

**COST REVIEW AD-HOC COMMITTEE DRAFT MINUTES
WEDNESDAY, DECEMBER 4, 2019 3PM – 5PM
COUNCIL CHAMBERS
1175 EAST MAIN STREET**

I. CALL TO ORDER

Chair Dennis Slattery called the meeting to order at 3:04 PM.

Roberta Stebbins, Stefani Seffinger, Pamela Lucas, Shaun Moran, Jim Bachman, Mike Morris, Kelly Madding, Shane Hunter and Mark Welch were present. Julie Akins was absent.

II. APPROVAL OF MINUTES:

1. Cost Ad-Hoc Review Committee November 20, 2019

Bachman/Stebbins moved to approve the minutes. Discussion: None. All Ayes. Motion passed unanimously.

City Administrator Kelly Madding gave brief Staff report and spoke to the timeline of the upcoming meetings.

III. AMBULANCE SERVICES DISCUSSION

The Committee discussed essential services verses valued services.

The Committee discussed funding and services.

Madding gave a brief Staff report and handed out the Fire Standards of Coverage report and the ASA Annual Report (*see attached*).

Fire Chief David Shepherd went over the Fire Standards report and the ASA Annual Report.

Items discussed were:

- Cost differences between Type 1, 2 & 3 ambulance services.
- Ambulance vehicles costs.
- Ambulance service calls and procedure.
- Ambulance transport cost and revenue.
- Emergency response time.

The Committee directed Chief Shepherd to prepare a fixed cost verses variable cost analysis for the ambulance service.

The Committee discussed the General Fund and valued services (*see attached*).

Items discussed were:

- Public Art Program.
- RVTV.
- Tourism.
- Transient Occupancy Tax.
- Expenditures and revenues.
- Parking Fund.
- AFR Fees.

VI. ADJOURNMENT

The Cost Review Ad-Hoc Committee was adjourned at 5:00 PM

Respectfully submitted by:

City Recorder Melissa Huhtala

Attest:

Chair Slattery

In compliance with the Americans with Disabilities Act, if you need special assistance to participate in this meeting, please contact the City Administrator's office at (541) 488-6002 (TTY phone number 1-800-735-2900). Notification 72 hours prior to the meeting will enable the City to make reasonable arrangements to ensure accessibility to the meeting (28 CFR 35.102-35.104 ADA Title I).



STANDARDS OF COVERAGE 2009



ASHLAND FIRE & RESCUE STANDARDS OF COVERAGE

INTRODUCTION

This document examines Ashland Fire & Rescue's ability to respond to and mitigate emergency incidents created by natural or human-made disasters. It differs from the Ashland's Emergency Management Program and Emergency Management Plan because it provides overall planning and coordination for emergencies, and it is a comprehensive analysis of detailed Fire, EMS, and Rescue systems.

The format of this document is based on the State of Oregon's Standards of Response Coverage, a critical element of the accreditation process of the Commission on Fire Accreditation International (CFAI). "Standards of Response Coverage" are those written procedures that determine the distribution and concentration of the fixed and mobile resources of a Fire and EMS organization. A systems approach to deployment, rather than a one-size-fits-all prescriptive formula, allows for local determination of the level of deployment to meet the risks presented in each community. In this comprehensive approach, each agency can match local need (risks and expectations) with the costs of various levels of service. In an informed public policy debate, a City Council "purchases" the Fire, Rescue, and EMS service levels (insurance) the community needs and can afford.

The Standards of Coverage are developed through the evaluation of Ashland Fire & Rescues present practices, regulatory requirements, historical response data, and a comprehensive risk analysis. The response analysis will help the City Council and the community, visualize what the current, or a possible, response system can and cannot deliver.

**** Printing of this document was done in black and white as a cost savings measure. A color version is available via electronic medium on request.**

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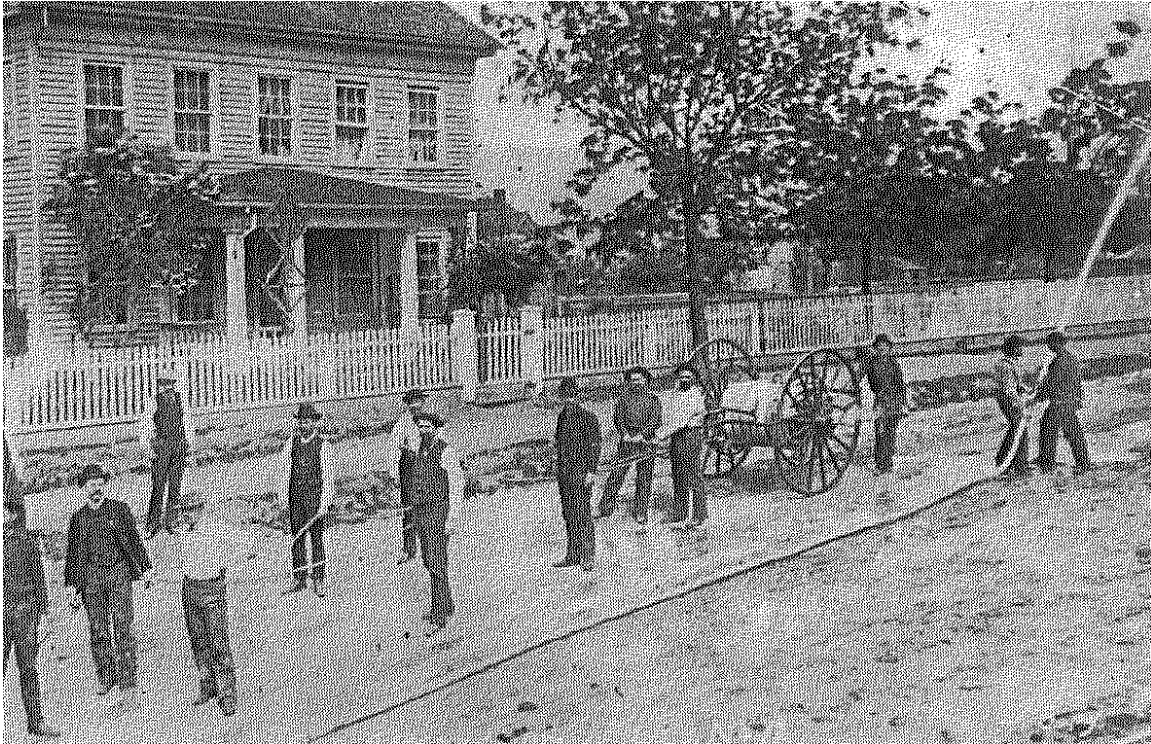
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SECTION ONE: COMMUNITY BASELINES

A. History of Ashland Fire & Rescue

Like many towns across America, Ashland has literally been shaped by fire. On March 11, 1879, a devastating fire that began in a blacksmith's shop destroyed many of the businesses on the west side of the plaza. Many of the masonry structures that replaced the wooden buildings are still standing today.



Ashland Hose Company No. 1, East Main Street, 1887

On August 3, 1885 the “Ashland Fire Committee” was formed under City Council ordinance No. 14. In 1891, the City Council passed Ordinance No. 105 establishing the Ashland Fire Department, consisting of two hose companies. The first Fire Chief was appointed in 1913. Today, Ashland Fire & Rescue (hereafter referred to as “AF&R”) is organized as a municipal service department

B. Governance

The City of Ashland operates under the strong Mayor – Council form of government with the Mayor elected for a four year term and six Council Members elected, at-large, for four-year overlapping terms. Day-to-day operational activities are overseen by a City Administrator who coordinates the duties and

responsibilities of eight Department Directors including the Fire Chief. The budget process, organized under Oregon budget law, utilizes seven citizens as lay members of the city budget committee, who are joined by the Mayor and Council. The Budget Committee approves the budget, which is the annual spending plan for the City. The City Council adopts the budget following a public hearing. The adopted budget for AF&R in 2009 was approximately 5 million dollars. AF&R generates over 700,000 dollars of revenue which accrues in the General Fund.

C. Geography

Urban Growth Boundary: The emergency medical services and fire suppression auto/mutual aid boundaries of Ashland Fire & Rescue extend beyond the Urban Growth Boundary of the City. The City Urban Growth Boundary is as follows:

- Northern Boundary - Jackson Rd. @ Hwy 99 North, Bear Creek, East Main St.
- Eastern Boundary - Dead Indian Memorial Rd., Tolman Creek
- Southern Boundary - Upper Strawberry Lane, Pinecrest Terrace, Green Meadows Way
- Western Boundary - Ashland Mine Rd.

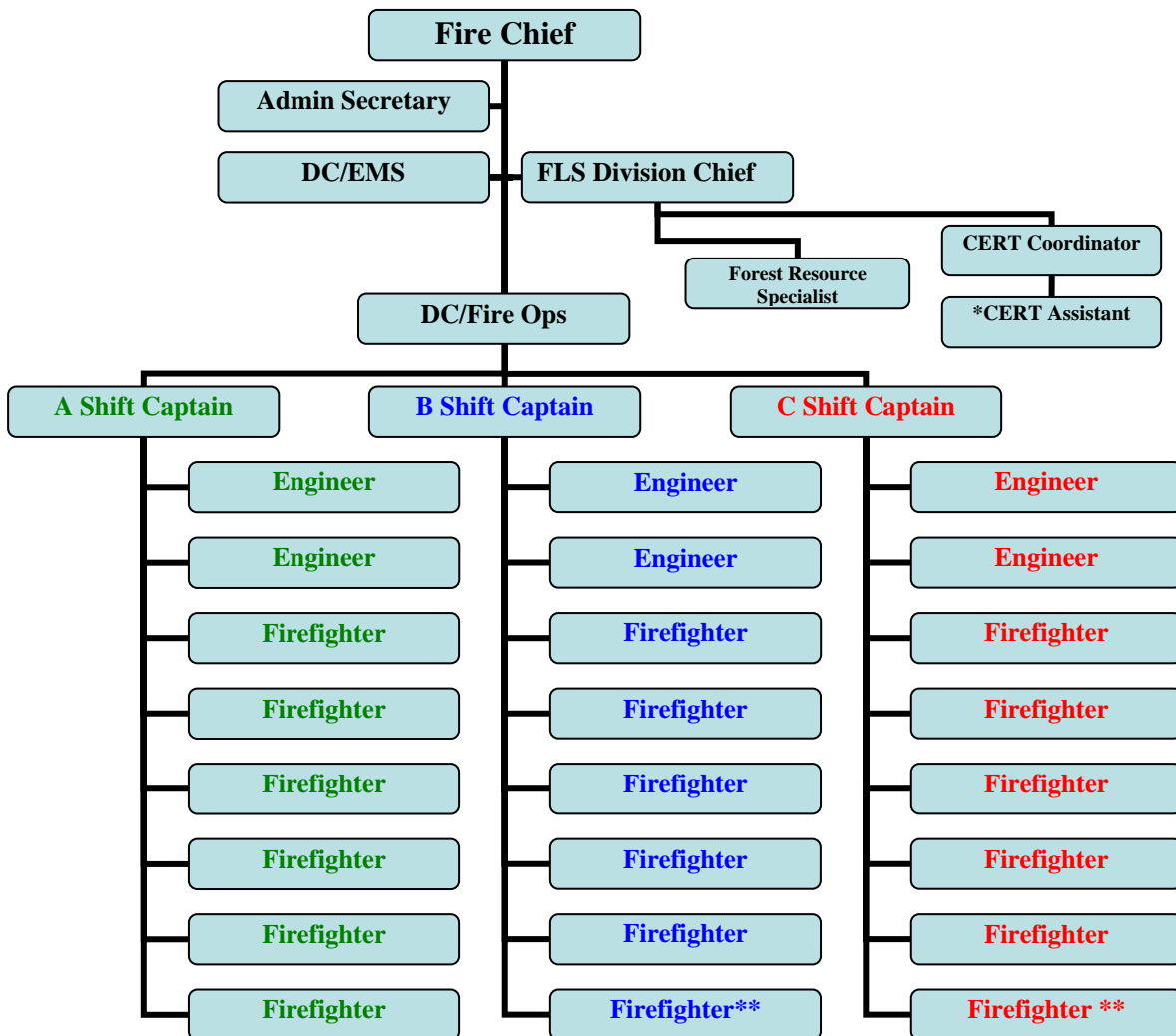
Primary topography: Ashland's elevations vary from 1,760 – 3,560 feet above sea level, and are located on the edge of the eastern foothills of the Siskiyou Mountain Range. The surrounding lands are a combination of livestock grazing lands and pasture lands and forested mountainous terrain. The valley floor consists mostly of farmland and pastureland, while the mountain slopes and mid to higher elevations are forested.

The City is bordered to the east by Neil Creek, to the north by Bear Creek. and to the west by Wright's Creek. To the south lies the Ashland Creek watershed, source of the city's drinking water. All drainages ultimately run into the Rogue River. The Talent Irrigation District maintains a major canal which runs from southeast to northwest through the city, continuing into rural farmland.

Weather: Summer months have typically very low humidity, often less than 20%. High temperatures range between 80 and 105 degrees Fahrenheit from June through September. These conditions create extreme fire conditions during most fire seasons. Winter months have typically moderate temperatures of 40 to 60 degrees with occasional lows in the teens and twenties. In addition, winters usually bring snow, ice and wind. This is particularly true for elevations above the valley floor.

D. Existing Fire Deployment

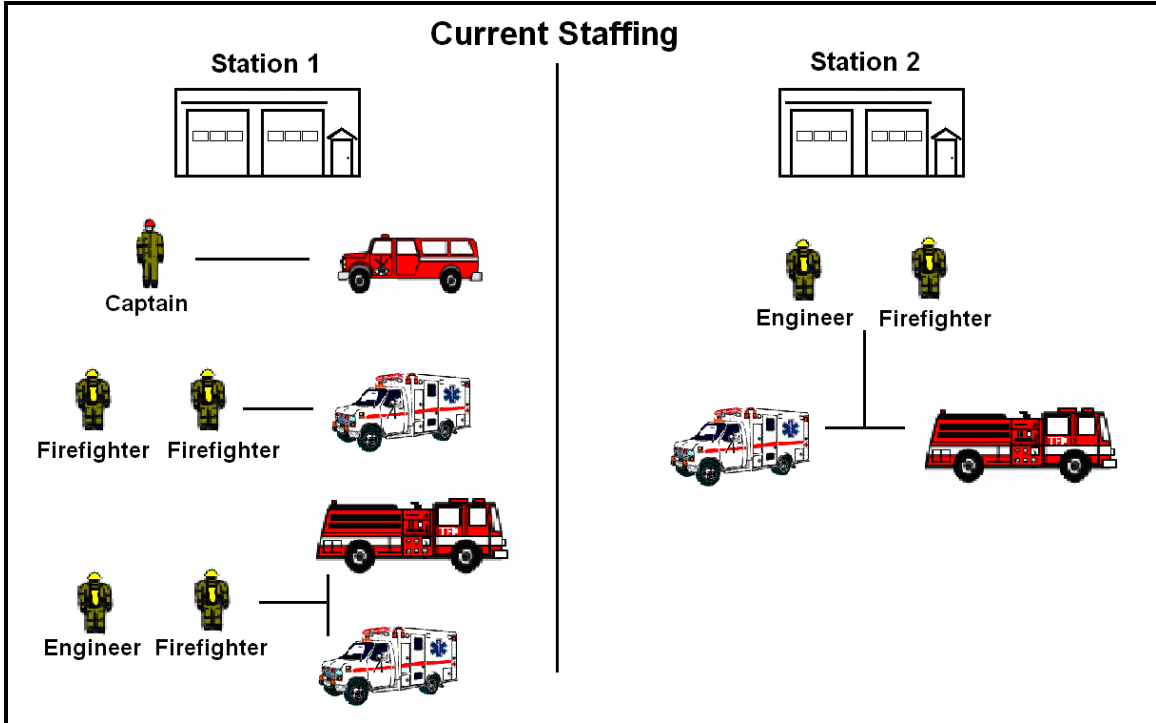
Ashland Fire & Rescue employs thirty-four full time personnel (Two positions are currently unfilled due to budget short falls). There are 6 Firefighters, 2 Engineers and 1 Captain on each shift. There are three emergency response shifts. Each shift works a 24 hour day, rotating days on and days off during a nine day cycle. Each of the three shifts is under the command of the shift Captain. While each shift is comprised of 9 personnel, the minimum daily required staffing is 7 personnel (1 Captain, 2 Engineers, and 4 Firefighters). These 7 - 9 personnel operate out of the City's two fire stations. Fire Station No. 1 is also utilized for administrative offices. The administrative staff includes the Fire Chief, Operations Division Chief, EMS Division Chief, Fire & Life Safety (FLS) Division Chief and Secretary. The following is the department's organizational chart:

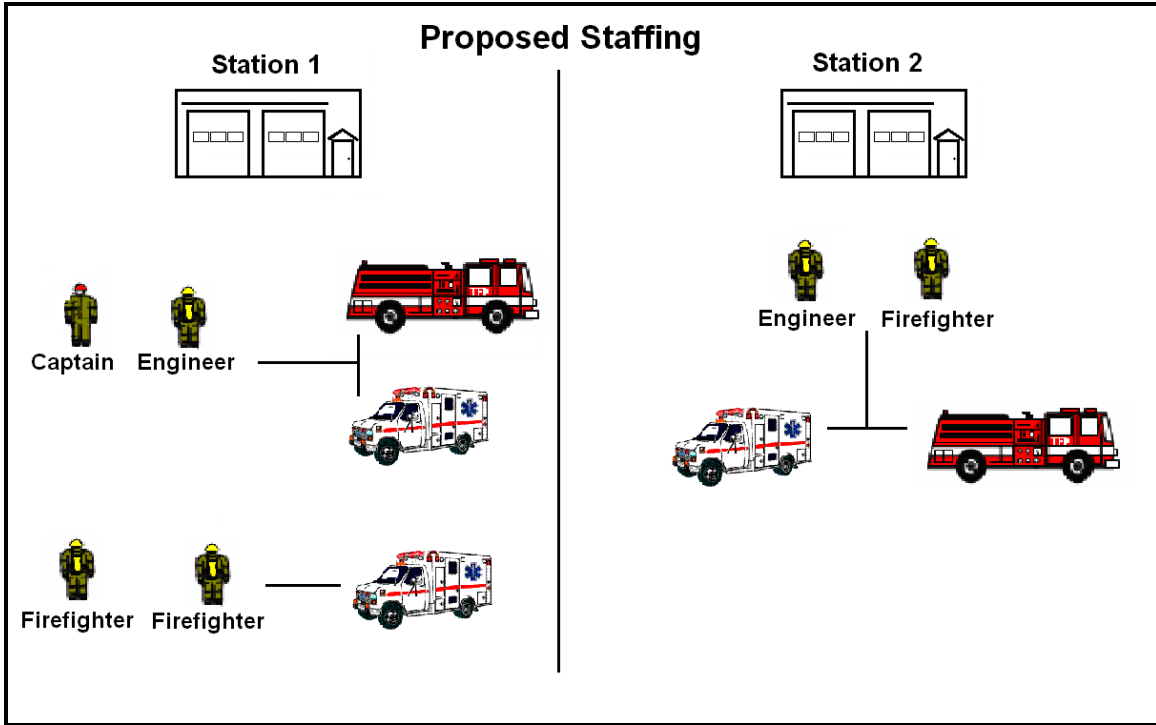


**indicates part time position funded by grant funds*

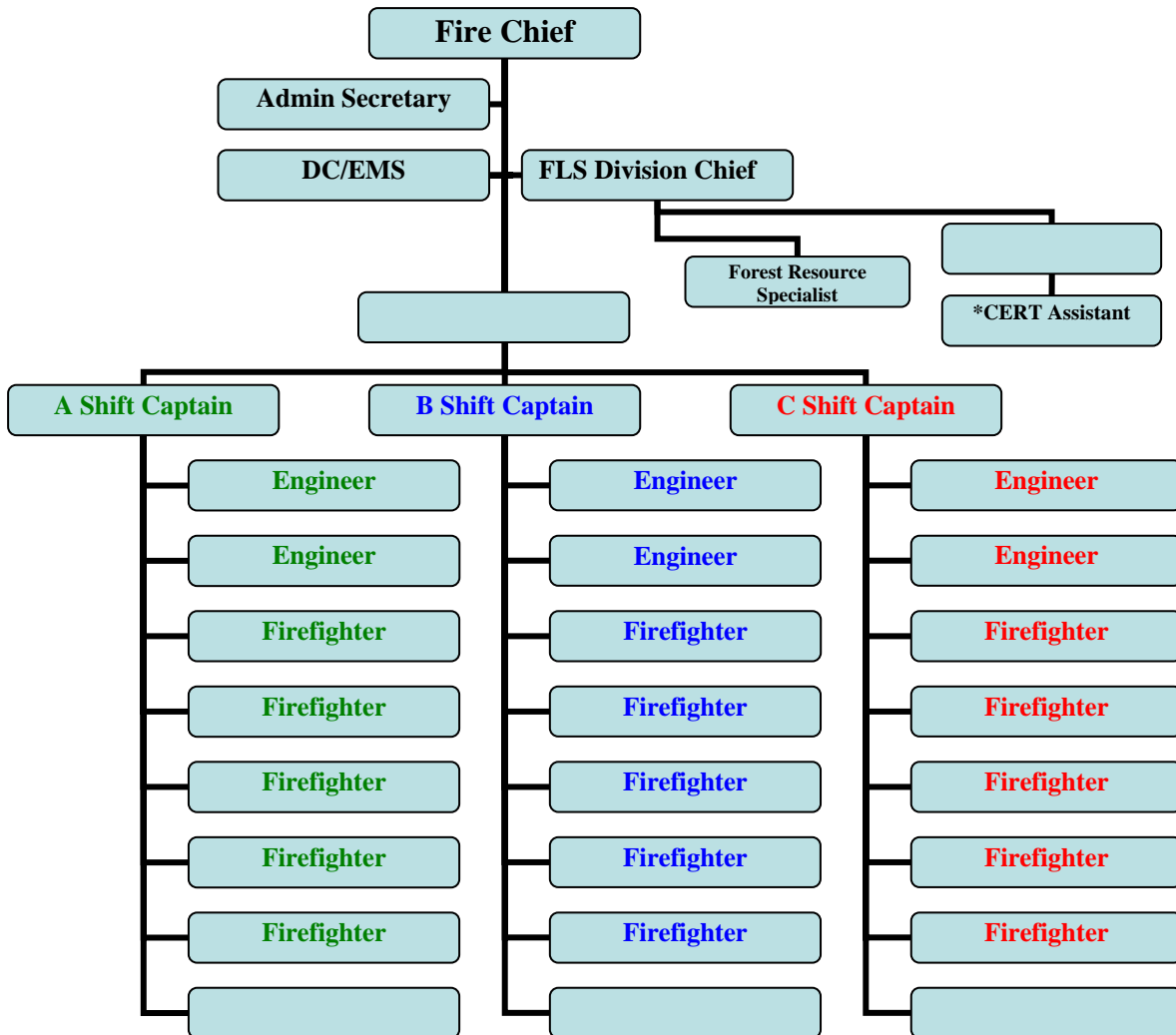
**** indicates positions that have not been filled due to lack of funding in the current 2008-2009 budget year.**

Minimum Daily Staffing





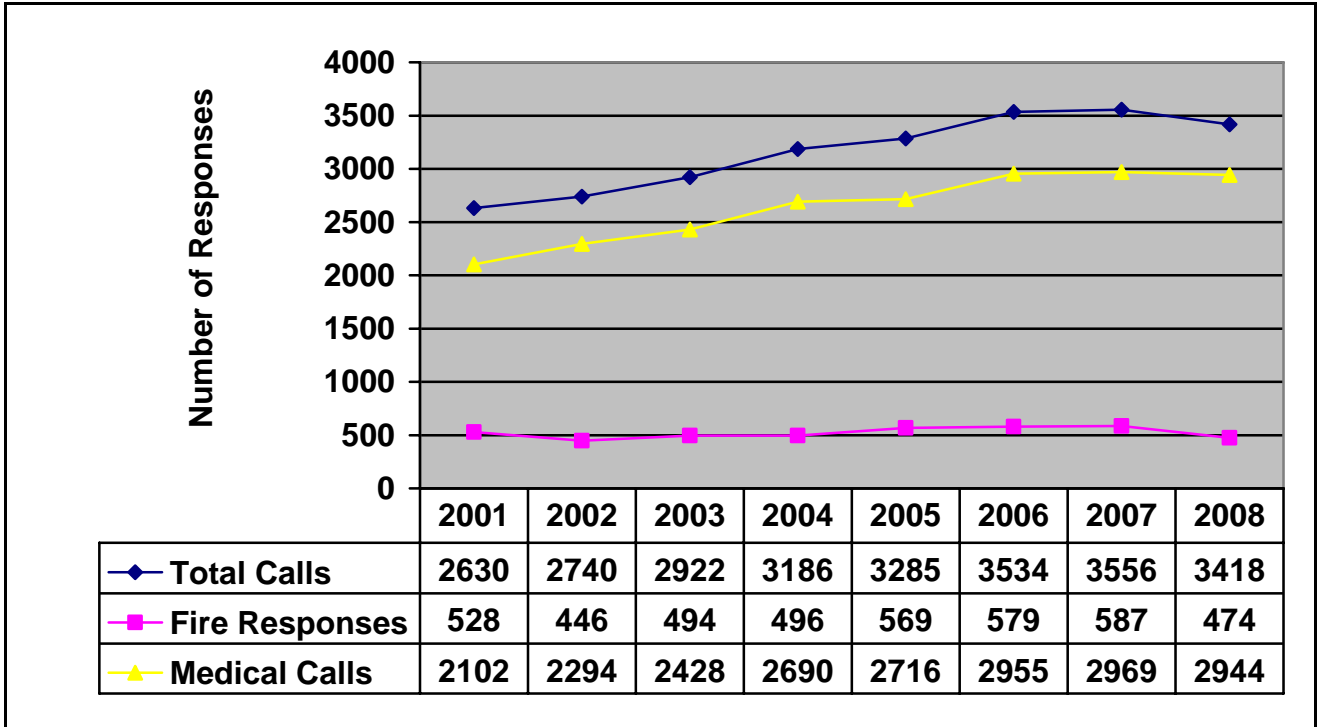
The following will be the department's organizational chart with the proposed budget cuts scheduled to take effect July 1, 2009 for the 2009-2010 budget year). Full time staff will decrease to twenty-nine personnel (Down from thirty two full time funded positions). In addition to the two firefighter positions that have not been filled, the department would need to cut another two firefighters and the C.E.R.T. coordinator. The Operations Division Chief position would be left vacant and that individual placed on a shift to augment line staff. Minimum daily staffing would then be reduced to 6 firefighters (3 Firefighters, 2 Engineers, and 1 Captain).



**indicates part time position funded by grant funds*

Calls for service

During the 2008 calendar year, Ashland Fire & Rescue responded to 3,418 calls for service. Of these requests for service, 86% were related to Emergency Medical Services, 14% were Fire related emergencies.

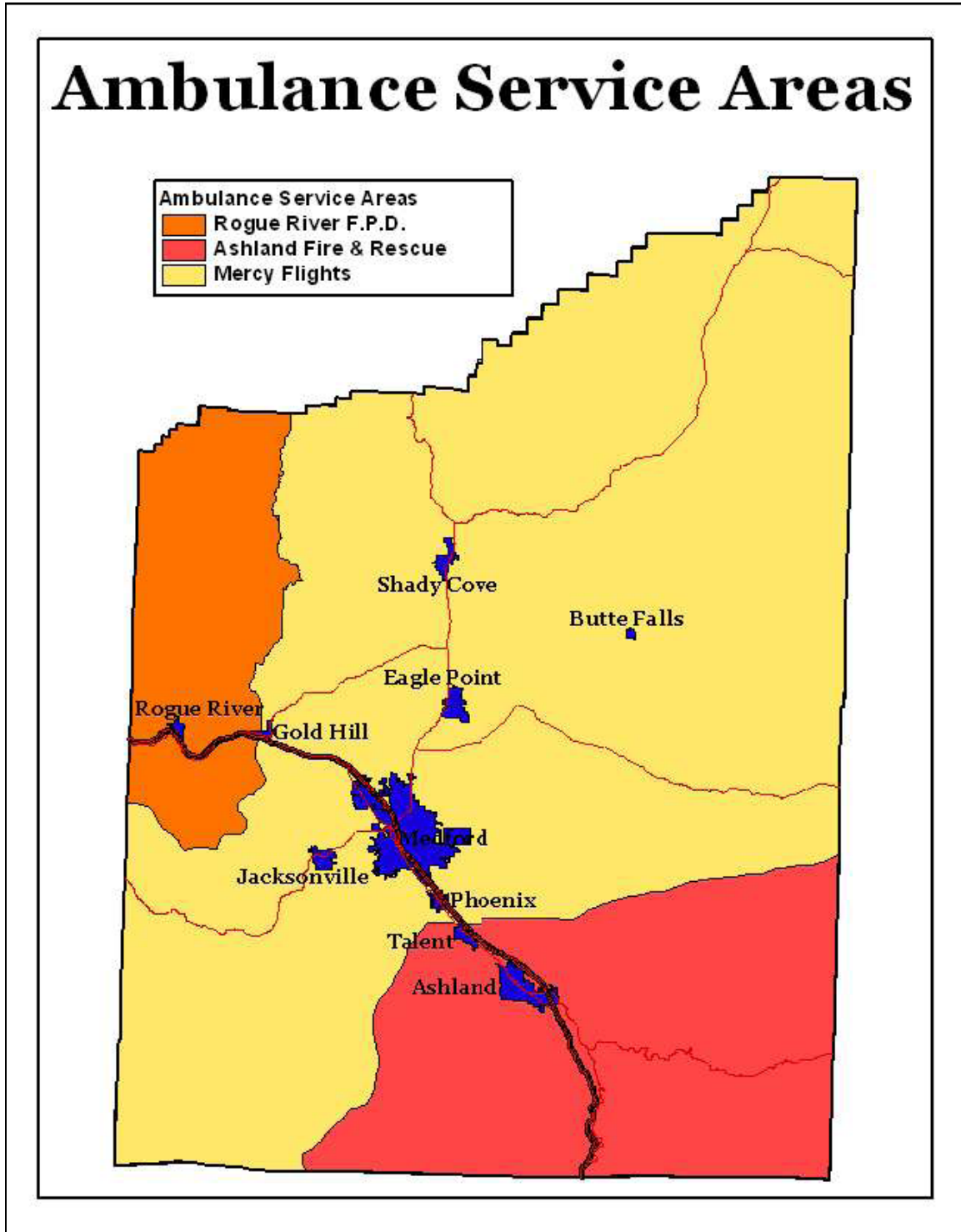


❖ **Note – While multiple units may respond on an emergency response, it is only counted one (1) time for statistical purposes.**

Fire Response numbers include the following:

- Structure Fires
- Brush Fires
- Car Fires
- Fire Alarms Sounding
- Ruptured Gas Lines
- Smoke Detector/CO Alarms
- Power Line Hazards
- Rescue Situations
- Lift Assists to the Disabled
- Miscellaneous Other

The following map shows AF&R's ambulance response area outside of the city limits.



SECTION TWO: RISK ASSESSMENT

A. Risk Assessment Model

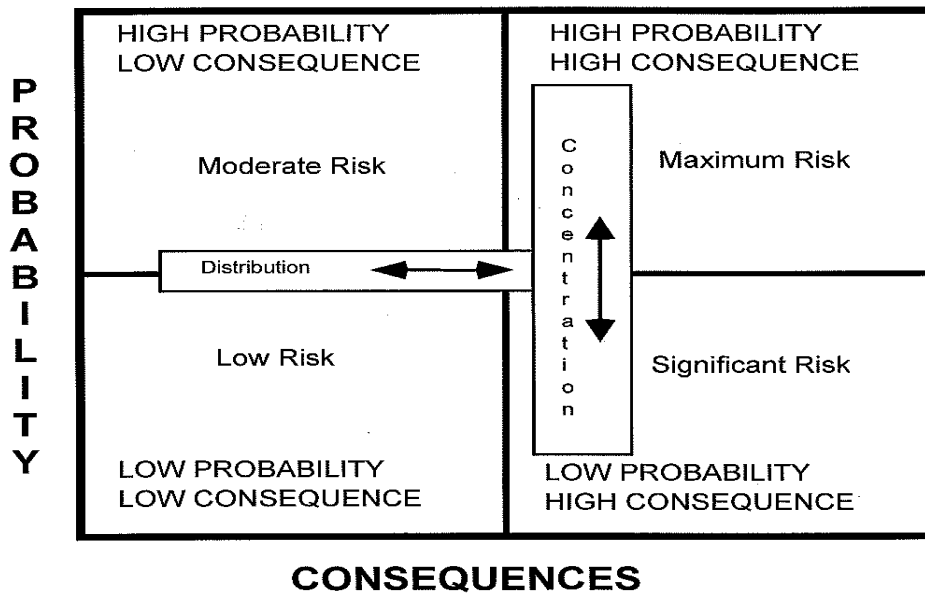
The City of Ashland must assess risks based upon the potential frequency (probability of an incident occurring) and consequence (potential damage should an event occur). For example, a terrorist act has a low probability; however, if a terrorist act occurs, the damage and the psychological impact are potentially very high. This same outlook regarding risk assessment can also be applied to natural disasters. For example, an earthquake generally does not hit the same community every year; but if it does strike, the damage can be great. Conversely, medical emergencies happen every day. The overall potential damage from medical emergencies to the community as a whole is not nearly as significant as that from an earthquake or other natural disaster though these individual incidents greatly affect those requiring the service. To design future deployment strategies, the department must be able to compare the potential frequency and potential damage of events that may affect the community and service area.

Risk management is the analysis of the chance of an event occurring and the resulting damage that could occur as a result of the event.

For example: structure fires are relatively infrequent in comparison to medical incidents in the City of Ashland and its service areas; however, the loss of subsequent dollars, loss of irreplaceable items, and loss of business or jobs make the consequences of such fires high; activation of automatic fire alarms is high probability with low consequence; earthquakes or a large hazmat incident may be infrequent but represent a large potential loss to life and property. Comparatively, a dumpster fire may be a high probability but have little consequence outside of the fire response. With an understanding of the different levels of probability and consequences, proper strategic planning in respect to risk management and resource deployment can take place.

The challenge in community risk management does not lie solely in the work necessary to assess the probabilities of an emergency event in a community, but in the political arena as well. It is the policy makers who will determine the level of service to be delivered to the area being served.

The following Risk Matrix helps identify the elements that must be considered when assessing community risk. Each of the four categories represents a specific level of risk based on the probability of that risk occurring and ties the probability to the consequences that will be experienced if the risk occurs. Each risk that a community faces can be identified and categorized using this measurement of probability/consequences. As the level of risk increases, a different commitment of fire resources is needed to keep the risk from escalating.



1. Maximum Risk: Maximum risk includes a high probability and maximum consequence. This level of risk has the potential for a high level of life and property loss as well as significant property damage across the entire geographic area. Maximum risks will certainly have a devastating impact on the community's ability to maintain its commercial, residential and industrial tax base. An event of this magnitude would severely impact the community in multiple ways and challenge the community's ability to recover. An event of this nature would most likely include a disaster declaration by the Governor and/or the President of the United States. An example of a Maximum Risk event would be Hurricane Katrina, the Loma Prieta Earthquake, the Oakland Hills Fire or the bombing of the World Trade Center in New York.

2. Significant Risk: Significant risk level has a low probability of occurrence and a high level of consequences. This risk level has the potential for high to moderate life and property loss. A significant risk may vary in magnitude and may create varying threats to those people in the immediate area of impact. Significant risks can also impact those in close proximity to the immediate threat zone. The financial impact related to a significant risk is usually high by threatening the community's economic and social structures. A significant risk will require an extended recovery period but a community that has prepared can recover within a reasonable period of time.

3. Moderate Risk: Moderate risk has a high probability of occurrence and a low level of consequence. This level of risk can present a potential for life and property loss but these are usually limited to only those areas, properties and residents in the immediate threat zone. A moderate risk usually has an impact both financially and socially but is limited to specific areas unless the community has allocated adequate resources to respond to a risk of this level. Inadequate

resource allocations for moderate risk incidents can cause them to escalate to a significant level of risk requiring additional resources and the possibility for increased life and property loss. Recovery from a moderate risk is usually completed within a brief period of time. Moderate risk incidents seldom require assistance from outside the jurisdictional area.

4. Low Risk: Low risk has a low probability of occurrence and a low level of consequence. This risk level presents little threat to the community's ability to function unless the community does not have adequate resources allocated to handle this level of risk. The occurrence of this type of event is infrequent and presents little, if any, potential for significant life and property loss or damage.

The relationships between probability and consequence and the community's adopted service level goals determine the needed concentration and distribution of resources. Distribution is the location of resources throughout the city. Concentration is the number of resources needed in a given area within the city. This varies depending on many factors including the number of events (calls for service); the risk factors of the area; the availability, reliability, and time of arrival of secondary responding units; etc. A challenge will be to find the proper balance for the distribution and concentration of resources needed to meet the service level goals today and in the future as the city and the department service areas continue to grow.

Distribution: The term distribution is used in the fire service to describe the location of fire department emergency response resources in an effort to ensure their availability to provide intervention for all risk levels. Because of the cost related to the allocation of fire resources, fire departments use a static response system. A static response system is a system in which fire stations are strategically located in designated response areas across the community, or coverage area. This allows fire department units to travel from one point to another in a pre-designated period of time known as response times or performance objectives.

A key component to a static response system is to ensure fire department resources are properly placed based on current and future growth. Properly spaced fire stations are needed to assure a rapid deployment of emergency resources in order to respond to and mitigate average, or routine, emergency calls for service in a timely manner.

Concentration: The term concentration is used to describe the spacing of multiple fire department resources so a fire department can assemble an "effective response force" at the scene of an emergency incident. An effective response force is that which will most likely stop the escalation of the emergency incident as it is categorized in each risk type. Differing incident types require different levels of initial and secondary staffing based on the nature of the

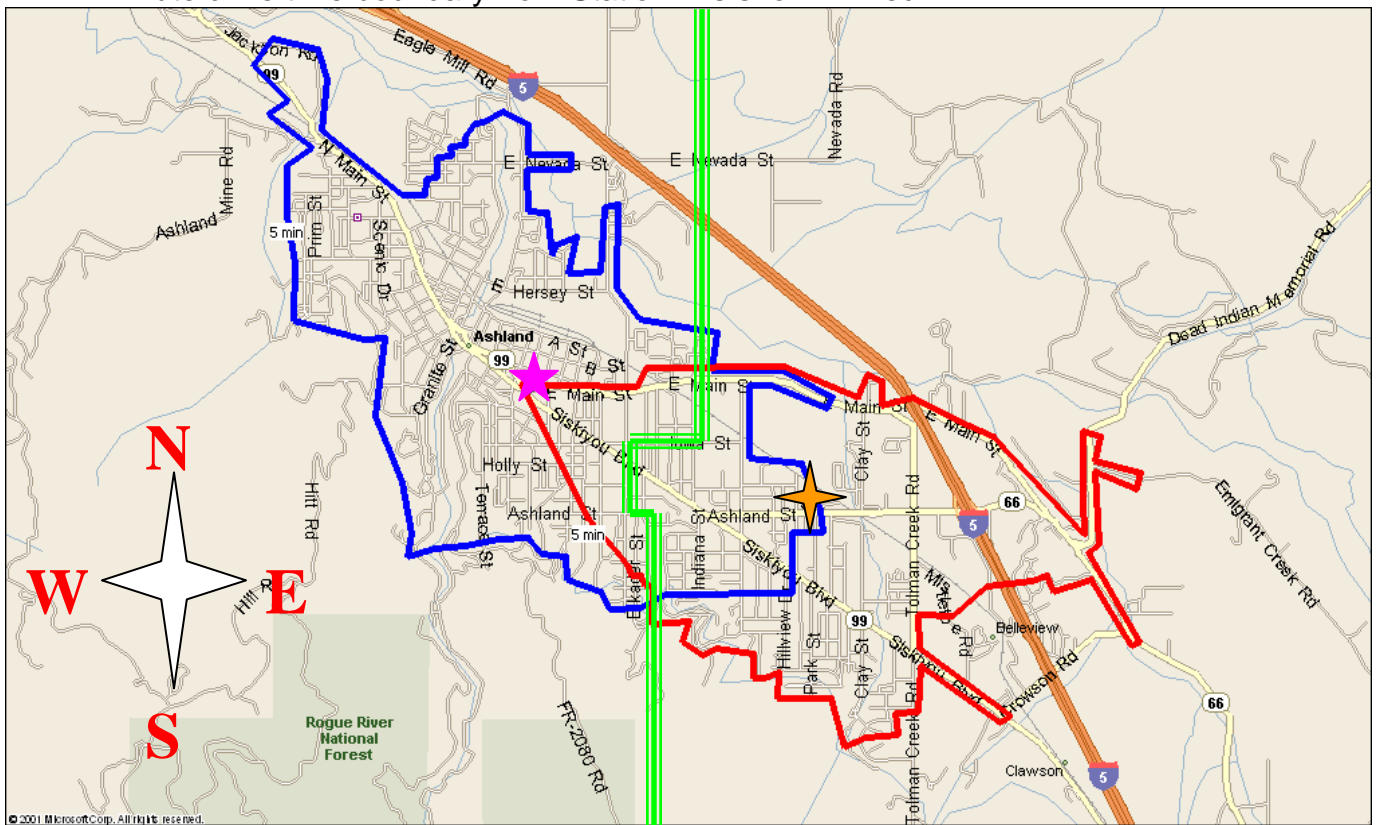
incident. These incident specific resource requirements are called critical tasking and are explained in detail later in this document.

It is a critical factor for fire departments to develop specific service level objectives to address the concentration of resources for each risk area.

★ **Fire Station #1** is located at 455 Siskiyou Boulevard. Current minimum staffing is 1 Captain, 1 Engineer and 3 Firefighters who staff one command vehicle, one engine and one ambulance. The station also houses an unstaffed backup ambulance, engine, brush truck and wildland urban interface engine. Personnel can be moved off one type of equipment and onto another to better respond to emergency needs. Station 1's first in response area is that part of the city to the west of the triple green line.

★ **Station #2** is located at 1860 Ashland Street. Current minimum staffing is 1 Engineer and 1 Firefighter who will respond in an engine or ambulance depending on the type of call. Station 2 houses backup ambulances, a brush truck and a technical rescue response trailer. Station 2's first in response area is east of the triple green line.

The blue line shows the boundary for a 5 minute drive time from Station 1. The 5 minute drive time boundary from Station 2 is shown in red.



❖ It should be noted that those areas outside of the blue & red lines have a drive time greater than 5 minutes

B. Risk Type

Understanding community risk is important when conducting a fire department response coverage assessment. Each risk presents the need for varying fire resources. Based on the potential posed, each risk type may require an increased number of fire department personnel, apparatus, equipment, and water supply to keep a potential event from escalating beyond the department's mitigation capabilities. This section explains the various risk types in the community.

The potential risks include the following categories; Structure Fires, Emergency Medical Services, Wildland Fires, and Technical Rescue.

1. Structure Fire Risk

A building categorized as Maximum Risk will be significant in size, absent of automatic fire protection and alarm systems, require a large amount of water to contain a fire and have a potential for a high life loss due to existing and non-conforming exiting. These buildings will have an irreplaceable or a major financial or social impact on the community if lost. A key factor that places a building in this category is inadequate water availability for fire suppression operations at the site of this building. An example of a building categorized as Maximum would be as follows: An older, multi-story, non-reinforced masonry building considered to have historical significance. This building would have no fire protection or alarm systems, poor exiting, and a marginal water supply for firefighting operations.

A building categorized as Significant Risk will be substantial in size and have the potential for life and property loss. The potential for life loss varies between those occupants in the immediate area to threatening the lives of all of the people in the building. The financial impact to the community created by this level can be high due to loss of jobs and/or loss of tax revenue. These buildings usually have automatic fire protection and alarm systems. Examples of Significant buildings include common hallway apartments, warehouses, office complexes, moderate to large sized retail stores, hospitals, medical buildings, and older downtown buildings that have retrofitted their buildings with fire protection systems.

Buildings categorized as Moderate Risk are average in size and can present a potential for a high life loss but are usually limited to threatening only the immediate occupants of the structure. The financial impact due to the loss of this structure has an impact on the occupants or owners, but not the surrounding properties. Examples of these buildings vary widely with the most typical in this class being a single family residence. Smaller apartment buildings and smaller businesses are also included in this category.

Buildings categorized as Low Risk have a very limited exposure. They are small structures that are not normally occupied by people. They also generally have a reduced amount of fire load, require small amounts of water to extinguish, have limited potential to spread to other buildings, and have little financial impact to the owners or the community. An example of a building in the Low Risk category would be a carport, shed, or out-building with limited potential for spreading to nearby buildings.

The table below illustrates the types and numbers of building occupancies that can be found within the City of Ashland.

CLASSIFICATION	# of BUILDINGS
Single Family Residential	7,800
Multi- Family Residential	258
Offices/Mercantile/Assembly	338
Educational Facilities	28
Fabrication & Manufacturing	27
Hazardous Materials	65
Health Care Facilities	4
Stand Alone Large Mercantile	28
Storage	6
Totals	8,554

**** There are 1770 businesses that operate in the City of Ashland**

**** It is important to note that the above table shows buildings only. There are many structures that have multiple businesses within them.**

2. Emergency Medical Services (EMS) Risk

Routine, single patient emergency medical service incidents in the Fire Department's coverage area can be considered "Low" to "Moderate" risk. These types of incidents have a very high probability of occurring but their consequences only affect the patient and their immediate family. EMS incidents with multiple patients, also known as Mass Casualty Incidents (MCI's) can be considered "Moderate" to "Significant" risks. These call types occur less frequently but have the potential to affect a greater number of people.

Emergency Medical Service (EMS) incidents make up the largest percentage of responses for AF&R. This fact is also true for the fire service nationwide. During the past 15-20 years fire departments across the country have taken a lead role in providing basic and advanced life support services in their protection areas in an effort to provide comprehensive pre-hospital care for the citizens they protect. Nationally, EMS calls for service make up approximately 70% of any fire department's overall emergency call volume

Assessing the risk related to the EMS system involves understanding the history and types of EMS calls being responded to as well as the location in which those calls are occurring. As the population in the United States ages, calls for emergency medical service are certain to increase. During difficult economic times, fire departments experience an increase in calls for EMS service.

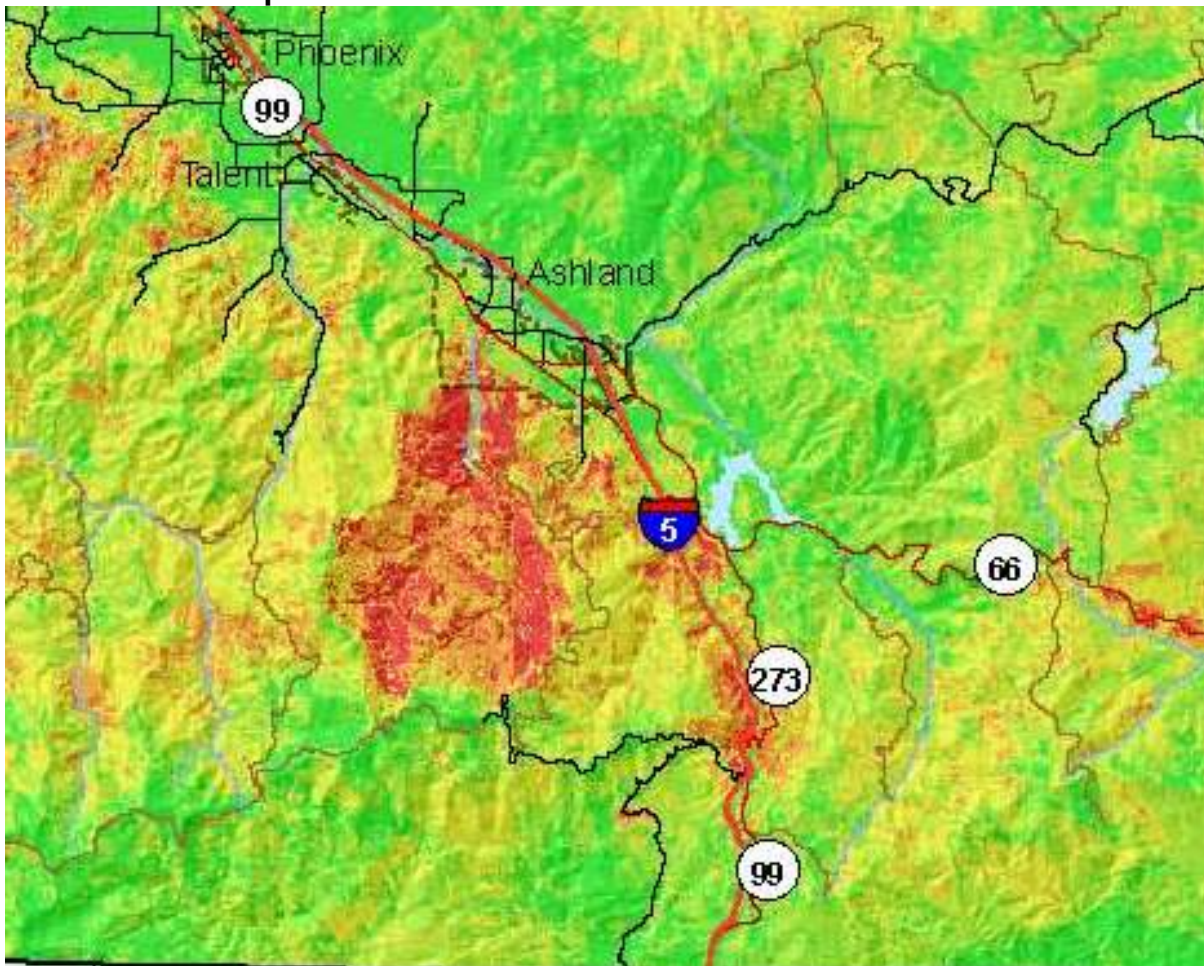
Emergency Medical Service (EMS) responses are the most prevalent incident type for AF&R. During FY 07/08 the Fire Department responded to 3,418 calls for emergency service. Of those calls, 86% were calls related to emergency medical services. The most typical types of patient symptoms generating EMS calls were altered level of consciousness, cardiac arrest, chest pains, shortness of breath, falls and seizures.

3. Wildland Fire Risk

Assessing Ashland's Wildfire Risk

Wildland fire risk and hazards have been documented as "High" (High is the highest rating) in both the primary and mutual aid response areas of Ashland Fire & Rescue. The State of Oregon and Jackson County wildfire risk assessments rate the Ashland wildland urban interface (WUI) as among the most hazardous in the State and the highest ranked community in Jackson County (State of Oregon Wildfire Risk Assessment 2005, Jackson County Integrated Fire Plan, 2005). The primary factors used for assessing a community's wildfire risk are the vegetation types (fuels), steepness of the topography, housing density, fire starts, and protection capabilities. The key factors that lead to Ashland's high rating are the fuel loads that surround Ashland, the density of homes in the WUI zone, and the upslope Ashland Municipal Watershed.

*** Ashland Municipal Code refers to this area as The Wildfire Hazard Area.**



Composite Wildfire Assessment Map, Jackson County Integrated Fire Plan (2005). Red is high risk.

Wildfire Behavior and Suppression

Wildland fire behavior is driven by three primary factors: fuel, weather, and topography. All three factors combine in the Ashland WUI to create potentially extremely hazardous wildfires. The intensity and rate of spread (together referred to as behavior) of a wildfire determine what suppression tactics will be effective. Flame heights over 4 feet dictate the use of fire engines and bulldozers in a direct or indirect attack strategy and flames over 8 feet dictate the use of aerial resources and construction of firelines well away from the fire front.

Wildfire Fuel Conditions

The fuel (vegetation) in and around Ashland is often heavy although a significant area of fuels has been modified through an ongoing AF&R fuels reduction program. According to a City commissioned study in 2002, just over 80% of the WUI area is either Extreme or High hazard vegetation types (not including Federal lands), meaning flame



lengths of at least 4 feet and more likely 8 feet and greater over a larger proportion of the protection area. The fuels reduction program has decreased the potential fire behavior and increased potential suppression effectiveness on 1,431 acres of City and private land since 2002. However, without regular maintenance these acres will revert back to pre-2002 conditions. The Forest Resource Specialist is a staff position dedicated to wildland fire prevention and fuels mitigation.

Structure Vulnerability

An important unknown factor is the flammability of homes. As explained above the wildfire risk is well quantified, but each individual home has its own hazard rating depending on the construction and the immediate 100 foot area, often called the “defensible space” zone, surrounding the home. There are 1,879 structures (2008) in the Ashland WUI zone, but it is unknown how many have adequate defensible space for effective fire protection. Looking at WUI wildfires in similar communities across the West, the prognosis for structure survival during a major wildfire in Ashland looks grim. Factors include high housing density, narrow and winding streets, a finite water supply (no water in many rural portions in the mutual aid area), commonly hot and dry days, steep topography, and highly flammable vegetation surrounding the community all spell out a potentially challenging and hazardous environment for firefighting with limited

chances for avoiding home loss. Outreach and education efforts continue by AF&R to encourage homeowner preparations, but the loss of the City's Code Compliance Officer (2008-2009) increases difficulty in code enforcement when hazardous situations are identified by AF&R. This decreases the effectiveness of suppression and home protection actions and increases the risk to firefighter's safety.

4. Technical Rescue Risk

In general, technical rescue is the application of special knowledge, skills and equipment to safely resolve unique and/or complex rescue situations.

For a wide variety of reasons, victims become stranded and/or injured in the areas in and around our city. Easy access to hiking and biking trails along with extremes in the geography create technical rescue situations each year.

Furthermore, vaults, tanks, tunnels and trenches spread throughout the City pose a risk to the employees who work in them and the citizens who might become trapped in them. Maintaining a rescue response is not only mandated by OSHA but is the prudent approach to these threats.

Rope Rescue

Rope rescue is defined as any rescue attempt that requires rope and related equipment to safely gain access to, and remove victims from, hazardous geographic areas with limited access such as slopes, cliffs, and buildings, above or below grade structures, by means of rope systems. Rope rescues are divided into two general categories, low/steep angle and high angle.



Toothpick Trail Rescue - 2002

Both of these categories exist in and around the City. Each year AF&R is called to treat and rescue injured victims from our watershed, park lands and frontier areas we serve. Many of these victims are located in remote regions accessible only by 4x4 vehicles, by foot, and in some cases helicopter. These calls for service range from litter carry outs to technical rescues involving multiple agencies and extended times to accomplish the mission.

Confined Space/Trench Rescue Risk

Confined spaces exist in the City in a variety of forms. Federal OSHA regulations define a confined space as a space that:

- Is large enough and so configured that an employee can bodily enter and perform assigned work; and
- Has limited or restricted means for entry or exit; and
- Is not designed for continuous employee occupancy.



Examples of confined spaces in Ashland include:

- Sewers and sewer facilities (throughout city and at the waste water treatment plant)
- Storm drains
- Electrical and communication vaults (serviced by Ashland Electric and AFN)
- Tanks (fixed and mobile)
- Manholes
- Trenches and excavations (City Streets, Water and Electric departments and private contractors)
- Tunnels (SOU)

Confined space rescue represents one of the most challenging and dangerous operations undertaken by fire departments in America today. Nearly 60% of all confined space deaths are would-be rescuers associated with secondary entries. This includes fellow employees, bystanders and untrained or poorly trained responders.

SECTION THREE: CRITICAL TASK ANALYSIS OF AF&R

In order to provide life safety and emergency mitigation efforts in an effective manner it is imperative that firefighters respond to emergencies in a timely manner and with enough trained firefighters to safely mitigate the emergency. Critical tasks are those duties that must be conducted by firefighters in order to safely control emergency incidents.

In order to effectively determine AF&R's ability to ensure effective service delivery while maintaining a safe working environment the department must conduct a critical task analysis. The critical task analysis is the process of matching AF&R's resource deployment to each type of risk. A critical task analysis identifies the necessary staffing level required to safely perform each task and successfully mitigate each risk. A critical task analysis was conducted for the following risk types:

- **Structure Fires**
- **Emergency Medical Calls**
- **Wildland Fires**
- **Technical Rescues**



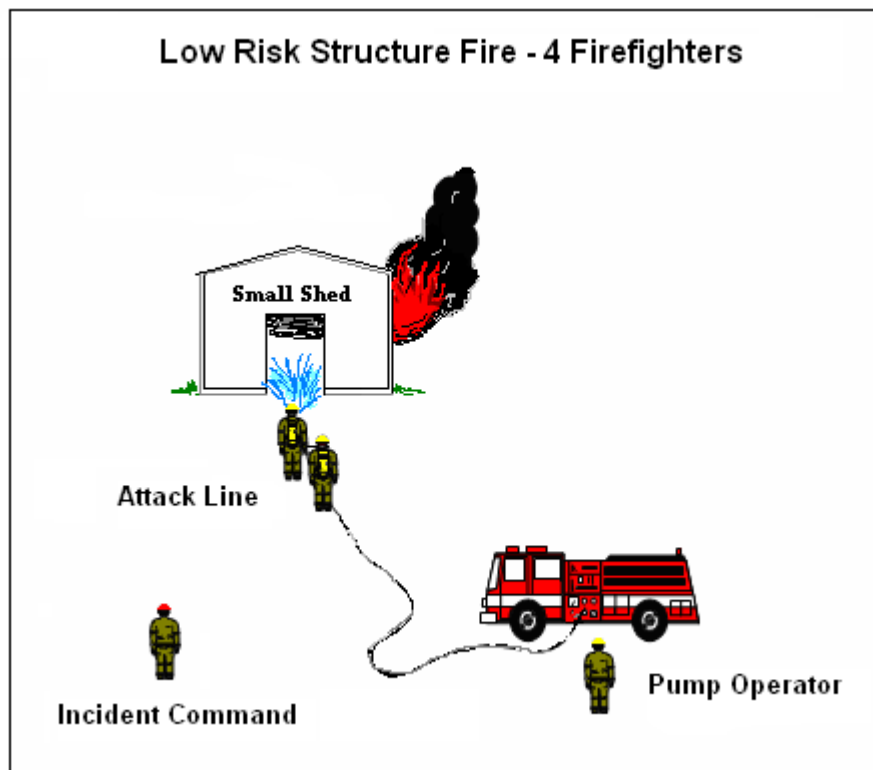
A. Structure Fires

Low Risk Fires

The following table provides a task analysis for Low Risk structure fires and/or incidents like rubbish fires, small grass fires, vehicle fires and incidents that involve a light fire load. The example also takes into consideration that the potential for injury or loss of life is non-existent and that the potential for exposure issues related to adjacent properties is non-existent.

CRITICAL TASK	PERSONNEL
Command / Safety	1
Pump Operator	1
Attack Line	2
Total Number of Firefighters	4

Low risk fires are normally handled by one fire unit and 4 firefighters as demonstrated in the following diagram:

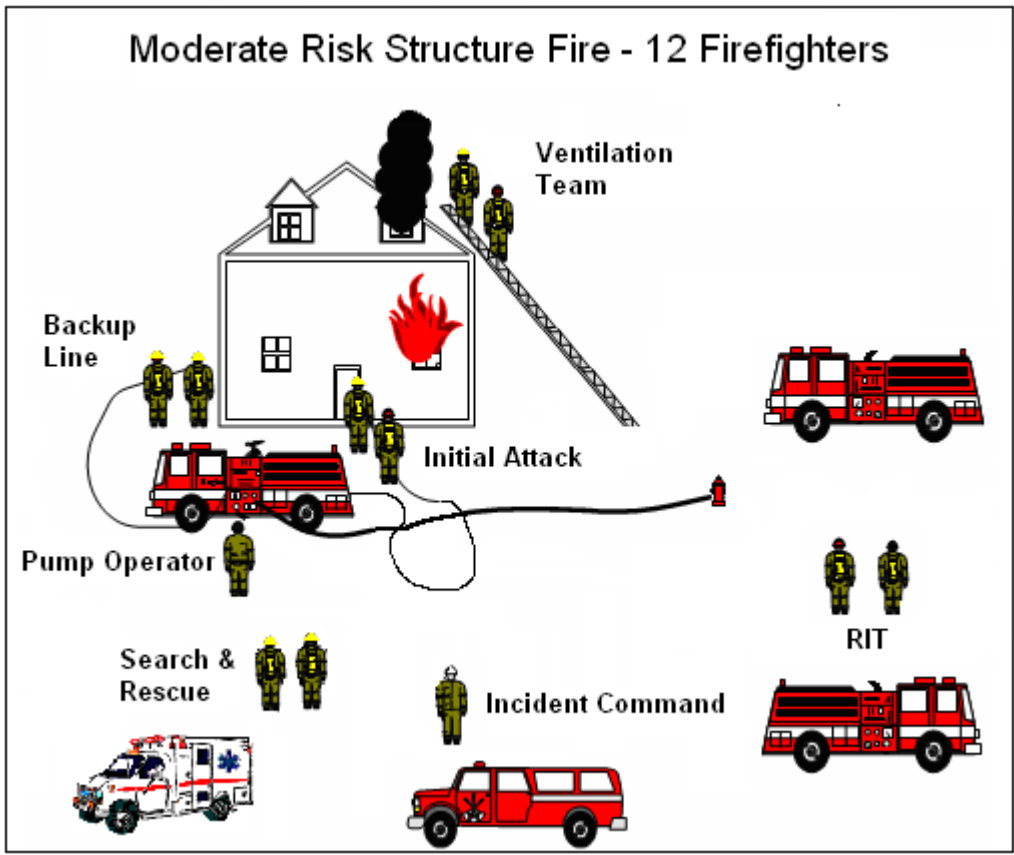


Moderate Risk Fires

The following table and diagram represent the critical task assignments and personnel requirements for an initial alarm assignment at a “Moderate Risk” structure fire.

CRITICAL TASK	PERSONNEL
Command / Safety	1
Pump Operator	1
Attack Line	2
Back-up Line *	2
Support / Search and Rescue	2
Ventilation	2
RIT **	2
Total Number of Firefighters	12

- * **Back-up Line is required to meet OSHA’s 2-IN / 2-OUT Policy.**
- ** **Rapid Intervention Team (RIT).** A dedicated crew of firefighters who are assigned for rapid deployment to rescue lost or trapped members.



- ❖ **NFPA recommends a minimum of 14 firefighters for initial response on these types of fires**
- ❖ **Currently, at minimum staffing, AF&R is able to deploy 7 firefighters, plus an additional 2 firefighters from Jackson County Fire Dist. #5 for a total of 9 firefighters. Therefore, fire attack and rescue often cannot be conducted simultaneously.**
- ❖ **After July 2009, we will be able to deploy 6 firefighters, plus 2 additional firefighters from Jackson County Fire Dist. #5 for a total of 8 firefighters.**
- ❖ **AF&R must at times operate in split or less than ideal modes on the fire ground until sufficient staffing is on scene.**
- ❖ **Equipment and personnel responding may be reduced because of multiple emergencies or extenuating circumstances.**

Significant and Maximum Risk Fires

Fire departments should maintain the capability to provide additional alarm assignments when situations are beyond the capacity of the initial first alarm assignment. The National Fire Protection Agency (NFPA) standard recommends when an incident escalates beyond an initial full alarm assignment, or when a significant risk is presented, the Incident Commander (IC) upgrade the number of resources at the incident scene to provide for the increase of the Rapid Intervention Team (RIT) from a partial crew of 2 firefighters to a full Rapid Intervention Crew of 4 firefighters. NFPA further recommends that the IC also deploy a safety officer.

CRITICAL TASK	PERSONNEL
Command / Safety	4
Pump Operators	2
Attack Lines	4
Back-up Lines	4
Search and Rescue	4
Ventilation	4
RIT	4
Total Number of Firefighters	26

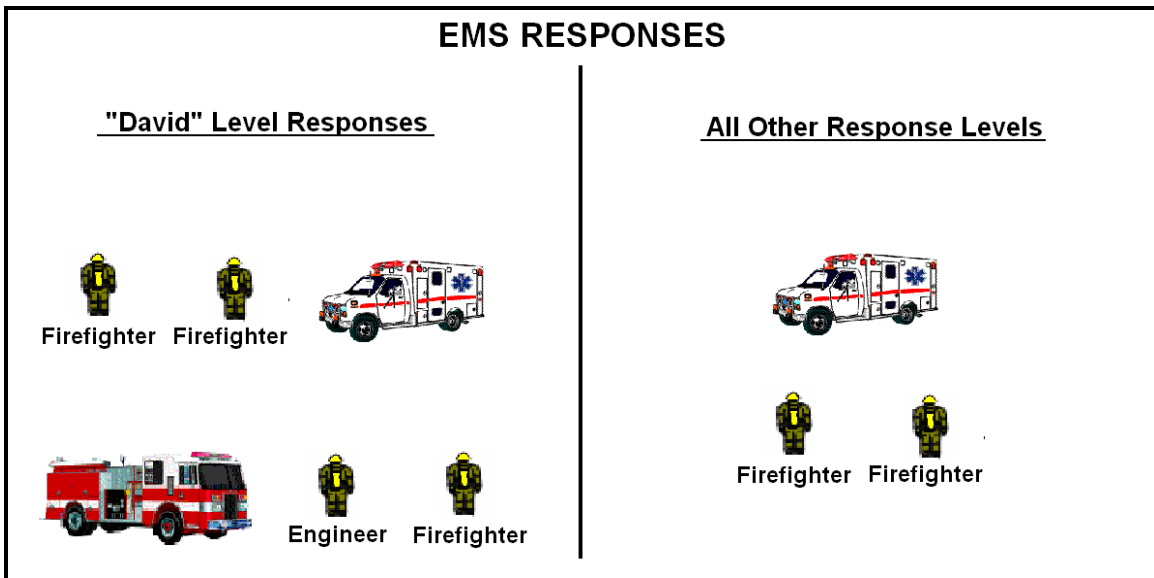
- ❖ **Equipment and personnel responding may be reduced because of multiple emergencies or extenuating circumstances.**

B. Emergency Medical Services

Routine, Single Patient EMS Incident

AF&R has determined that 2 Firefighter/Paramedics are able to provide the necessary EMS care for the majority of EMS Responses. In those cases where a significant life threatening emergency has been identified by the dispatch center, 2 more personnel are dispatched to the scene to assist with the additional critical tasks that these kinds of calls generate. These calls are coded a “David” response.

The following illustration shows the resources needed at most medical emergencies.



- ❖ **Equipment and personnel responding may be reduced because of multiple emergencies or extenuating circumstances.**
- ❖ **Motor vehicle accidents and airplane incidents both start at the “David” level response on first alarms.**

“David” responses can be defined as those types of medical emergencies which are immediately life threatening and will require more than 2 personnel to help mitigate the crisis.

Mass Casualty Incident



To provide the resources needed to handle the needs during a mass casualty incident that goes beyond the capability of local resources, Jackson County has implemented the Ambulance Resource Management System (A.R.M.S.). The A.R.M.S. allows one strategic dispatch to utilize all ambulance resources available to respond to emergencies.

C. Wildland Fires

During peak fire season AF&R units respond to multiple wildland incidents both inside and outside of the primary boundaries of our response area. AF&R's primary responsibility is protection of life including evacuation of residents from the fire area. Secondary to life, property protection is prioritized, meaning that the advance of the fire may continue until protection of both life and property are addressed. Mutual aid from Jackson County District #5, Oregon Department of Forestry (ODF), and the U.S. Forest Service is absolutely critical to address potentially overwhelming demands for protection of life and property, and to suppress the wildfire itself if AF&R units are fulfilling primary goals first.

Small Wildland Fire



Two acre fire in Lithia Park

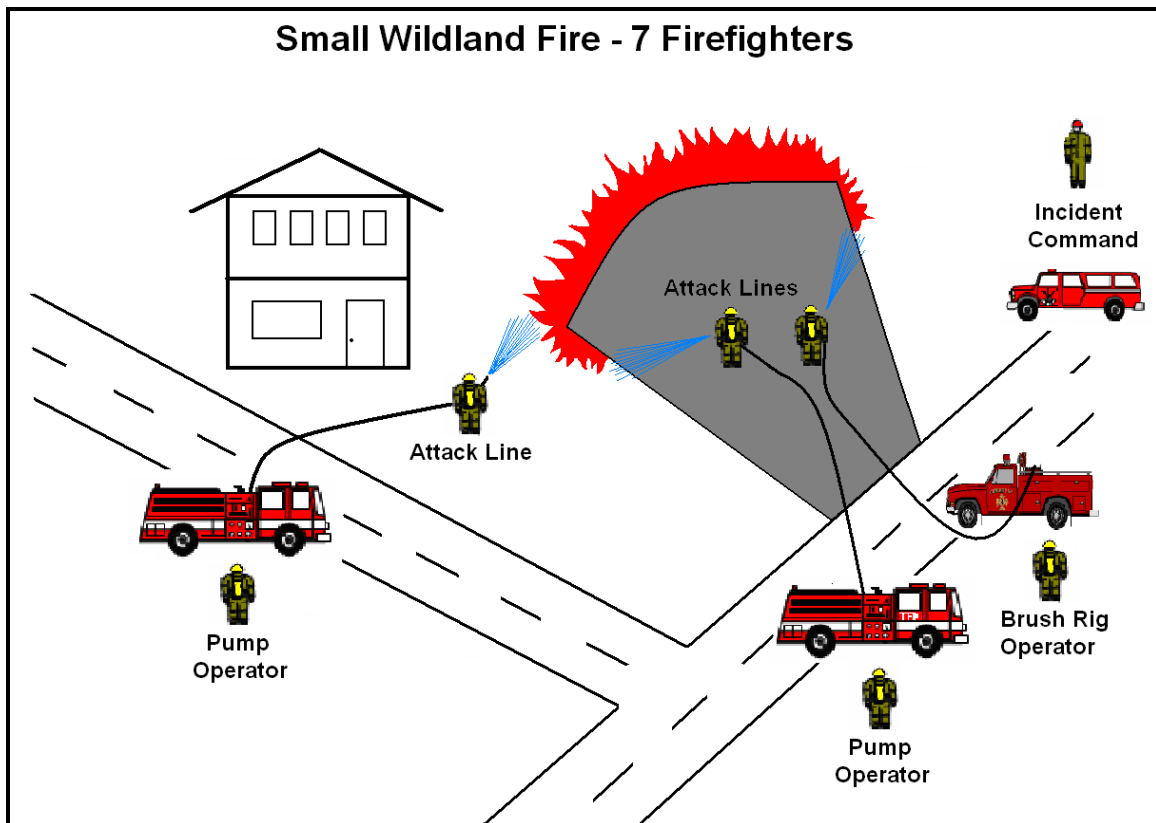
Because wildland fires could have such a disastrous effect upon the City, AF&R has placed a significant interest in extinguishing any small brush/grass fires as quickly as possible. Initial alarm assignments have all available personnel responding to the scene. The fire pictured above occurred in Lithia Park in late July. The mitigating factors that stopped the fire from spreading to upslope homes and toward the watershed were a rapid response from fire crews and the fuels reduction program, which had eliminated ladder fuels from the area.

The following chart shows the initial alarm assignment for any wildland fire that occurs within the City.

Small Wildland Fires (less than one acre)

CRITICAL TASK	PERSONNEL
Command/Safety	1
Pump Operators	2
Attack Lines	3
Brush Rig Operator	1
TOTAL	7

- ❖ At minimum staffing, the above numbers do not leave any personnel available to staff an ambulance
- ❖ During the fire season AF&R will also receive assistance from ODF and the U.S. Forest Service, including helicopter and fixed wing aerial resources.
- ❖ Equipment and personnel responding may be reduced because of multiple emergencies or extenuating circumstances.



Large Wildland Fire

When wildland fires escalate beyond a first alarm assignment, additional resources must be requested through additional alarms. Additionally, Strike Teams and Task Forces may be requested from Jackson and Josephine Counties. Further escalation of the incident or the potential for serious impacts to the community can necessitate declaration of a conflagration in order to mobilize State-wide resources. Typical critical tasks required during a large wildland fire are listed below:

- ❖ Establish a Unified Incident Command Structure
- ❖ Provide an Incident Safety Officer

- ❖ Evacuate residents as needed
- ❖ Delegate Division and Group Supervisor responsibility
- ❖ Request and direct fire control activities using air tankers and helicopters
- ❖ Fire control/structure protection with engines
- ❖ Fire control with dozers
- ❖ Fire control with hand crews
- ❖ Provide mobile water supply
- ❖ Tactical planning including structure triage and GIS mapping

D. Technical Rescue

The following graph indicates the minimum number and type of responders needed to perform a Technical Rescue. At this time, because of the elimination of the training funds for Technical Rescue, there is no actual “Team”. As it stands, there are several individuals on each shift who have a basic understanding of various rescue disciplines. In cases where we need additional expertise or services, AF&R might be able to utilize outside organizations for assistance with a significant delay.

Incident type	Technical Rescue Trained Firefighters	Firefighters	Total
Reach and Treat Medical	1	3	4
Low Angle	1	6	7
High Angle	9	6	15
Confined Space (no rigging)	6	4	10
Confined Space (with rigging)	9	6	15

SECTION FOUR: ESTABLISHING OBJECTIVES

This section discusses the basis for fire department response objectives. Fire department response objectives are typically based on:

1. The dynamics of fire growth.
2. The events involved in a life threatening emergency medical incident.

These two types of emergency responses have extensive scientific information available thus making them quantifiable. This section provides the definitions of

response times, a discussion on each of the above items, and the associated department goals.

A. The Elements of Response Time

Response times are a critical component in the control and mitigation of an emergency incident. Understanding the standardized elements of response time is important in order for a fire department to measure its response effectiveness.

The National Fire Protection Association definitions concerning fire responses are as follows:

Dispatch Time - The point of receipt of the emergency alarm at the public safety answering point to the point where sufficient information is known to the dispatcher and applicable units are notified of the emergency.

Turnout Time – The time beginning when units acknowledge notification of the emergency to the beginning point of response time.

Response Time – The travel time that begins when units are en route to the emergency incident and ends when units arrive on scene.

Jackson County Ambulance Service Plan defines ambulance response times as follows:

Notification Time - The length of time between the initial receipt of the request for EMS by either a provider or an emergency dispatch center (911) and the notification of the ASA provider.

Response Time - The length of time between the notification of each provider and the arrival of each provider's emergency medical service unit(s) at the incident scene or at the end of an ambulance access point.

On-Scene Time - The point at which the responding unit arrives on the scene of the emergency.

System Response Time - The elapsed time from when the Public Safety Answering Point receives the call until the arrival of the appropriate provider unit(s) on scene.

B. Dynamics of Fire Growth and Flashover

In order for firefighters to provide the most effective service, and to significantly reduce the risk of life and property loss, they must arrive at a structure fire in a short period of time with adequate resources. Matching the arrival of resources with a specific point in the fire's growth is one of the greatest challenges for a fire department. Finding the specific point in a fire's growth can be accomplished by identifying the stages of a fire.

Stages of a Fire

Regardless of the speed of growth, or length of burn time, all fires inside a compartment or building go through the same stages. A fire in a compartment begins with the "Ignition" stage and when left unaddressed will develop through the Growth, Flashover, Fully Developed, and Decay stages. One particular stage emerges as being very significant because it marks a critical change in conditions. This phase is called the "Flashover" phase.

The following provides a brief overview of the stages of fire within a compartment:

Ignition Stage – Ignition describes the period when a heat source is applied to a combustible fuel package, in the presence of oxygen, and a continuous chemical chain reaction known as combustion begins. At this point the fire is small and generally confined to the material (fuel) first ignited.

Growth Stage – During this stage, the combustion process continues to release increased levels of heat while nearby objects reach their ignition temperature, and begin to burn. Superheated gases rise to the ceiling, spread outward and begin to bank down the walls of the enclosure consuming all available oxygen in the room and raising the heat levels to reach the next stage.

Flashover Stage – Flashover is the transition between the growth and the fully developed fire stages. During flashover, the conditions in the compartment change very rapidly, and the fire changes from one that is dominated by the burning material first ignited, to one that involves all of the exposed combustible surfaces within the compartment.

Fully Developed Stage – The fully developed fire stage occurs when all combustible materials in a compartment are involved in fire. During this period of time, the burning fuels in the compartment are releasing the maximum amount of heat possible for the available materials, and producing large volumes of fire gasses. A fire at this stage requires significantly more resources (water, hoses, and personnel) to control, due to the massive amount of heat energy involved. Also, during this stage, hot unburned fire gasses are likely to begin flowing from the compartment of origin into adjacent spaces or compartments. These gasses

ignite as they enter a space where air is more abundant, causing the fire to spread further.

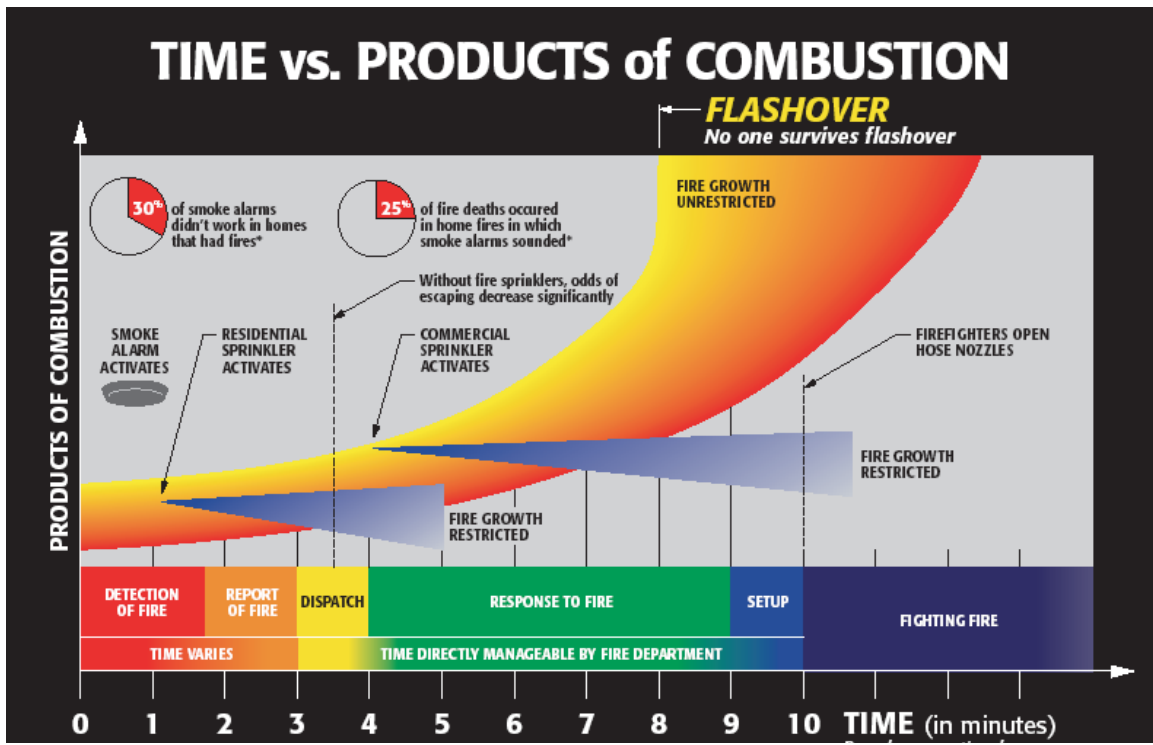


Decay Stage – During this stage, the fire diminishes and temperatures begin to decline because the fire has already consumed the available fuels in the compartment.

Flashover

“Flashover” is a critical stage of fire growth for various reasons. The predominate reasons that this phenomenon is so critical is that no living thing can survive in the flashover room, and that it creates a rapid increase in the rate of combustion which requires a greater amount of water to reduce the burning material below their ignition temperature. After flashover has occurred the fire burns much hotter and spreads at a much more significant pace. Once flashover has occurred search and rescue efforts become more difficult in the remainder of the building. Also, the occurrence of flashover causes an increased need for fire suppression personnel to mitigate the incident in a timely manner.

The following graph represents the stages of fire growth. This graph also identifies the time elements involved in flashover such as the detection and reporting of the fire, dispatch processing time, and the fire department’s response time.



The following table compares pre and post flashover conditions:

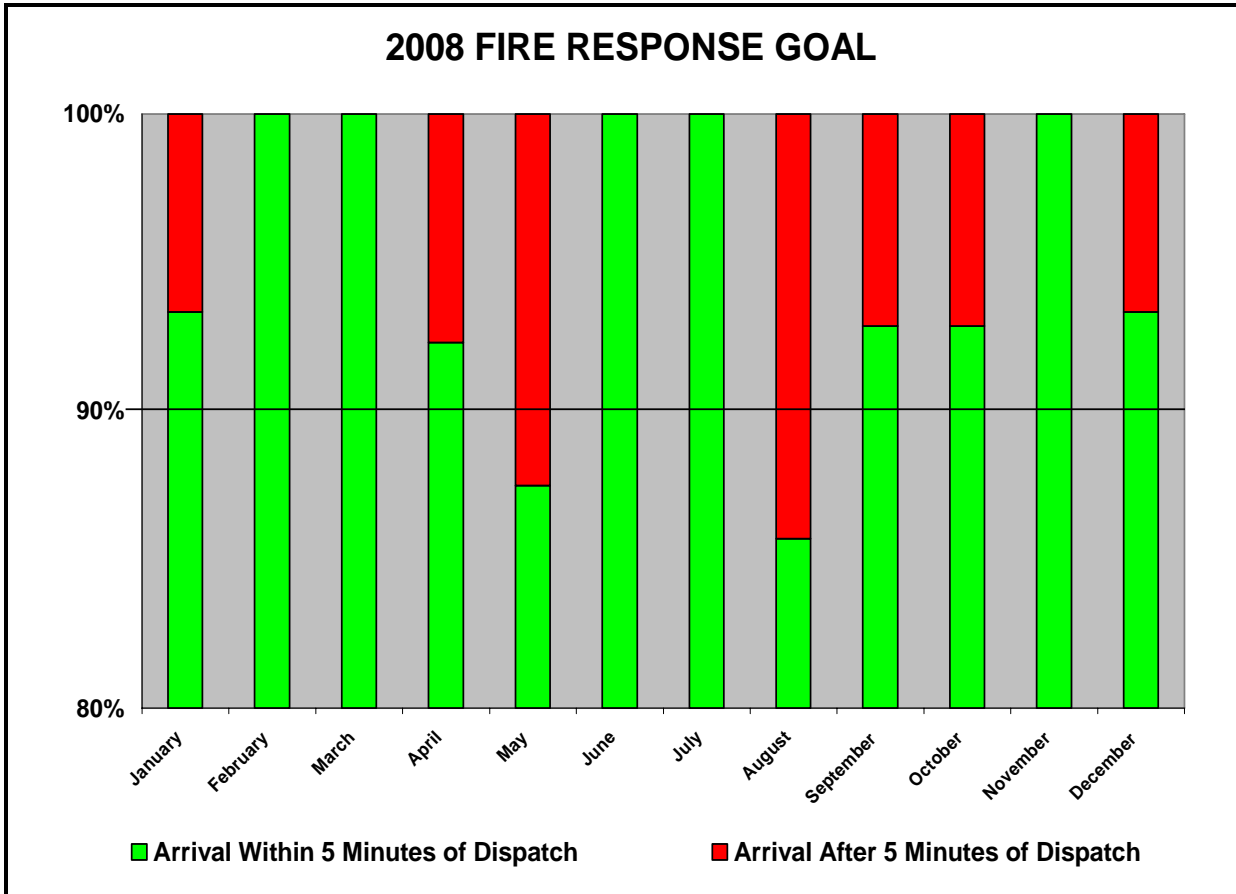
Before Flashover	After Flashover
Limited to one room	May spread beyond one room
Requires smaller attack lines	Requires more, and larger attack lines
Search and Rescue is easier/safer	Compounds Search and Rescue
Initial assignment can handle	Requires additional companies

Staffing and equipment needs can be reasonably predicted for different risk levels and fire stages. The correlation of staffing and equipment needs with fires according to their stage of growth is the basis for response coverage. The goal is to maintain and strategically locate enough firefighters and equipment so a minimum acceptable response force can reach a reasonable number of fire scenes before flashover occurs.

To minimize risk, the department strives to extinguish small fires quickly before they reach flashover potential to minimize risk. As flashover is such a significant fire event, preventing this stage of fire behavior is imperative. Time is a key factor in this effort. Once flashover potential is reached, an exponential increase occurs not only in the rate of combustion, but in the amount of resources necessary to mitigate the fire emergency. For these reasons Ashland Fire & Rescue has established the following goal:

Goal #1

AF&R will respond to 90% of all fire suppression calls inside the City of Ashland with a response time of 5 minutes or less. * AF&R will use the NFPA established measuring criteria concerning emergency fire response times.



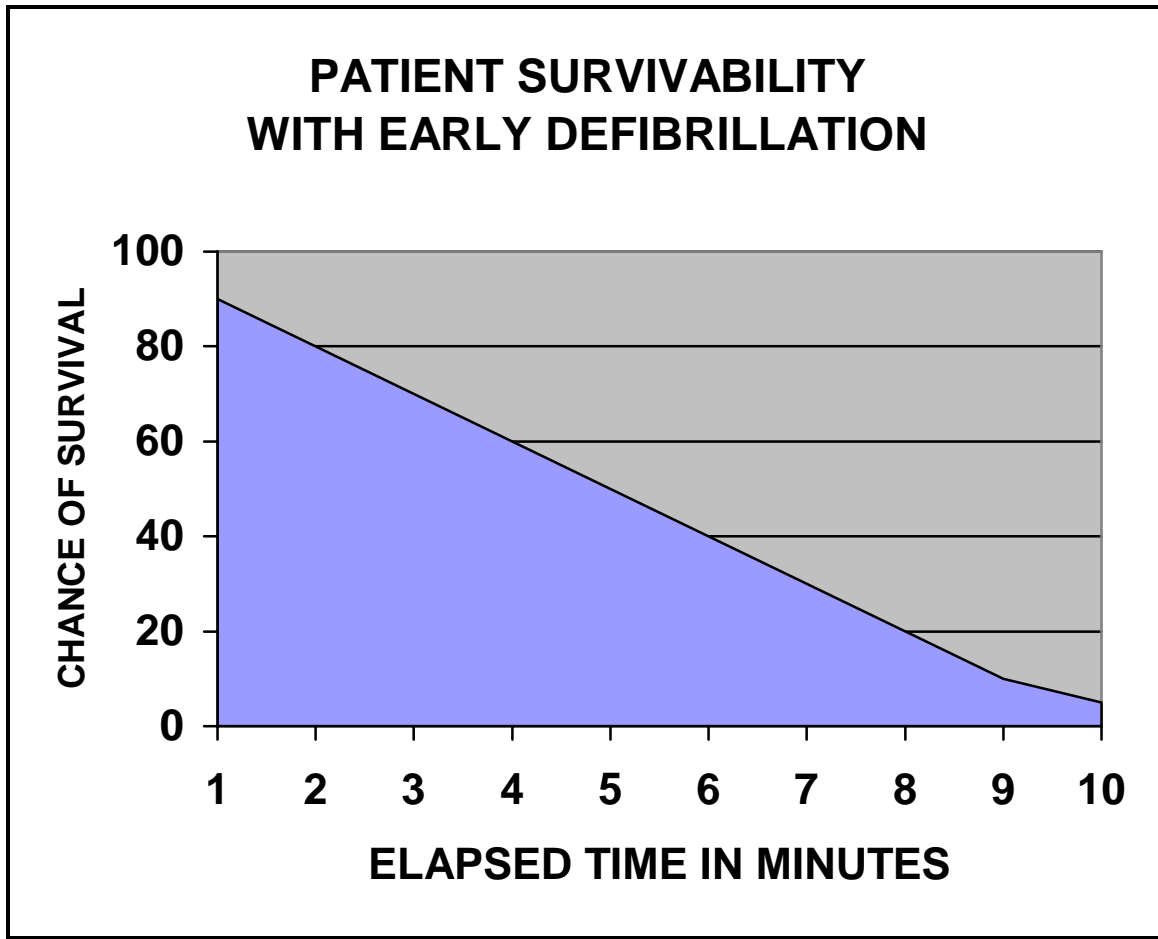
- ❖ Fire suppression calls include: Structure Fires, Wildland Fires, Vehicle Fires, and Fire Alarm Sounding calls.

C. Emergency Medical Services Benchmarks and Expectations

Life Threatening Medical Emergencies – Basis for Response Objectives

Using life threatening medical emergencies as a basis for setting EMS response time performance objectives has become a fire and EMS industry norm. The American Heart Association has shown that the likelihood of a patient surviving a

life threatening medical emergency is improved if CPR and defibrillation are initiated within 4 minutes of the onset of the medical emergency.



From an emergency medical perspective, the service-level objective typically is to provide medical intervention within a six-minute timeframe, as brain damage is very likely at six minutes without oxygen. However, in a cardiac arrest situation, survivability dramatically decreased beyond four minutes without appropriate intervention. Intervention includes early recognition and bystander CPR.

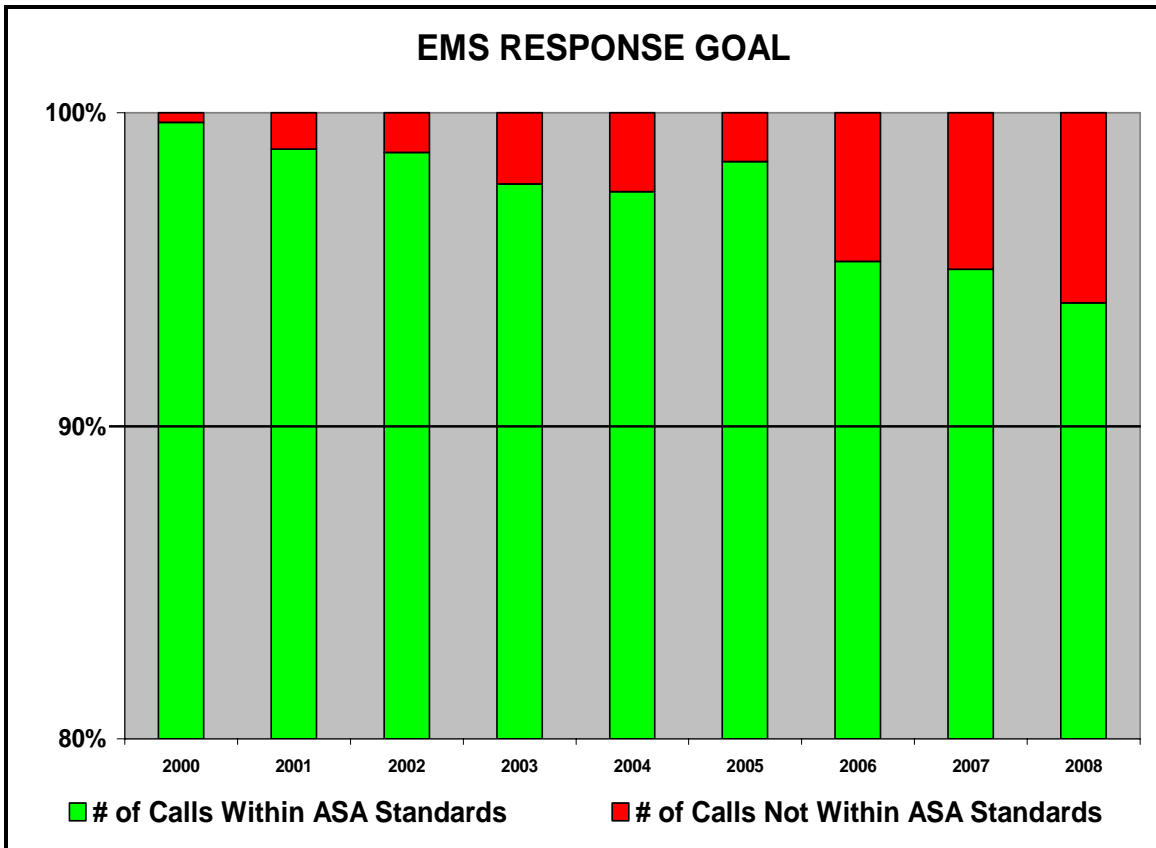
Early defibrillation is often called the critical link in the chain of survival because it is the only way to successfully treat most sudden cardiac arrests. When cardiac arrest occurs, the heart starts to beat chaotically (fibrillation) and cannot pump blood efficiently. Time is critical. If a normal heart rhythm is not restored in minutes, the person will die. In fact, for every minute without defibrillation, the odds of survival drop seven to ten percent. A sudden cardiac arrest victim who is not defibrillated within eight to ten minutes has virtually no chance of survival. The shortest possible response times create the highest probabilities of

resuscitation. For these reasons Ashland Fire & Rescue has established the following goal:

Goal #2

AF&R will provide emergency medical services to 90% of patients within ASA time standards.

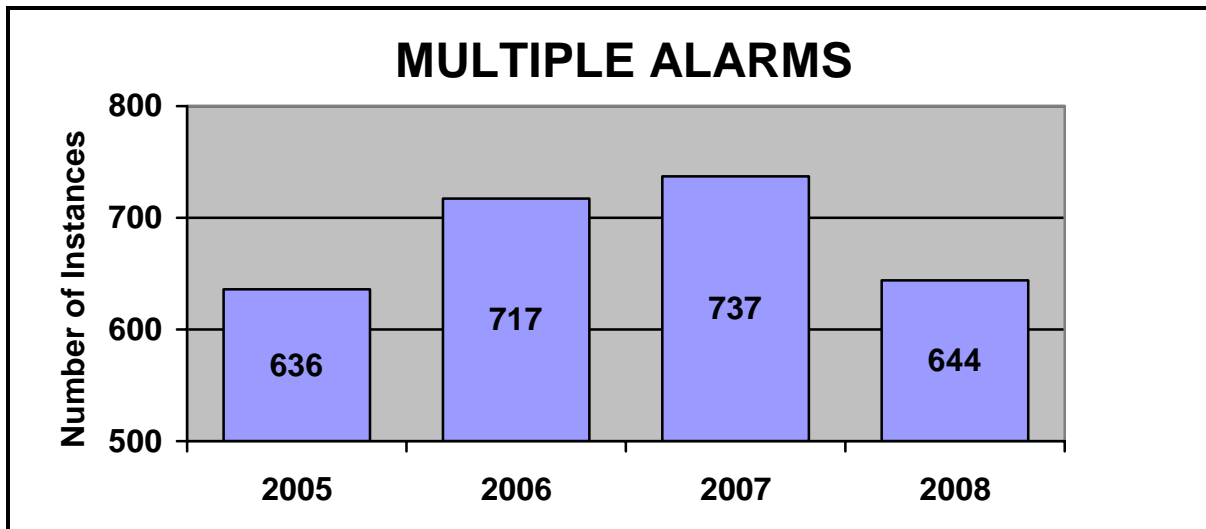
ZONE	STANDARD
Urban	8 minutes
Suburban	15 minutes
Rural	45 minutes
Frontier	2 Hours



SECTION FIVE: RESPONSE RELIABILITY

Response reliability addresses the probability that the required amount of staffing and apparatus will be available when a fire or other emergency call is received. If

every piece of apparatus in each station were available every time a fire call was received, the response reliability for each station would be 100%. As the number of calls per day increases, and line staffing decreases, the likelihood that a needed piece of equipment and/or personnel will already be busy with an existing incident will increase. For example, in January of this year there were 27 times when two overlapping emergency responses occurred, 8 times when three overlapping emergency responses occurred and 3 times when four overlapping emergency responses occurred. Consequently, during these times, AF&R's response reliability decreases. The following chart shows the number of times there have been multiple alarms occurring at the same time:



While AF&R utilizes mutual aid agreements to receive equipment and manpower from neighboring departments, response times will be longer than those recommended by NFPA and ASA standards. The following steps have been taken to help with low staffing levels and multiple alarms:

- 1) All firefighting personnel have been issued a pager and are encouraged to return to duty when a "call-back" for personnel is initiated.
- 2) An Automatic and Mutual Aid Agreement is maintained with all fire and ambulance agencies in Jackson and Josephine Counties.
- 3) Automatic Aid is pre-programmed through six alarm assignments, providing a systematic method to bring additional resources to the incident as needed.
- 4) AF&R maintains Automatic and Mutual Aid Agreements with the Oregon Department of Forestry and the United States Forest Service for grass, brush and forest fires.

SECTION SIX: CONCLUSION

NFPA 1710, Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Career Fire Departments describes what an optimal fire department emergency response would be, to safely and efficiently handle different types of emergencies. Although AF&R is unable to meet these standards at this time, AF&R will continue to use NFPA 1710 standard as a goal for improvement in the future. AF&R will continue its efforts to meet the community's needs for fire protection, emergency medical services, response to hazardous conditions, community emergency preparedness, plans review, interface fuel reduction and planning with the available resources.



**JACKSON
COUNTY**
Oregon



2018
ANNUAL AMBULANCE SERVICE
REPORT

“Efficient and Effective Service”

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EXECUTIVE SUMMARY

Jackson County's Ambulance Service Plan requires each transporting agency to meet stringent response times, provide paramedic level of care to every emergency medical call, and adhere to extensive training and equipment requirements. With the exception noted in the paragraph below, all three ambulance agencies in Jackson County met or exceeded these requirements in 2018. Together, Rogue River Fire District, Mercy Flights, and Ashland Fire & Rescue can put 32 ambulances and 140 patient care staff into the system of emergency medical response and transport.

Ambulance providers are required to meet response times for 90% of emergency medical responses. With one exception, response times were met by all agencies for at least 90% of responses. The exception was in the Frontier Response Zone for Rogue River Fire District. They only received two calls in the Frontier Zone and were forced to stage an ambulance to wait for law enforcement during one of the responses, which resulted in meeting the response time for 50% of their Frontier calls.

There were a total of 29,803 medical runs in 2018, resulting in 20,928 transports (70% of runs resulting in transports). The remaining calls were either canceled or determined that ambulance transportation to a hospital was not required upon assessment at the scene. Combined, providers conducted about 82 runs per day and transported an average of 57 patients per day.

Historically, medical runs and transports generally increase each year. However, the countywide total of both medical runs and transports decreased from 2017 to 2018. Runs decreased by about 5% from 2017 to 2018, while transports decreased by about 4% during the same time period. While the reason for the decrease is not definitively known, ambulance providers believe it may be largely due to the excessive wildfire smoke that caused people to stay indoors for much of the summer.

Jackson County ambulance service agencies and the EMS community continue to serve the citizens of our community well.

INTRODUCTION

Oregon counties are required by Oregon Revised Statute (ORS) 682.062 to develop a plan for ambulance services. The plans serve to provide a coordinated framework and response system for ambulance services within each county. Jackson County’s Ambulance Service Plan has been adopted by County ordinance in Chapter 1075. The Plan meets the requirements of Oregon Administrative Rule (OAR) 333 Division 260 County Ambulance Service Area Plans, which delineates the obligations of county Ambulance Service Plans. As such, the Plan addresses essential components including assigned ambulance service areas, response times, coordination, medical supervision, and quality assurance, among other matters. A primary mission of Jackson County’s Plan is to ensure efficient and effective provision of ambulance services in Jackson County. It can be found online at <http://jacksoncountyor.org/>.

Jackson County has three ambulance service providers: Rogue River Fire District, Mercy Flights, and Ashland Fire & Rescue. Each provider is assigned to a specific ambulance service area (ASA) according to the County Ambulance Service Plan. By March 1 of every year, each provider is required to submit updated information to the Jackson County Health and Human Services Director. This information includes copies of current vehicle licenses, rates, a financial statement, certification of insurance, a mechanic’s inspection report, personnel certifications, and other documents deemed necessary by the Director. Jackson County Health and Human Services uses this information to create the Annual Ambulance Service Report. This report summarizes information and activities that occurred in the 2018 calendar year. A draft of this report is submitted to the Jackson County Emergency Medical Services (EMS) Committee for review and comment prior to finalizing. A copy of this report can be obtained by contacting Jackson County Environmental Public Health at (541) 774-8206.

AMBULANCE SERVICE AREAS AND PROVIDERS

Jackson County has three distinct ambulance service areas pursuant to the Jackson County Ambulance Service Plan. Mercy Flights has the largest ASA in terms of geographic area and population, followed by Ashland Fire & Rescue, then Rogue River Fire District. Table 1 describes the service area of each provider, while a map of the ASAs can be found in Attachment 1.

Table 1: Ambulance Service Areas and Providers

AMBULANCE SERVICE AREA	GEOGRAPHIC AREA	PROVIDER
ASA I	NW Jackson County (Rogue River)	Rogue River Fire District
ASA II	Central, NE, and SW Jackson County	Mercy Flights
ASA III	SE Jackson County (Talent/Ashland)	Ashland Fire & Rescue

STAFFING

Emergency medical service providers have five levels of certification: Paramedic, Emergency Medical Technician-Intermediate (EMT-I), Advanced Emergency Medical Technician (AEMT), and Emergency Medical Technician (EMT), Emergency Medical Responder (EMR), with Paramedic representing the highest level of training within the classification. In addition, registered nurses (RNs) are part of the EMS system when their practice includes

the pre-hospital ambulance setting. It is important to note that the Jackson County Ambulance Service Plan requires Paramedic level of care for all emergency ambulance responses. Total transport agency staffing levels in Jackson County slightly increased from 132 staff in 2017 to 140 in 2018. Table 2 depicts the staffing by agency.

Table 2: Agency Staffing Summary

ROGUE RIVER FIRE DISTRICT (ASA I)				
Certification	Full-time	Part-time	Volunteer	Total
Paramedic	11	0	2	13
EMT-Intermediate	0	0	0	0
Advanced EMT	1	0	1	2
EMT	1	0	4	5
EMR	0	0	0	0
RN	0	0	1	1
Total	13	0	8	21
MERCY FLIGHTS (ASA II)*				
Certification	Full-time	Part-time**	Volunteer	Total
Paramedic	43	6	0	49
EMT-Intermediate	0	0	0	0
Advanced EMT	0	0	0	0
EMT	26	4	0	30
EMR	0	0	0	0
RN	4	4	0	8
Total	73	14	0	87
ASHLAND FIRE & RESCUE (ASA III)				
Certification	Full-time	Part-time	Volunteer	Total
Paramedic	32	0	0	32
EMT-Intermediate	0	0	0	0
Advanced EMT	0	0	0	0
EMT	0	0	0	0
EMR	0	0	0	0
RN	0	0	0	0
Total	32	0	0	32

*Mercy Flights also provides air ambulance services. **Includes part-time and casual work classifications.

VEHICLES

By ordinance, ground ambulances in Jackson County are required to meet all State licensing requirements as prescribed in OAR 333 Division 255 Ambulance Licensing. All ambulances in Jackson County meet Advanced Life Support (ALS) level care, as opposed to only basic (BLS) or intermediate levels (ILS) of care requirements.

Ambulances must also meet federal construction specifications. The “Type” of ambulance refers to the federal standards that designate ambulances as Type I, II, or III. Generally, Type I ambulances are based on a truck cab-chassis; Type II are a standard van chassis; and Type III are cutaway van cab-chassis.

The Jackson County transport agencies license 32 ALS ambulances (Table 3). In addition, EMS response agencies (fire departments) have rescue vehicles and fire engines to arrive on scene with EMS providers to initiate care.

Table 3: Provider Ambulances

ROGUE RIVER FIRE DISTRICT (ASA I)				
Type	License / Unit #	Year	Mileage	Level
III	E260058 / 7431	2013	151,895	ALS
III	E268522 / 7433	2016	35,038	ALS
III	E274725 / 7432	2018	28,213	ALS
MERCY FLIGHTS (ASA II)				
Type	License / Unit #	Year	Mileage	Level
III	CN03125 / 148	2009	165,779	ALS
III	CN03126 / 149	2009	197,968	ALS
III	CN03139 / 150	2009	189,873	ALS
III	CN03165 / 151	2009	180,129	ALS
III	CN03552 / 152	2010	121,990	ALS
III	CN03553 / 153	2010	110,026	ALS
III	CN03652 / 154	2012	97,047	ALS
III	CN03651 / 155	2012	97,486	ALS
II	622GHV / 156	2013	130,759	ALS
II	759GHV / 157	2013	116,079	ALS
II	621GHV / 158	2013	135,337	ALS
II	728GKM / 159	2013	120,824	ALS
II	727GKM / 160	2013	128,889	ALS
II	669GWG / 161	2014	121,417	ALS
II	668GWG / 162	2014	101,726	ALS
II	667GWG / 163	2014	118,936	ALS
II	696HQQ / 164	2015	69,818	ALS
II	696HQQ / 165	2015	69,603	ALS
II	330JJW / 166	2016	58,775	ALS
II	001JJW / 167	2016	64,163	ALS
II	002JJW / 168	2016	54,040	ALS
II	219KCE / 169	2017	31,431	ALS
II	215KCE / 170	2017	30,211	ALS
II	220KCE / 171	2017	29,483	ALS
ASHLAND FIRE & RESCUE (ASA III)				
Type	License / Unit #	Year	Mileage	Level
I	E233465	2006	129,689	ALS
I	E244368	2008	104,395	ALS
I	E244394	2011	160,644	ALS

I	E263890	2015	77,7674	ALS
I	E271500	2018	621	ALS

STAGING LOCATIONS

Transport agencies strategically position their ambulances in order to achieve the quickest response times and greatest good for their ASA (Table 4). Providers with relatively small area and population may not have the need to stage in multiple locations (e.g., Rogue River Fire District), while Mercy Flights stages ambulances in various locations due to the significant geographic area and population density mix of their ASA.

Table 4: Ambulance Staging Locations

ROGUE RIVER FIRE DISTRICT (ASA I)	
Station	Location
Rogue River Fire District	5474 North River Road, Gold Hill
MERCY FLIGHTS (ASA II)	
Station	Location
HQ Station	2030 Milligan Way, Medford
South Station	828 S Central Ave, Medford
Providence Station	1111 Crater Lake Ave, Medford
RRMC Post	Rogue Regional Medical Center
Pech Station	401 Pech Rd, Central Point
Post Location	Hwy 62 & Vilas Rd, Medford
Post Location	11655 Hwy 62, Eagle Point
Post Location	West Main & Lozier, Medford
Post Location	N Pacific Hwy & Table Rock Rd, Medford
Post Location	Barnett Rd & Riverside Ave, Medford
ASHLAND FIRE & RESCUE (ASA III)	
Station	Location
Station 1	455 Siskiyou Boulevard, Ashland
Station 2	1860 Ashland Street, Ashland

NOTIFICATION AND RESPONSE TIMES

The Ambulance Service Plan requires specific notification and response times. “Notification time” is defined as the length of time between the initial receipt of the request for emergency medical service by either a provider or an emergency dispatch center ("911"), and the notification of the ASA provider. “Response time” means the length of time between the notification of each provider and the arrival of each provider's emergency medical service unit(s) at the incident scene or at the end of an ambulance access point.

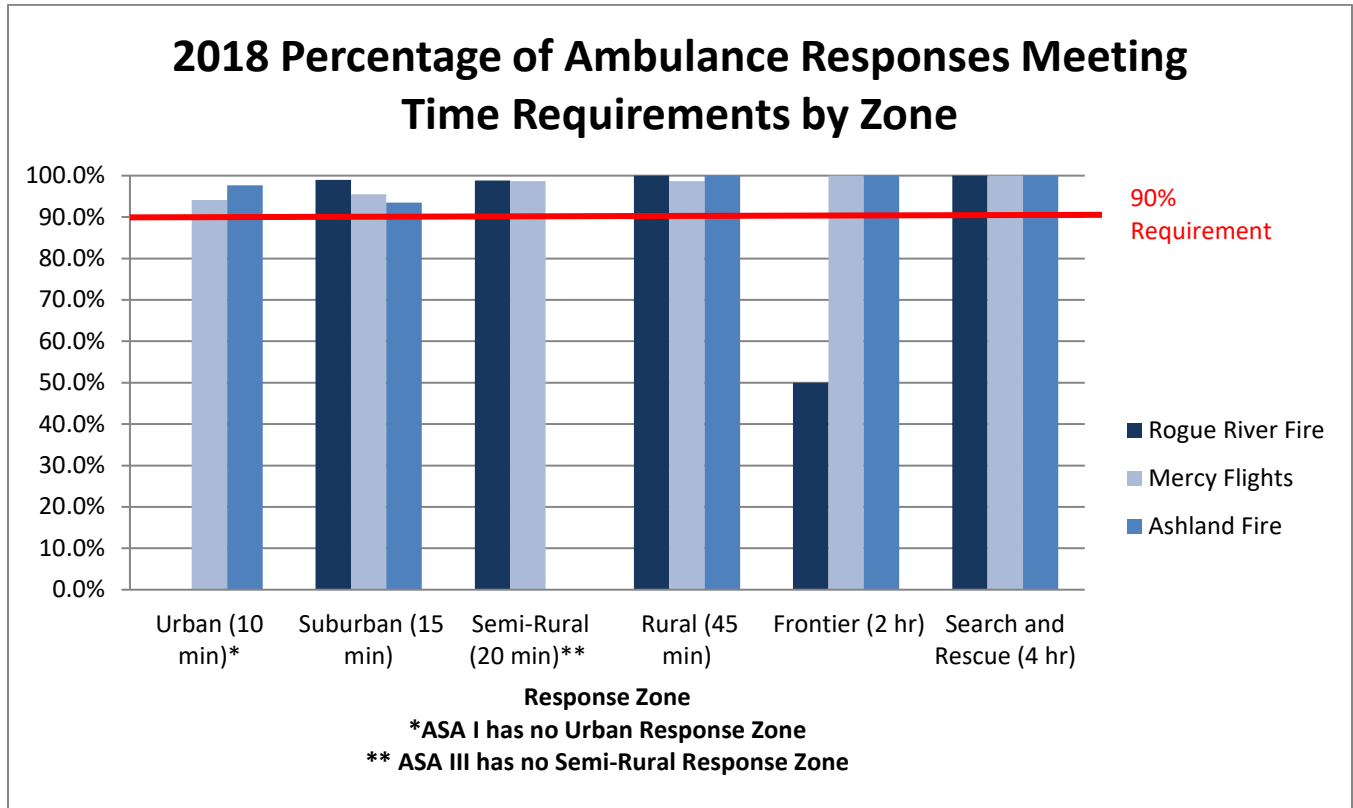
Ambulance response times are based on various zones as shown in Table 5. In general, response times increase with distance from urban areas.

Table 5: Response Times by Zone

ZONE	RESPONSE TIME	CRITERIA
Urban	10 minutes	Within the urban growth boundaries of Ashland, Medford and Central Point.
Suburban	15 minutes	Within 10 miles of Medford City Hall and Ashland City Hall (and on paved roads) and the city of Rogue River. Also I-5 from the Josephine County line to exit 12 south of Ashland (except those areas within urban response zones). Includes Jacksonville, Eagle Point Phoenix, Talent and White City. Includes the Jackson County Expo. Includes all areas within Rogue River Fire District along paved roads.
Semi-Rural	20 minutes	The urban growth boundaries of Gold Hill and Shady Cove. Also includes those portions of Galls Creek, Sardine Creek, and Hodson Roads within Rogue River Fire District and on paved roads.
Rural	45 minutes	More than 10 miles from Medford and Ashland City Hall, and a population of greater than 6 persons per square mile
Frontier	2 hours	6 or fewer persons per square mile and accessible by maintained roads.
Search & Rescue	4 hours	Primarily forest, recreation or wilderness lands not accessible by paved roads and with less than 6 persons per square mile. Response Time applies for ASA provider vehicle access only.

All transportation agencies are required to meet response times for 90% of emergency medical responses. With one exception, response times were met by all agencies as shown in Figure 1 (page 8). The exception was in the Frontier Response Zone for Rogue River Fire District. They only received two calls in the Frontier Zone and were forced to stage an ambulance to wait for law enforcement during one of the responses, which resulted in meeting the response time for 50% of their Frontier calls.

Figure 1



Note: Rogue River Fire District only received two calls in the Frontier Zone and were forced to stage an ambulance to wait for law enforcement during one of the responses, which resulted in meeting the response time for 50% of the Frontier calls.

TRANSPORTS

As the name implies, a “transport” is when a patient is transported via ambulance to a hospital. Transports are categorized as either Advanced Life Support (ALS) or Basic Life Support (BLS), depending on the nature of the medical assessment. The term “medical run” means an ambulance is dispatched as a result of a 911 call. There were a total of 29,803 medical runs in 2018, resulting in 20,928 transports (70% of runs resulting in transports). The remaining calls were either canceled or determined that ambulance transportation to a hospital was not required upon assessment at the scene. Combined, providers conducted about 82 runs per day and transported an average of 57 patients per day. Historically, less than 1% of patients are transported to the hospital by ambulance using lights and sirens (also called Code 3).

Medical runs and transports generally increase each year. Rogue River Fire District saw an increase in medical runs and transports by 4.8% and 2.9%, respectively, compared to 2017. However, Ashland Fire & Rescue and Mercy Flights had a decrease in medical runs and transports. Ashland Fire & Rescue had a 4.7% decrease in runs and 5.9% decrease in transports. Mercy flights saw a 5.6% decrease in runs and 5.3% decrease in transports. As a result, the total countywide runs decreased by about 5% from 2017 to 2018, while transports decreased by

about 4% during the same time period. While the reason for the decrease is not definitively known, ambulance providers believe it may be largely due to the excessive wildfire smoke that caused people to stay indoors for much of the summer. Medical run and transport information are represented in Figures 2, 3, and Table 6.

Figure 2

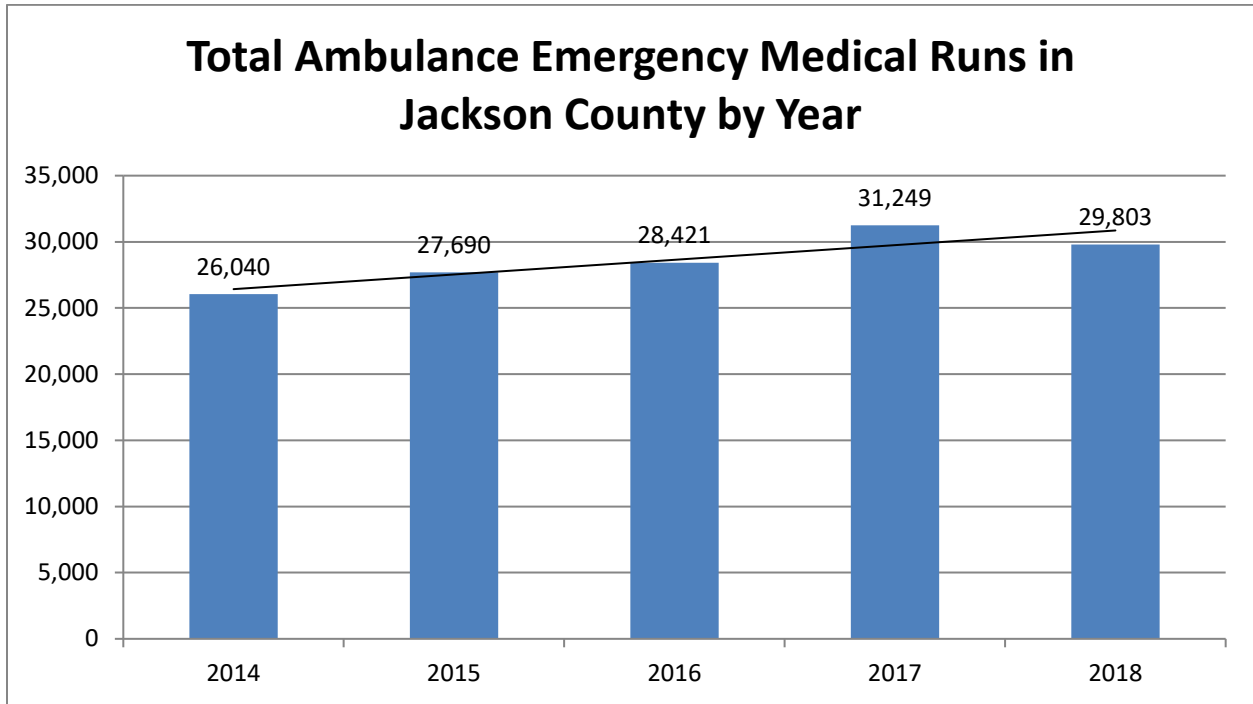


Figure 3

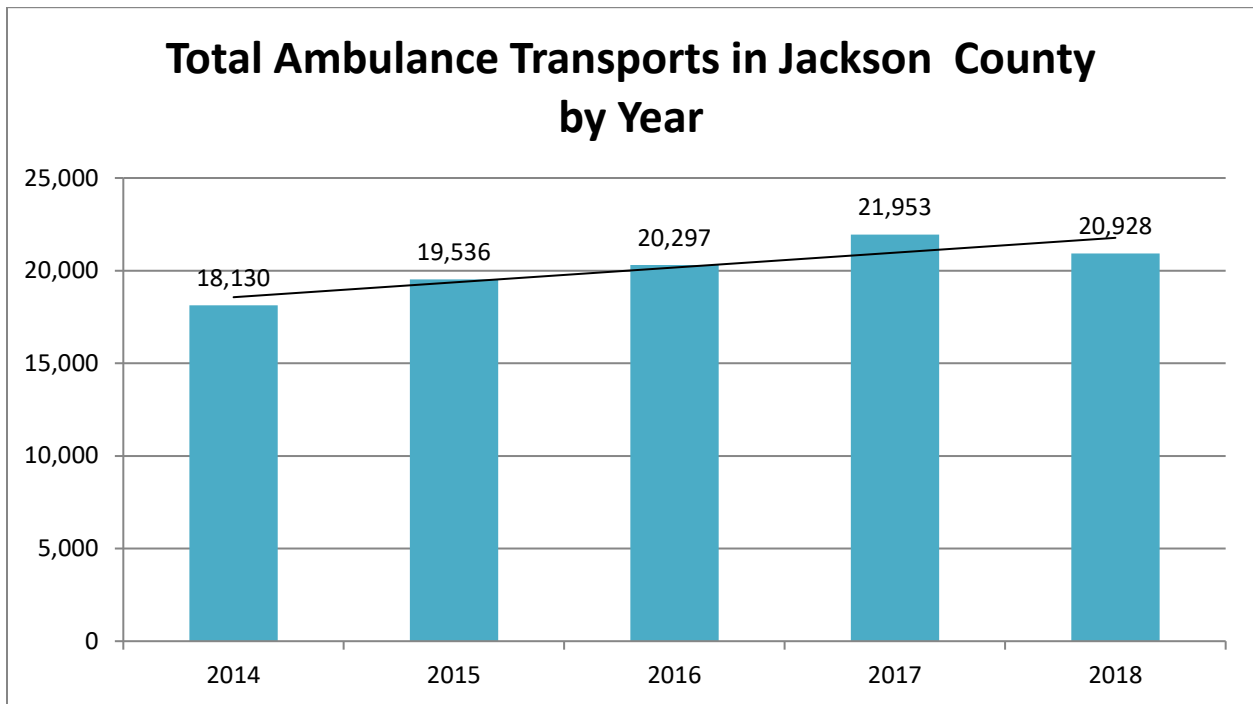


Table 6: Medical Run and Transport Data

TYPE	ROGUE RIVER FIRE DISTRICT (ASA I)	MERCY FLIGHTS (ASA II)	ASHLAND FIRE & RESCUE (ASA III)	TOTAL
Medical Runs	1,887	25,116	2,800	29,803
ALS Transports	948	13,502	1,425	15,875
BLS Transports	129	4,337	587	5,053
Total ALS and BLS Transports	1,077	17,839	2,012	20,928
Code 3 Transports (lights and sirens to hospital)	85	31	65	181
% of Transports per Medical Run	57%	71%	72%	70%

Table 7: Miscellaneous Run and Transport Data

TYPE	ROGUE RIVER FIRE DISTRICT (ASA I)	MERCY FLIGHTS (ASA II)	ASHLAND FIRE & RESCUE (ASA III)
Average Miles per Transport	16.0	6.01	7.1
Runs by Other Agency in Your ASA	69	0	23
Runs by Your Agency in Other ASA	80	47	0
Scheduled Transports	0	984	222
Membership Transports	288	4,887	630

RATES AND MEMBERSHIPS

Unless approved by the Jackson County Board of Commissioners, ambulance fee rates can only be increased using the Centers for Medicare and Medicaid Services (CMS) Consumer Price Index for all urban consumers (CPI-U). This allows ambulance fees to stay commensurate with inflation. Table 8 shows the ambulance service rates for 2018.

Table 8: 2018 Ambulance Rates

RATE	ROGUE RIVER FIRE DISTRICT (ASA I)	MERCY FLIGHTS (ASA II)	ASHLAND FIRE & RESCUE (ASA III)
ALS (base)	\$1,093.08	\$1,112.00	\$1,070.00
BLS (base)	\$862.96	\$1,112.00	\$1,070.00
Mileage	\$14.76	\$15.85	\$14.00
Treat and Release	\$287.67	\$410.00	\$310.00

All three providers offer annual memberships that are designed to provide revenue to the agency in exchange for reduced service fees. Rogue River Fire District and Ashland Fire & Rescue both offer FireMed memberships, which are also offered by other agencies in Oregon. Mercy Flights provides a membership service with comprehensive benefits for their constituents. Combined, there were 22,561 annual memberships in 2018.

Table 9: Membership Information

2018 MEMBERSHIPS	
ROGUE RIVER FIRE DISTRICT (ASA I)	1,136
MERCY FLIGHTS (ASA II)	18,369
ASHLAND FIRE & RESCUE (ASA III)	3,056

EMS COMMITTEE

The Emergency Medical Services (EMS) Committee is mandated by County ordinance. Its purpose is to review all aspects of medical services in Jackson County with the exception of issues involving quality of individual patient care. The EMS Committee may recommend changes to the Ambulance Service Plan, review ASA boundary changes, make recommendations on response time changes, review local ordinances as to their adherence to the Jackson County Ambulance Service Plan, review rates, and make findings and recommendations to the Director of Health and Human Services.

The EMS Committee remains active in promotion of collaboration between both pre-hospital and emergency department resources. Quarterly meetings are typically attended by agency leadership. The Committee remains focused on evaluating Systems of Care reporting (Stroke, STEMI, Cardiac Arrest, and Trauma) to improve continuity of care. Attendance at the Committee remains strong and sub-committees are active.

QUALITY ASSURANCE COMMITTEE

Like the EMS Committee, a Quality Assurance (QA) Committee is designated by ordinance. The purpose of the committee is to review pre-hospital care to assure that appropriate, safe and quality care and transport is delivered to Jackson County residents. The QA Committee reviews complaints of violations of the Ambulance Service Plan referred by the Director Health and Human Services and reviews dispatch processes and times. The Committee may also make recommendations for revisions of the Ambulance Service Plan. In addition to the QA Committee, quality assurance is also monitored by the transporting agencies' supervising physicians and in-house processes.

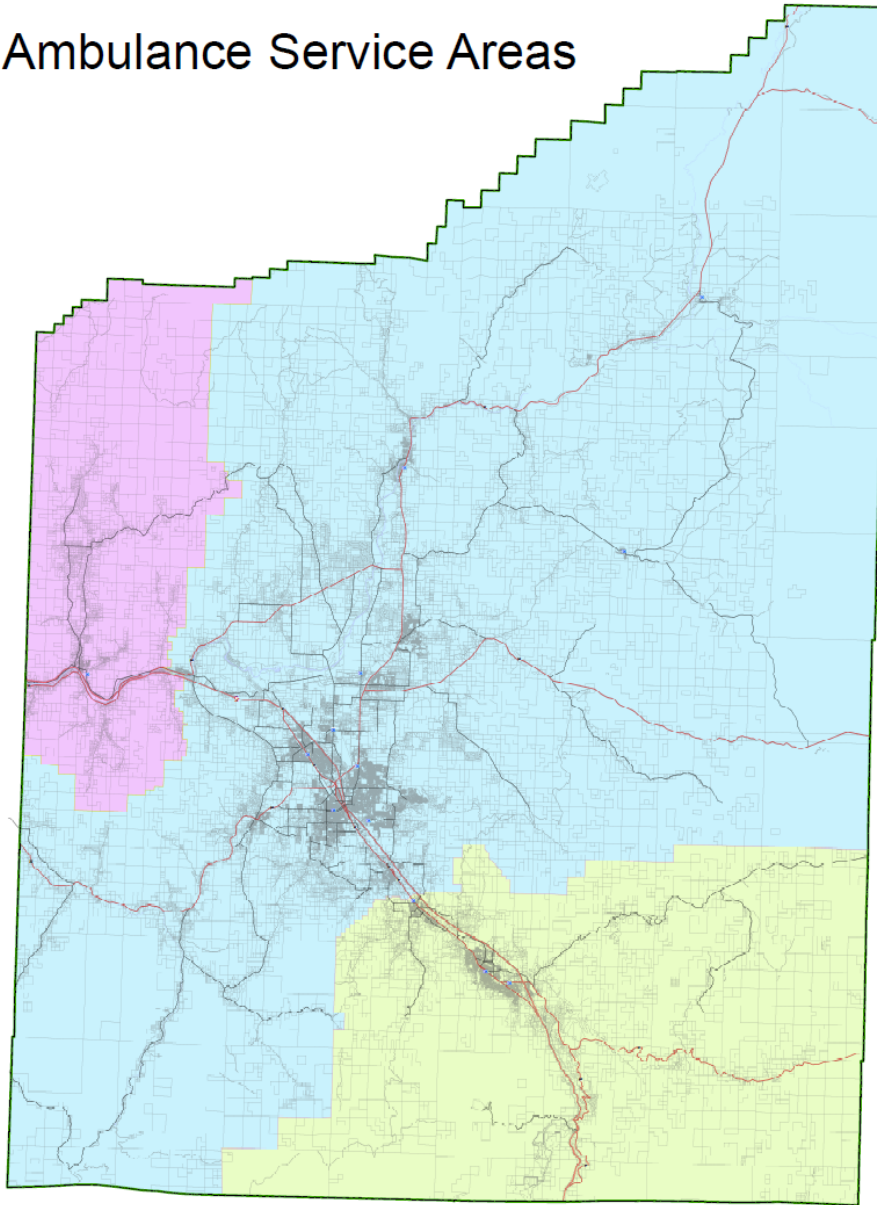
AMBULANCE SERVICE PLAN CHANGES

There were no changes to the Ambulance Service Plan in 2018.

ATTACHMENT 1: AMBULANCE SERVICE AREA MAP

Jackson County

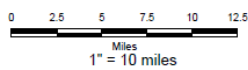
Ambulance Service Areas



Ambulance Service Areas

- Ashland Fire & Rescue
- Mercy Flights
- Rogue River Fire Department

Medical Responders



JACKSON COUNTY

GEOGRAPHIC INFORMATION SYSTEM
This map is based on a digital database compiled by Jackson County from a variety of sources. Jackson County cannot accept responsibility for errors, omissions, or positional accuracy. There are no warranties, expressed or implied.

General Fund

	BN 2013/15 Actual			BN 2015/17 Actual			BN 2017/19 Actual*			BN 2019/21 Adopted		Funding Source
										Budget		
Expense												
Public Art Program	20,541	\$		33,029	\$		124,291	\$				Minimal donations & TOT
RVTV	126,618			118,260			133,870					Peg fees and franchise
Tourism	47,467			66,395			72,858					274,160 Transient Occupancy Tax restricted portion
Econ Development	210,729			327,182			294,197					366,908 General Fund
ECTS Grants	1,304,744			1,497,427			1,603,407					1,449,488 Transient Occupancy Tax
Chamber of Commerce	629,519			779,595			877,577					892,676
OSF	220,000			220,000			220,000					220,000
Small Grantees	421,501			497,832			505,830					230,000 FY 21 has not been fully allocated yet
Parking	242,489			247,829			326,270					340,000 Parking fees cover expense
Parks Property Tax Contribution	8,856,000			9,560,000			10,601,400					10,783,800 Property Tax collection
Forestry	889,478			1,213,281			3,715,983					2,633,236 See AFR reconciliation**
CERT PS and Program	176,278			214,633			227,867					270,200 See CERT reconciliation**
Social Service Grants	253,688			263,933			268,000					268,000 General Fund
Code Enforcement PS only	127,601			175,089			199,100					190,358 General Fund
Band	114,017			127,186			124,646					132,733 Required by Charter
*Audit not complete for FY until 12/17/19												
**See program reconciliation for grants received and balance of program												
Transient Occupancy Tax Revenue	\$ 4,551,540	\$	\$ 5,595,566	\$	\$ 6,043,637	\$	\$ 6,552,738					
Tourism Restricted	1,213,896		1,492,337		1,611,838		1,899,768					1,899,768
General Government Operations	3,337,644		4,103,229		4,431,799		4,652,970					4,652,970
Total Restricted TOT Tourism Allocation	1,213,896		1,492,337		1,611,838		1,899,768					
Visitor & Convention Bureau- Chamber of Commerce	629,519		779,595		877,577		892,676					892,676
Oregon Shakespeare Festival	220,000		220,000		220,000		220,000					220,000
Long Term Parking	-		-		244,060		491,454					491,454
Economic, Cultural, and Sustainability Grants	112,414		139,214		156,710		160,000					160,000
Public Art	33,724		41,762		47,013		42,250					42,250
Other City Tourism eligible Capital Projects	218,239		311,766		66,478		93,388					93,388
Marijuana Revenue	330		17,328		192,259		440,000					
General Fund	330		17,328		192,259		240,000					240,000
Housing Trust Fund							200,000					200,000

**City of Ashland
AFR - Program**

	2006-07 Actual	2007-08 Actual	2008-09 Actual	2009-10 Actual	2010-11 Actual	2011-12 Actual	2012-13 Actual	
Transfer from Water								
Water Surcharge	135,828.48	48,095.62	0.00	99,927.61	231,160.87	336,811.00	1,969,979.00	
Grants	135,828.48	48,095.62	0.00	99,927.61	231,160.87	336,811.00	1,969,979.00	
Total Revenue	135,828.48	48,095.62	0.00	99,927.61	231,160.87	336,811.00	1,969,979.00	
Personnel Services	68,143.00	86,847.00	89,048.00	99,361.00	186,324.00	216,045.00	214,410.00	
Material and Services	125,912.00	92,571.00	39,923.00	121,655.00	183,791.00	269,683.00	2,245,675.00	
Capital Outlay								
Total Expenditures	194,055.00	179,418.00	128,971.00	221,016.00	369,115.00	485,728.00	2,460,085.00	
Over(under)	(58,226.52)	(131,322.38)	(128,971.00)	(121,088.39)	(137,954.13)	(148,917.00)	(490,106.00)	
Transfer from Water								
Water Surcharge								
Grants								
Total Revenue	2013-14 Actual	2014-15 Actual	***2015-16 Actual	2016-17 Actual	2017-18 Actual	2018-19 Actual	Total	
Personnel Services	89,747.00	70,473.00	250,000.00	250,000.00	250,000.00	250,000.00	1,773,343.51	
Material and Services	89,747.00	70,473.00	171,415.85	174,966.37	174,979.25	177,343.51	1,384,211.53	
Capital Outlay			71,970.93	458,019.05	1,290,120.91	1,384,211.53	1,811,555.04	
Total Revenue	89,747.00	70,473.00	493,386.78	882,985.42	1,715,100.16	1,811,555.04	7,865,049.98	
Personnel Services	150,592.00	141,177.00	164,351.00	195,129.00	331,823.00	409,555.00		
Material and Services	427,446.00	170,263.00	110,342.00	743,460.00	1,385,963.00	1,531,142.00		
Capital Outlay					50,000.00			
Total Expenditures	578,038.00	311,440.00	274,693.00	938,589.00	1,717,786.00	1,990,697.00	9,849,631.00	
Over(under)	(488,291.00)	(240,967.00)	218,693.78	(55,603.58)	(2,685.84)	(179,141.96)	(1,964,581.02)	

Per Kelly - Max of \$50,000 Per Year

	2019-20 Adopted	2020-21 Adopted
Transfer from Water	50,000.00	50,000.00
Water Surcharge	377,698.00	377,698.00
Grants		
Total Revenue	427,698.00	427,698.00
Personnel Services	339,193.00	345,885.00
Material and Services	89,573.00	84,656.00
Capital Outlay		
Total Expenditures	428,766.00	430,541.00
Over(under)	(1,068.00)	(2,843.00)

NOTES:

** No overhead (central services) has been changed to AFR

*** Moved the program to the General Fund

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CITY OF ASHLAND
OREGON EMERGENCY MANAGEMENT, CERT PROGRAM

As of June 30, 2019

	FY02	FY03	FY04	FY05	FY06	FY07	FY08	FY09	FY10	
CERT GRANT REIMBURSEMENTS		707.25	24,380.36	12,370.00	15,100.00	26,628.96	33,735.04	19,625.00	34,698.00	
PERSONAL SERVICES										
Current Coordinator									(15,419.55)	
Previous Coordinator							(76,965.59)	(78,174.61)	(58,549.55)	
Previous Coordinator			(23,295.40)	(31,481.98)	(8,356.38)	(69,824.32)	(21,045.75)	(22,357.84)	(15,987.22)	
Previous Coordinator			(28,653.02)	(28,653.02)						
Previous Assistant					(8,822.09)	(15,606.15)	(868.89)			
Previous Assistant				(12,897.74)	(3,120.00)					
Previous Assistant			(23,295.40)	(45,069.10)	(44,379.72)	(41,574.13)	(86,298.36)	(98,001.34)	(100,532.45)	
TOTAL									(89,856.32)	
MATERIALS & SERVICES										
075100.610350	(10,101.01)	(12,385.37)	(22,651.22)	(8,751.45)	(15,148.71)	(13,033.48)	(10,012.73)	(12,651.42)	(13,292.22)	
General Fund Contribution	(10,101.01)	(34,973.52)	(43,339.96)	(40,761.17)	(41,622.84)	(72,702.88)	(74,279.03)	(93,558.87)	(68,450.54)	
CERT GRANT REIMBURSEMENTS	FY11	FY12	FY13	FY14	FY15	FY16	FY17	FY18	FY19	TOTAL
	29,892.00	20,729.00	19,215.00	19,072.00	5,378.75	1,820.00	4,072.00	3,714.00	-	\$ 271,137.38
PERSONAL SERVICES										TOTAL
Current Coordinator										(605,847.14)
Previous Coordinator										(146,808.42)
Previous Coordinator	(74,412.05)	(20,389.40)	(62,886.96)	(73,710.37)	(78,822.98)	(84,579.13)	(86,905.75)	(96,036.55)	(102,516.00)	(304,779.73)
Previous Coordinator		(56,976.82)								(45,513.69)
Previous Coordinator										(51,948.42)
Previous Assistant										(74,895.96)
Previous Assistant										(9,690.98)
Previous Assistant										(26,758.49)
TOTAL	(74,412.05)	(77,366.22)	(62,886.96)	(73,710.37)	(78,822.98)	(84,579.13)	(86,905.75)	(96,036.55)	(102,516.00)	(1,266,242.83)
MATERIALS & SERVICES										
075100.610350	(20,866.50)	(22,345.47)	(19,503.99)	(21,538.10)	(26,657.78)	(20,150.89)	(28,890.17)	(16,944.60)	(16,944.60)	(311,869.71)
General Fund Contribution	(65,386.55)	(78,982.69)	(63,175.95)	(76,176.47)	(100,102.01)	(102,910.02)	(111,723.92)	(109,267.15)	(119,460.60)	(1,306,975.18)

Water Treatment Plant Platinum vs. Silver

Platinum refers to a higher “envision standard” for infrastructure projects (<https://sustainableinfrastructure.org/envision/>). It is kind of like the LEED certifications and requires a bunch of analysis with the primary focus being electrical energy conservation and solar potential strategies

Non Platinum is taking advantage of energy efficiencies without going too far and not spending more money to gain additional efficiencies that may not pay off.

Council approved a \$55k change order to the design contract to analyze the potential and cost difference to move from envision “silver” to envision “platinum” at the November 19th Business meeting.

With respect to pure costs, we don’t know what it means yet as HDR is just beginning the analysis to determine what upgrades would be needed to meet the envision platinum credit standard and have their subcontractor perform the necessary estimating for the upgrades. Once this is complete we will know potential actual costs and this will be brought back to the Council for a discussion.

City Economic Development Budget

BN19-21

	FY19-20	FY20-21	BN 19-21 TOTAL
Proposed Economic Development TOT Allocation	182,122	184,787	366,909
Personal Services (.25 FTE)	47,442	48,951	96,393
Materials & Services (not including Program Funds Available)	59,680	60,836	120,516
Program Funds	75,000	75,000	150,000
TOTAL Economic Development Program	182,122	184,787	366,909
Program Funds Allocation			
<u>Proposed Chamber Programming</u>			
<u>Outreach and Education</u>			
Video Production (Portal, Workshops, other)	3,000	3,000	6,000
Promotional materials (Portal, Living and Doing, Recruitment, etc)	15,000	15,000	30,000
Conferences/Workshops	10,000	10,000	20,000
<u>Events</u>			
Festival of Lights	15,000	20,000	35,000
<u>Research & Development</u>			
Business Retention & Expansion Program	20,000	15,000	35,000
Portal/Economic Dashboard	2,000	2,000	4,000
Business Sector Analysis	-	-	-
Chamber Programming Total	65,000	65,000	130,000
Chamber Portion of Total Program Funds	87%	87%	87%
<u>Proposed City Programming</u>			
Employment Lands -Expansion Pre-assessments	-	-	-
Launch Ashland - Entrepreneurial Program	10,000	10,000	20,000
Economic Development Strategy - Ashland Airport	-	-	-
Downtown/RR Enhancements - Flower Baskets	-	-	-
City Programming Total	10,000	10,000	20,000
PROGRAM TOTAL	75,000	75,000	150,000