, the Oregon Department of Forestry, and other partners to promote Wildfire Awareness Month in May. The theme focus was Wildfire Knows No Season and residents were encouraged to take steps to better protect their homes from wildfire, and stop fires before they start. The OSFM assisted Keep Oregon Green with funding to air radio and television spots on wildfire prevention and defensible space.

The OSFM continues to participate with the Oregon Department of Forestry on the Oregon Forestland-Urban Interface Fire Protection Act (Senate Bill 360) committee to review the Oregon law. The law enlists the aid of property owners to turn fire-vulnerable urban and suburban properties into less-volatile zones where firefighters may more safely and effectively defend homes from wildfires. The law requires property owners in identified forestland-urban interface areas to reduce excess vegetation, which may fuel a fire around structures and along driveways.









### **Analytics & Intelligence Unit**

The Analytics & Intelligence Unit provided 900 hours of training and support to the Oregon fire service in 2016. This involved 36 training sessions on the National Fire Incident Reporting System and the state's incident reporting software, attended by 243 staff members from 122 fire agencies. The unit handled 1,352 calls for assistance that included technical user support, public records and other information requests, and various types of data analysis. At the time of this report, the unit managed to achieve a compliance rate of 89% of all Oregon fire agencies reporting data for 2016. This is the second highest percentage of agencies reporting in 50 years.

# Oregon State University and University of Oregon Partnership

The OSFM continued its partnership with Oregon State University and the University of Oregon sports programs to promote fire prevention and build brand awareness through alternative marketing. The second year of the agreement included football radio ads/live in-game mentions, tabling events, a basketball program ad, and the use of the mascots and logos in prevention materials. New prevention education products this year include smoke alarm fliers, static window clings, eyeglass/tech device cloths, youth fire safety cards, selfie banners, mobile billboard banners, and social media images to focus on wildfire awareness, smoke alarm installation, home fire escape planning, and cooking safety.



### FIRE & LIFE SAFETY SERVICES

The Fire and Life Safety Services Branch includes the Administrative Unit, Field Operations Unit, Codes and Technical Services Unit, and Health Care Unit. Together, they provide services to Oregon fire agencies and expertise on new construction regarding access and water supply, fire code inspections, code interpretation, fire investigation and coordination, and plan review and inspection of above ground liquefied petroleum gas tanks.

### **Administration Unit**

The unit downsized paper storage by over one million pages and moved to the Laserfiche platform for records retention and reduced paperwork. This unit also develops, provides, and manages OSFM's Competency Recognition programs. These programs provide education and recognition of the commitment and scope of practice among fire and life safety professionals in Oregon. Thirteen certifications were awarded in 2016.

### **Field Operations Unit**

Staff revised the Basic Fire Investigation training (previously titled - Basic Fire Investigation 100/200). This simplified the process of obtaining the basic fire investigation certification and set a standardized level of training.

Thirteen field deputies and two supervisors, located throughout the state, provided effective and efficient fire code inspections, gave input and direction for new construction and development, and provided fire investigation assistance to the Oregon fire service.

Compliance staff members and deputies conducted 2,069 inspections throughout the state and provided code interpretation. The unit also worked with local fire agencies to advise them on how to determine adequate fire department access and water supplies for new construction, and worked with each agency to develop a Plan of Cooperation.



Deputies conducted or assisted in 165 investigations on fires that caused more than 29 deaths, 44 civilian injuries, five firefighter injuries, and more than \$10.6 million in property loss.

Noteworthy investigations included:

Newport Motel Fire (August 5, 2016, \$1,141,425 loss, four civilian fatalities, eight civilian injuries with no firefighter injuries). This was a complex fire with firefighters responding from Newport, Toledo, Depoe Bay, North Lincoln, Waldport, Seal Rock, and Yachats as well as Newport police and Oregon State Police arson detectives. This fire remains under investigation at the time of this report.

Astoria Fire (October 19, 2016, \$ 2,000,000 loss, two civilian injuries) involved an explosion at a commercial marijuana extraction process plant.

### **Deputy Districts**

District 1 – Tad Pedersen

District 6 – Jeff Henderson

District 11 – Scott Goff

District 2 – Shannon Miller

District 7 – Mike Shaw

District 12 – Dave Fields

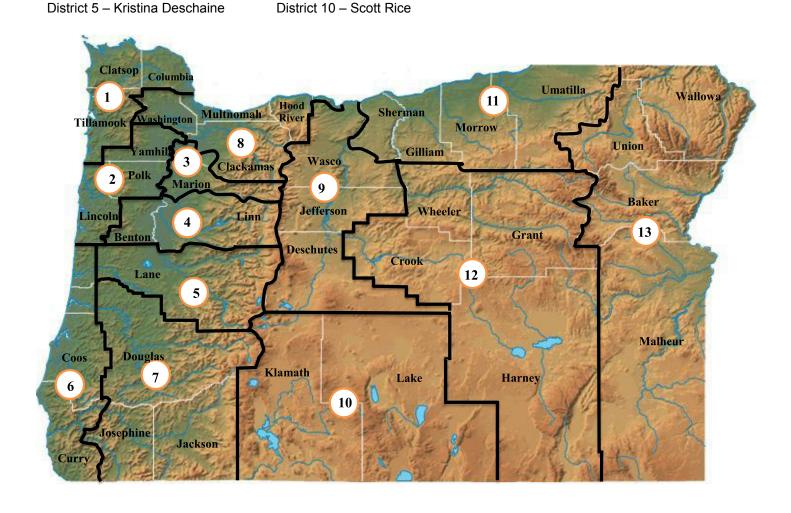
District 3 – Sean Condon

District 8 – Ted Megert

District 13 – Casey Kump

District 4 – Jonathan Jones

District 9 – Kevin Sullivan



### **Codes and Technical Services Unit**

Deputy state fire marshals provided technical expertise and fire code interpretation to agencies statewide. Forty-three new construction liquefied petroleum gas tank plan reviews were conducted in accordance with the Oregon Fire Code and National Fire Protection Association standards.

Staff developed a technical interpretation for the application of aftermarket door-locking hardware for school safety. This was in response to the Umpqua Community College shooting to set a standard for schools to follow.

In October of 2016, Joint Policy Bulletins were initiated in collaboration between the OSFM, Oregon Fire Chiefs Association, and Oregon Fire Marshals Association that provides information to Oregon's fire service to encourage consistent and concise application of Oregon fire prevention and life safety regulations. The first joint policy bulletin provided guidance on how to work with the Building Code Division's (BCD) Uniform Alternate Construction Standard (UACS) for One- and Two-family Dwellings which provides construction alternative to fire apparatus access and water supply requirements to these structures. The bulletin addressed concerns raised by local fire agencies on how to work with new rules issued by Oregon Building Codes Division that significantly redefined their role and responsibilities for addressing this issue.

Staff revised the agricultural technical guidance for outdoor public events. This was in response to multi-use functions in agricultural settings which included identifying limitations of allowed use and limited access for emergency responders.

The OSFM also updated fire and life safety inspection procedures of public and state-owned buildings and certain state licensed facilities to current life safety codes and standards. This ensures a reasonable level of life safety to employees, occupants, and visitors, as well as firefighters and emergency responders during emergency operations.







### **Healthcare Unit**

The unit is responsible for federal Medicare-Medicaid (CMS) certification surveys and compliance with fire and life safety standards for health care facilities receiving federal funding.

Unit staff completed 213 initial and re-visit surveys from January through October resulting in 559 deficiencies cited. The Healthcare Unit conducts life safety inspections of CMS accredited facilities in an effort to educate our customers, which will result in the reduction of property damage, prevent injuries, and save lives while maintaining emphasis on public safety.

### **Plan of Cooperation**

The Plan of Cooperation (POC) agreement is a new communication and collaboration tool the OSFM introduced that will improve our understanding of the capacity of local fire prevention/investigation programs and communicate how the OSFM is able to support the Oregon fire service. The purpose of the document is to provide a structured framework for conversations with every Oregon fire chief, whose jurisdiction is not exempt under ORS 476 .030(3), about their local fire prevention/investigation program, to determine the support they need from our office, communicate what support we are able to provide, and identify any gaps in services that cannot be provided.

The Plan of Cooperation is not a formal contract for services. It is an agreement in principle on how the OSFM and each non-exempt fire jurisdiction will cooperate in providing fire prevention/investigation program services in their service area.

This is the first step in determining the needs of fire agencies to better serve the citizens in each agency's jurisdiction.



### **EMERGENCY RESPONSE SERVICES**

The Emergency Response Services Branch is comprised of the Regulatory Service Unit (seven programs: Fireworks, Explosives, Liquefied Petroleum Gas, Non-Retail Fueling, Fire Standard Compliant Cigarettes, Novelty/Toylike Lighters, and Community Right to Know), the State Emergency Response Commission, the Local Emergency Planning Committee Program, and the **Emergency Response Unit.** 

The Emergency Response Unit administers the Hazmat by Rail Incident Coordination, Agency Operations Center, and the State Regional Hazardous Materials Emergency Response Teams.

### **Hazmat by Rail Incident Coordination**

The Oregon Legislature passed House Bill 3225 in 2015 following a needs assessment of Oregon's fire service to identify gaps in the capability to respond to hazmat transportation by rail incidents. HB3225 allocated funding for a hazmat rail coordination, planning, training, and equipment inventory activities. In 2016, the OSFM's hazmat rail coordinator began to connect representatives from the rail industry with emergency responders to share information, develop plans, and facilitate training. Through collaboration with Union Pacific and Burlington Northern Santa Fe railroads, eight firefighting foam trailers were strategically placed throughout Oregon. They are housed with fire agencies near major rail lines, and in some cases, the same agencies that staff Oregon's Regional Hazmat Emergency Response Teams. These assets, along with other resources available to respond to hazmat transportation by rail incidents, have been added to the Western Regional Resource List, an online emergency planning and resource coordination tool.

In June 2016, the OSFM provided both direct field support and resource coordination during the Mosier train derailment. Key staff members responded directly to the incident to assist the unified command team and assess the situation. The OSFM's Agency Operation Center dispatched two strike teams of water tenders that joined local resources to deliver more than 1.5 million gallons of water to cool rail cars exposed to the crude oil fire.



# Fireworks Regulatory Review and Program Updates

The OSFM reviewed its regulatory authority and updated its administration of the Fireworks Program.

In the past, the OSFM has supported the seizure of retail fireworks at locations that do not have the wholesale or retail permit number, and the full name of the retail permit holder on the fireworks packaging (boxes, cases, etc.). This labeling requirement is applicable at the time the fireworks are received by a permitted retailer from a permitted wholesaler. Since this labeling requirement does not apply after the retailer has received the fireworks from the wholesaler, the OSFM will no longer seize legal Oregon consumer fireworks located at retail sales locations for not having proper labeling.

Historically, OSFM deputy state fire marshals have signed applications for fireworks display permits, as the local fire authority, when the proposed display is to take place in an area unprotected by a municipal fire department or fire protection district. Oregon Revised Statute 480.140 (2) specifies that such displays are to be under the supervision of the county court or its designee. Beginning in 2016, the OSFM is adhering to the original intent of this rule and will direct those seeking a permit in these unprotected areas to contact the county court or its designee to sign these applications as the local fire authority.

The OSFM has partnered with Oregon's fire service training community, regional hazmat response teams, and the rail industry to develop local training at the awareness, operations, and technician level. In 2016, 172 have attended Hazmat Rail Emergency Awareness Training, 65 have attended Hazmat Rail Emergency Operations Training, and 45 have attended Hazmat Rail Tank Car Specialist Training.

# State Emergency Response Commission

The OSFM is designated as the State Emergency Response Commission (SERC) as defined in ORS 453.520. This responsibility fulfills a federal mandate under the Emergency Planning and Community Right-to-Know Act of 1986. As the SERC, the OSFM is tasked with coordinating local emergency planning committees (LEPCs), in each Oregon county (or combined counties), reviewing local emergency response plans, and establishing procedures for receiving and processing public requests for information collected under Oregon's Community Right-to-Know Program.

The OSFM formed the SERC Executive Committee. This advisory group to the OSFM is comprised of key partner agencies from the emergency planning community, including: Oregon Emergency Management, the Oregon Department of Environmental Quality, Oregon Department of Transportation, the Oregon Health Authority, the Oregon Fire Chiefs Association, and representation from Oregon tribes, counties, and LEPCs. The committee will assist the OSFM with setting priorities for Oregon LEPCs, reviewing emergency plans, organizing LEPC training and outreach activities, and recommending approaches to grow and support Oregon LEPCs.



### **Oregon Regional Hazardous Materials Emergency Response Teams**

Hazmat 01 - Roseburg Hazmat 07 - Portland Hazmat 13 - Salem Hazmat 02 - Eugene Hazmat 08 - Southern Oregon Hazmat 14 - Ontario

Hazmat 03 - Gresham-Multnomah Hazmat 09 – Tualatin Valley Hazmat 15 - Coos

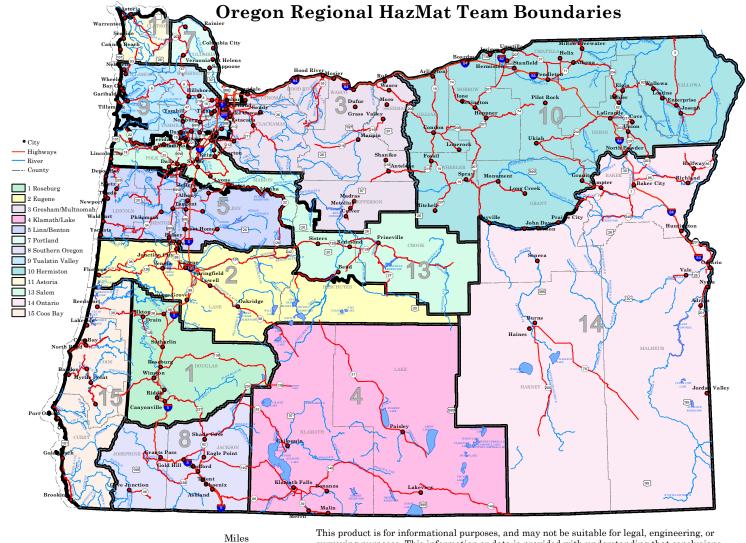
Hazmat 04 - Klamath/Lake Hazmat 10 - Hermiston

Hazmat 05 - Linn/Benton Hazmat 11 - Astoria

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surveying purposes. This information or data is provided with understanding that conclusions drawn from such data are the responsibility of the user. Data was compiled through various sources by the Oregon Department of Foresty and Oregon State Fire Marshal. September 2014

### 2016 Conflagrations

2016 was an atypical fire season for the OSFM, with three declared conflagrations and only two incident management team (IMT) mobilizations. The season began on June 3, when a unit train transporting Bakken crude oil derailed in the town of Mosier. The OSFM used the Fire Service Mobilization Plan to deploy two strike teams of water tenders to assist with cooling the derailed cars. Mobilized resources were back in station after 32 hours. This derailment and the subsequent mobilization of structural fire resources was a test of the work that had been done since the passage of HB 3225, which requires OSFM to work with partner agencies to plan for a coordinated response to oil or hazardous material spills or releases during rail transport. All agencies involved learned valuable lessons, which are being used to continue to bolster Oregon's ability to respond to any future rail incidents.

The second conflagration of the season, the Akawana Fire near Sisters, was declared on June 8 and the Green IMT mobilized along with four task forces. Akawana was the longest deployment of the season, at just over three days. The mobilization to the Akawana Fire occurred during the third day of a four-day, multistate FEMA-sponsored exercise, Cascadia Rising, which OSFM staff had been involved in planning since late 2014. Incident Management Team members participated in the exercise with National Guard resources at Camp Rilea, and OSFM leadership staffed the State Emergency Operations Center.

The season's third and final conflagration was the Wasson Pond Fire near The Dalles, declared on July 4. Again the Green IMT mobilized with two task forces, this time for just over 24 hours.

While there was not a lot of activity during the 2016 fire season, the deployments reaffirmed the importance of using the Fire Service Mobilization Plan for both non-traditional incidents and wildland-urban interface fires to which we generally respond. Of the nearly 1,000 structures threatened by the two fires, only two outbuildings were lost, a success rate of over 99%.





