



STANDARD OF COVER

**Adopted By Board of Directors
October 25, 2012**

Standards of Cover - Overview

A critical element in the assessment of any fire/EMS delivery system is the ability to provide adequate resources for anticipated fire combat situations and medical emergencies. Each fire/EMS emergency requires a variable amount of staffing and resources to be effective. Properly trained and equipped fire companies must arrive, deploy, and attack the fire within specific time frames if successful fire ground strategies and tactical objectives are to be met. The same holds true for rescue operations, major medical emergencies, and other situations that require varying levels of resources.

Controlling a fire before it has reached its maximum intensity requires a rapid deployment of personnel and equipment in a given time frame. The higher the risk, the more resources needed. For example, more resources are required for the rescue of persons trapped within a high-risk building with a high-occupancy load than for a low-risk building with a low-occupancy load.

More resources are required to control fires in large, heavily loaded structures than in small buildings with limited contents. Therefore, creating a level of service requires making decisions regarding the distribution and concentration of resources in relation to the potential demand placed upon them by the level of risk in the community.

Fire Suppression Capabilities

Firefighters encounter a wide variety of conditions at each fire. Some fires will be at an early stage and others may have already spread throughout the building. This variation in conditions complicates attempts to compare fire department capability. A common reference point must be used so that the comparisons are made under equal conditions.

In the area of fire suppression, the service level objectives are intended to prevent the fire from reaching **FLASHOVER**, a particular point of a fire's growth that marks a significant shift in its threat to life and property. Firefighting tasks that are required at a typical fire scene can vary greatly. To save lives and limit property damage, fire companies must arrive within a short period of time with adequate resources to do the job. Providing the proper resources within a specific time period is a great challenge.

This is also true from an emergency medical perspective where the service level objective is typically to intervene within four to six minutes when people are pulse less and/or not breathing. If this is not accomplished within this time period, brain damage is very likely to occur due to lack of oxygen. In a cardiac arrest situation, survivability dramatically decreases beyond four minutes without appropriate intervention.

The Stages of Fire Growth

Virtually all structure fires progress through a series of identifiable stages:

*Stage 1 - **The Ignition Stage*** - The ignition of a fuel source takes place. Ignition may be caused by any number of factors from natural occurrences such as lightning to premeditated arson.

*Stage 2 - **The Flame Stage*** - The fuel initially ignited is consumed. If the fire is not terminated in this stage the fire will progress to the smoldering stage or go directly to flashover.

*Stage 3 - **The Smoldering Stage*** - The fuel continues to heat until enough heat is generated for actual flames to become visible. It is during this stage that large volumes of smoke are produced and most fire deaths occur. Temperatures rise throughout this stage to over 1,000°F in confined spaces creating the hazard of a “backdraft” or smoke explosion. This stage can vary in time from a few minutes to several hours.

*Stage 4 - **Free Burning or "Flashover" Stage*** - The fire becomes free burning and continues to burn until the fire has consumed all contents of the room of fire origin, including furnishings, wall and floor coverings, and other combustible contents. Research into the flashover phenomenon has yielded criteria that precisely measures when flashover occurs. However, any exact scientific measurement in the field is extremely difficult. Observable events that would indicate a flashover are “total room involvement” and “free burning.”

Effective Response Force

An effective response force is the minimum amount of staffing and equipment that must reach a specific emergency within a targeted time to mitigate the situation. This effective response force should be able to handle the typical emergency medical incident or fire that is reported shortly after it starts and that response must be within the maximum prescribed response time for the type of medical emergency or risk level of the structure. Considering that a district cannot hold fire risk to zero or successfully resuscitate every patient, the response objective should find a balance between effectiveness, efficiency, and reliability that will keep fire risk at a reasonable level and maximize the potential for saving lives and property (acceptable risk) at an acceptable cost.

Response Time

In general, 1720 provides the following benchmarks:

- **Urban Zones** with >1000 people/sq. mi. call for 15 staff to assemble an attack in 9 minutes, 90% of the time.
- **Suburban Zones** with 500-1000 people/sq. mi. call for 10 staff to assemble an attack in 10 minutes, 80% of the time.
- **Rural Zones** with <500 people/sq. mi. call for 6 staff to assemble an attack in 14 minutes, 80% of the time.
- **Remote Zones** with a travel distance =8 mi. call for 4 staff, once on scene, to assemble an attack in 2 minutes, 90% of the time.

The Black Butte Ranch Fire District falls within the guidelines of a Rural Zone with an estimated <500 persons per square mile, with the exception of June, July, and August when the Black Butte Ranch population could increase to 1500 people per square mile.

Elements of Response Time

Developing *Standards of Cover* must take into account not only the significance of flashover but also other factors such as the time/temperature relationship in a structure fire. This is also true with cardiac arrest events. The relationship between the time of medical intervention and cardiac patient survival is dependent on the time when external defibrillation is applied.

Various scientific models have been developed to correlate the relationship between time and the ability to successfully mitigate emergency events. The window of opportunity for both fire and critical medical emergencies to effectively intervene is narrowly defined.

Recognition must be given, however, to the *point of awareness* within these various models. In the instance of residential dwelling fires as shown through fire modeling studies conducted by the Southwestern Research Institute on smoke alarm activation, flame ignition does not normally occur for approximately 18-20 minutes after initiation of the event. From this point of awareness, conditions deteriorate rapidly with maximum temperatures and flashover occurring within an 8-10 minute time frame. Flashover can occur in as little as four minutes from this point of awareness depending upon the type of combustible material involved.

In a cardiac arrest, the point of awareness is the recognition of the patient's condition. The arrival of defibrillator-equipped personnel within the first four minutes before heart damage occurs greatly increases the chances of survival. In the absence of other mitigating strategies, response time has a direct relationship to the critical time interval for fire and medical emergencies with respect to outcome, patient survival, or property saved.

BLACK BUTTE RANCH FIRE DISTRICT CURRENT STATUS

Current Risk

Black Butte Ranch (BBR) is a private community in Central Oregon located 8 miles north of the town of Sisters in the Northwest corner of Deschutes County. The property is approximately three square miles with direct access from Highway 20W. The property is surrounded on all sides by dense forest and wooded areas. Black Butte Ranch RFPD (the district) provides Emergency medical care and transport, rescue, and Structural, vehicle, and wildland fire protection/fire suppression to the community. The fire district boundary and ambulance service area covers all BBR property within the three square mile boundary and property located at section 5, Highway 20W between MP90 and MP95, and George McAllister Road. In addition, the fire district also provides services on contract to three residences just outside the district boundary.

The following represents potential risks within the district (includes service contracts):

- Approximately 300 full time residents
- Approximately 5000 - 6000 visitors and guests on property during summer mos.
- Approximately 1253 home sites- 134 occupied year round-30 empty lots with a combined value of \$792,657,440.00
- Three large multi-structure condominium complexes- 91 individual units
- 18 large commercial structures valued at \$36,586,839.00 with associated equipment valued at \$3,688,696.00
- 5 pools, 1 hot tub, 1 steam room
- 23 tennis courts
- 3 basket ball courts
- Volleyball court
- Mixed use sports field
- 2 eighteen hole regulation size golf courses
- 14 lakes and ponds
- Approximately 8 creeks/waterways
- 33 miles of residential roads
- 18 miles of bike paths
- 25 miles of horse trails
- 5 miles of highway with annual average traffic of 6250 vehicles per day
- Commercial truck traffic with potentially hazardous cargo accounts for at least 6% of that total.

In addition to the more obvious tangible risks being protected, at risk is the private property investment and BBR corporate revenue. BBR Corp. annual revenues annually are approximately \$13,400,000.00. This does not include home owner's dues. Black Butte Ranch Corporation is a business that relies on visitors generating a large portion of their income. During the past nine years, wildland fires have caused significant losses of revenue due to evacuations, smoky conditions, road closures, and *would be* visitor's literal fear. These wildland fires have primarily originated just outside the district boundary, but there is a high probability for a start within the district. Future wildland fires put future corporation income at risk as well as the livelihood of 92 full time employees and an additional 223 seasonal employees.

Also At risk is the ISO rating. Given the current approx. median home value, an ISO rating change of one point (four to five) would cost the homeowners approximately \$330,000.00 overall in increased premiums. This figure does not include insurance premium increases for the commercial buildings within the district.

Anticipated risks vary greatly with time of year and the weather. Between Memorial Day and Labor Day, the resident guest population swells to potentially 6000 persons at any given time. This is also the time when a majority of people are utilizing the recreational facilities, golf courses, bike paths, horse trails, and just enjoying outdoor activities in general. This attributes greatly to the overall number of medical and injury calls that we receive annually. This period of time also represents the greatest daily number of travelers on the highway, however good weather and road conditions result in fewer motor vehicle collisions than in the winter months. Fire risk at this time of year is primarily from wildland fire incidents either threatening the district or within the district. During the past ten years, the district was significant threatened at least seven times from an approaching wildland fire. They caused the loss of two homes and prompted evacuations at least four times causing stress and financial expense to residences and considerable loss of income for the ranch corporation.

During the colder months-fall, winter, spring-the call volume decreases. We do however see a rise in vehicle collisions at this time due to the weather and road conditions.

Black Butte ranch RFPD has *automatic aid* agreements with Sisters Camp Sherman RFPD. We will automatically respond on serious illness and injury emergencies to all areas in their district that are north and west of the HWY 20W/McAllister junction. Within this area are numerous lakes, streams, & campgrounds, miles of off-road recreational trails, HooDoo ski resort, several Sno-parks, hundreds of miles of roads & highways, and the community of Camp Sherman. Camp Sherman has approximately 450 private residences with a population of visitors in the thousands during the summer months. The type and frequency of all these calls vary with the time of year as well.

Several factors have been identified that influence call responses and actions:

- Staffing levels are much lower between September and June greatly reducing available resources
- Staffing levels are generally better in the evening
- Training and experience levels of available resources
- OSHA *two-in two-out* rule
- Snow and ice on roads will slow response times
- Road congestion during summer months may slow response times
- Response time for mutual aid at least 20 minutes
- Narrow streets, overhanging branches, and Cul-de-sacs limiting apparatus choice and/or optimal access and staging
- Certified water rescue, ice rescue, high angle rescue, confined space rescue currently coming from mutual aid with at least one hour response time
- Hazardous materials mitigation team-approximately 2 hours response time
- Lack of specialized rescue equipment

SPECIFIC HAZARDS:

EMS:

- Illnesses; district and Charlie/Delta/Echo mutual aid
- Drowning – lakes, ponds, pools, rivers...district and Charlie/Delta mutual aid
- MVC; district and Charlie/Delta mutual aid
- Injuries @ residences, public areas, pools, golf courses, hiking trails...District and Charlie/Delta mutual aid
- Skiing, tubing, snowboarding, and snow mobile accidents. Mainly Charlie/Delta mutual aid
- ATV & off road motor cycle accidents. Charlie/Delta mutual aid
- Horse back riding falls and injuries. District and Charlie/Delta mutual aid
- Bicycle accidents. District and Charlie/Delta mutual aid

RESCUE:

- MVC
- Horse trail accidents
- Water rescue
- Ice rescue
- High angle rescue
- Off road trails accidents – includes bike and walking trails
- Golf courses
- HAZ MAT incident
- Confined space at utilities plant

FIRE:

- Structure fires, including flue fires
- Vehicle fires
- Dumpster/Rubbish fires/debris (section 5 dump and pit)
- Structural water damage salvage and overhaul
- Wild land fires
- Rescue

HAZ-MAT:

- Chemicals at pools
- Chemicals at golf course maintenance facilities
- Chemicals at utility plant
- Numerous propane tanks
- Hazardous materials transportation on Hwy 20
- Fuel storage at golf course and ranch maintenance facilities
- Hazardous materials at ranch maintenance facility
- Fuels, pesticides, cleaners, fertilizers, etc... at private residences

Other Hazards:

- Electrocutation hazard in pool pump room
- Winter driving conditions during winter months
- Vehicle and pedestrian congestion between Memorial day and Labor day, and other holidays.
- Larger than average square footage of most residences
- Large number of unoccupied residences between Labor day & Memorial day
- Challenging access to Roof for fire fighting operations on many residential structures

STAFFING AND DEPLOYMENT

Career Staffing

The leadership of the District consists of a five-member board of directors that has hired a Fire Chief to run the operational aspects of the fire department. The Fire Chief, with board approval, hires the BBRRFPD career staff that currently consists of one (1) Assistant Chief, Three (3) Captains, Three (3) Firefighter/Medic, and one (1) full time Administrative Assistant. This small staff is the main response to fire and EMS incidents.

Volunteer Staffing

The Black Butte Ranch Fire District is fortunate enough to have a small core of dedicated volunteers/Interns who serve our citizens. At this time there are 9 volunteers/interns currently on our rosters. The student interns attend Central Oregon Community College while living at the fire station, they provide staffing for incidents when they are not in Bend at school. These students are a significant addition for our staffing model. Student interns and Volunteers are utilized on incidents according to their EMS and Fire Certification levels. The skills and abilities for these personnel can vary month to month and year to year. This directly impacts the ability of personnel to respond to incidents at Black Butte Ranch.

ON-SCENE OPERATIONS, CRITICAL TASKING, AND EFFECTIVE RESPONSE FORCE

On-scene operations, critical tasking, and effective response force are the elements of a Standards of Coverage study that determines staffing levels, number of units needed, and duties to be performed on the fire ground. A fire department must be able to determine what tasks need to be completed in order to have a positive influence on the outcome of the situation, and the number of personnel and apparatus required to complete those tasks. Our capabilities of meeting these standards are different for certain hours of the day. During the daytime hours (8:00AM-5:00PM M-F) there are fewer volunteers to respond. Weekends and evenings generally have a better response due to being non working hours.

ON-SCENE OPERATIONS

Fires - The variables of fire growth dynamics and property and life risk combine to determine the fire ground tasks that must be accomplished to mitigate loss. These tasks are interrelated, but

can be separated into two basic types: Life Safety and Fire Flow. Life safety tasks are those related to finding and rescuing trapped victims and safely removing them from the building. Fire flow tasks are those related to getting extinguishing agent on the fire.

Life safety tasks are based upon the number of occupants, their location, are they unconscious, sleeping or awake, and their ability to take self-preserving action. Life safety tasks generally commit larger numbers of firefighters than do fire flow tasks. Consideration must also be given to the life safety risks of firefighters during rescue operations.

Fire flow tasks can be accomplished with hand held hoses or master streams. Master streams take relatively fewer firefighters to operate because they are most often fixed to apparatus, but require an adequate water supply.

The decision to use hand lines or master streams depends upon the stage of the fire and the threat to life safety. More importantly, these tactical decisions will be dictated by the amount of trained personnel who are assembled at the scene. If the fire is in a pre-flashover stage, firefighters can make an offensive fire attack into the building by using hand lines to attack the fire and shield trapped victims until they can be removed from the building. If the fire is in its post-flashover stage and has extended beyond the capacity or mobility of hand lines, or if structural damage is a threat to firefighter safety, the structure is declared lost and master streams are used to extinguish the fire and prevent it from spreading to surrounding property.

The key to a fire department's success at a fire is adequate staffing and coordinated teamwork, regardless of whether the fire ground tasks are all life safety related or a combination of fire flow and life safety.

Black Butte Ranch Fire District utilizes aggressive offensive attacks if possible and appropriate. The first objective is to place a water stream between any victims and the fire and then to rescue those victims by removing them from the proximity of the hazard. The second objective is to contain the fire to the room of origin. Again, these tactical decisions will be dictated by the amount of trained personnel who are assembled at the scene.

Black Butte Ranch Fire District has established the following guidelines for on-scene personnel tasked with determining the strategy(s) to be used during an incident:

Before an on-scene plan can be developed, the Incident Commander must select an appropriate initial strategy - offensive, defensive or transitional.

We will risk a lot - to save a life

We will risk a little - to save property

We will risk nothing - to save lives or property already lost

An ***offensive strategy*** is an aggressive interior fire attack. The top priority is the rescue of trapped victims. The second priority is to contain the fire to the room or area of origin. Because the District desires to limit the number of fires that spread beyond the room of origin and to limit fire related deaths and injuries, the aggressive offensive attacks are utilized whenever possible.

A ***transitional strategy*** is utilized in the face of changing resource levels or changing fire conditions this allows the strategy to change as resources change. A *defensive > offensive* transitional attack may be utilized while awaiting the arrival of sufficient resources to safely mount an offensive attack, or to temporarily reduce hazardous conditions within the structure. These conditions are described as *immediately dangerous to life and health* (IDLH) conditions, which mean unprotected people will not survive the environment. Conversely, an *offensive > defensive* transitional strategy may be employed when fire progress renders a building unsafe for continued interior operations.

A ***defensive strategy*** is one that allows for no interior fire attack. No attempts are made to rescue civilian victims because in circumstances where defensive tactics are warranted, victims are presumed to be beyond rescue. All fire fighting is performed from the exterior of the structure and the goal is to contain the fire to that structure or geographical area of origin.

Emergency Medical Responses - Strategies for emergency medical responses are based on medical protocols. Life threatening medical and trauma issues dictate short scene times and rapid transport to the closest appropriate medical facility. Individually, these responses may require few resources, but collectively can commit the District's entire on-duty staff for a short time or for several hours.

80 percent (%) of Black Butte Ranch Fire District requests for emergency responses are for emergency medical incidents. These calls vary greatly in severity and complexity. They typically range from a single patient with a minor medical problem (cut finger, sprained ankle, fever) to an auto accident with 1-3 critically injured patients. The fire district provides first response emergency medical services and ambulance transportation. Ambulances are staffed with at least one Paramedic and one EMT.

Black Butte Ranch Fire District provides the equipment required to initially treat a cardiac arrest patient on all of the ambulances. All firefighters and EMS responders are trained in the use of this equipment. Black Butte Ranch Fire District has established responses to match the level of severity and complexity of each medical emergency. The responses range from a single rescue unit for a minor medical emergency, to multiple units for a mass casualty incident (MCI), such as a traffic accident with multiple patients.

The first fire officer on scene amends the response once conditions have been assessed. Conditions considered include, but are not limited to, number of patients, severity of injuries, trapped victims requiring extrication, hazardous materials involvement, traffic control and

difficult access situations, such as a car over an embankment.

Establishment of an Effective Response Force

Minimum staffing levels for all fire apparatus have also been established. The duty officer or incident commander may use their discretion and allow units to respond with less than minimum staffing when needed. As an example, the minimum staffing for an engine is three. However, an engine may respond with four to six firefighters. Minimum staffing is used in this deployment standard as the least possible staffing for each fire unit, on each critical task and is therefore the worst case scenario.

CRITICAL TASKING

Critical Tasks are tasks that must be conducted in a timely manner by firefighters at emergency incidents in order to save lives, control the situation, stop loss, or perform the necessary tasks required in medical emergency situations. The fire district is responsible for assuring that responding companies are capable of performing all of the described tasks in a prompt, efficient and safe manner.

Critical Tasking for Fire Operations - is to provide the necessary number of personnel and equipment, so that the appropriate strategy goals for the situation can be met. On all incidents, the Incident Commander will act as the Safety Officer until sufficient personnel are on scene to delegate the task to another trained individual.

The *Initial Attack* - is determined by the Incident Commander's chosen strategy. Incident command is determined or established by the first arriving fire company. Initial support is those tasks/functions required to support the initial attack strategy to a successful conclusion.

If the objective of the initial attack is not met, then the operation moves into the extended attack phase. This phase generally requires the addition of more resources to support the change in tactics needed to preserve lives, control the incident, or stop the loss. Hostile fire situations are dynamic events and often require Incident Commanders to deal with changes as they occur.

**CRITICAL TASKING FOR STRUCTURE FIRES:
OFFENSIVE FIRE ATTACKS**

Structure Fire - Imminent Life Saving Rescue ONLY!

(This situation assumes it is possible to save a life - considering the risk. This is the one situation when safety of firefighters may be worth the risk, as determined by the Incident Commander based on available personnel)

TASKS	NUMBER OF FIREFIGHTERS
Incident Command	1
Pump Operator	1
Interior Operations	2
OR - OSHA <i>Minimum for life-saving rescue</i>	<i>(2 in - 2 out, minimum to attempt rescue) Total 4</i>

RESIDENTIAL STRUCTURE FIRE - Offensive Attack

TASKS	NUMBER OF FIREFIGHTERS
Incident Command	1
Pump Operator	1
Interior Operations (2 interior)	2
Backup Operations (2 nd line - assist Interior)	
Rapid Intervention Team (RIT - 2 out)	Conditionally met with (IC, Pumper Operator)
Minimum for Offensive Fire Attack	TOTAL 4

COMMERCIAL STRUCTURE FIRE - Offensive Attack (Stage 1)

(Assumes the size of structure is significantly larger than a residence)

TASKS	NUMBER OF FIREFIGHTERS
Incident Command	1
Pump Operators	1
Water Supply	
Operations Officer (Division Supervisor)	
Interior Operations (2 interior)	2
Backup Operations (2 nd line - assist Interior)	
Rapid Intervention Team (RIT - 2 out)	
Minimum for Offensive Fire Attack	TOTAL 4

COMMERCIAL STRUCTURE FIRE - Offensive Attack (Stage 2 and 3)

(Assumes the size of structure is significantly larger than a residence)

TASKS	NUMBER OF FIREFIGHTERS
Incident Command	1
Pump Operators	2
Water Supply	1
Operations Officer (Division Supervisor)	1
Interior Operations (2 interior)	2
Backup Operations (2 nd line - assist Interior)	2
Rapid Intervention Team (RIT - 2 out)	2
Minimum for Offensive Fire Attack	TOTAL 11

COMMERCIAL STRUCTURE FIRE - Offensive Attack (Stage 4)

(Assumes the size of structure is significantly larger than a residence)

TASKS	NUMBER OF FIREFIGHTERS
Incident Command	1
Pump Operators	3
Water Supply	1
Operations Officer (Division Supervisor)	2
Interior Operations (2 interior)	4
Backup Operations (2 nd line - assist Interior)	2
Rapid Intervention Team (RIT - 2 out)	2
Minimum for Offensive Fire Attack	TOTAL 14

All of the above Critical Tasks for OFFENSIVE FIRE ATTACKS assume the least number of firefighters needed to attempt an **Offensive Fire Attack Strategy**. Many factors such as risk to firefighters, probability of success in controlling the fire, firefighting water supply water, and is the benefit greater than the risk are being evaluated by the incident commander. Large structures with the potential to become uncontrollable may require more resources than the fire district can effectively muster - these potential situations will become red flags to incident commanders.

<p style="text-align: center;">CRITICAL TASKING FOR STRUCTURE FIRES: <u>DEFENSIVE FIRE ATTACKS</u></p>

Defensive fire attacks of structure fires assume that either resource are inadequate to attempt an interior fire attack strategy, or that the potential risks to firefighter safety is too great. A decision to attack a fire defensively will also be dictated by the stage of fire growth upon arrival. Another potential reason for choosing the defensive tactic would be based off the number of trained responders who have assembled on scene. In all situations where the risks out-weigh the benefits, the incident commander will decide to adopt a **Defensive Fire Attack Strategy**. This strategy is a more conservative approach and attempts to minimize the loss to the structure of origin. Unfortunately, it also assumes that no life-saving rescues will be attempted.

STRUCTURE FIRE - Initial Defensive Attack - 1 Fire Engine minimum staffing

(This situation assumes 1 engine with the minimum staff on exterior of structure)

TASKS	NUMBER OF FIREFIGHTERS
Incident Command	1
Pump Operator	1
Firefighter	1
Minimum Initial Defensive Attack (allows for 1 exterior hose-line)	TOTAL 3

COMMERCIAL STRUCTURE FIRE - Defensive Fire Attack

(Assumes the size of structure is significantly larger than a residence)

TASKS	NUMBER OF FIREFIGHTERS
Incident Command	1
Safety Officer	
Pump Operators	1
Water Supply	
Fire Attack & Exposure Protection (3 small hose lines or 2 large hose lines)	
For an Effective Defensive Fire Attack	Total 2

<p>CRITICAL TASKING FOR WILDLAND FIRE RESPONSES</p>
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There is a wide variety of incidents involving brush and Wildland fires and like structure fires there is also a variety of fire districts responses to these incidents. Simple slow-moving brush fires may only require one Brush Unit, while Wildland fires in forested or interface areas may require resources beyond the fire district’s capability.

SINGLE BRUSH UNIT/SQUAD RESPONSE - *Minimum Staffing*

<i>TASKS</i>	<i>NUMBER OF FIREFIGHTERS</i>
Fire Officer/Engine Boss	1
Driver/Firefighter	1
TOTAL	2

WILDLAND FIRE RESPONSE - *Initial Fire Attack*

(Assumes a Wildland fire that has significant potential)

<i>TASKS</i>	<i>NUMBER OF FIREFIGHTERS</i>
Incident Command	1
Fire Officer/Engine Boss	1
Pump Operator	1
Firefighters	2
Minimum for Initial Wildland Fire Attack	Total 5

<p>CRITICAL TASKING FOR EMERGENCY MEDICAL INCIDENTS</p>
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Critical Tasking for Emergency Medical Operations - is to provide the necessary number of personnel and tasks needed to support the incident. This consists of performing the following tasks according to AHA and ECEMS protocols.

Non-Life Threatening Category:

Non-life threatening situations are those such as simple fractures, sprains, or medical checks.

EMERGENCY MEDICAL INCIDENTS - Non-life Threatening Incidents

<i>TASKS</i>	<i>NUMBER OF FIREFIGHTERS</i>
Rescue/Squad	2
Minimum for 1 BLS Patient	2*

* Minimum level of training requires at least one EMT and a Certified AHA CPR Driver

EMERGENCY MEDICAL INCIDENTS - Life Threatening Incidents

<i>TASKS</i>	<i>NUMBER OF FIREFIGHTERS</i>
Incident Command	Senior Paramedic
Rescue/Squad	2
Minimum for 1 ALS Patient	2

With life threatening incidents the fire district's goal is to provide a Paramedic on each incident.

This level of EMS training provides a higher level of skills for managing a patient's airway, breathing and circulation. Not all members of the Fire District are trained to the Level of Paramedic. There may be times when a response may be delivered by an EMT.

<p>CRITICAL TASKING FOR MOTOR VEHICLE ACCIDENTS</p>
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MOTOR VEHICLE ACCIDENT - Minimum Staffing for Injury Accidents

(Presumes limited injuries, patients and uncomplicated extrication)

<i>TASKS</i>	<i>NUMBER OF FIREFIGHTERS</i>
Incident Command	1 (Fire Officer)
Pump Operator	1
Patient Triage, Treatment, Transport	1
Minimum for 1 injured/trapped victim	Total 3

MOTOR VEHICLE ACCIDENT - Injury Accident with Multiple Patients

(Presumes 3 or more patients with serious injuries and possible extrication needed)

<i>TASKS</i>	<i>NUMBER OF FIREFIGHTERS</i>
Incident Command	1
Pump Operator	1
Firefighters for Scene Safety	2
Patient Triage, Treatment, Transport	*2
Extrication	*2
Multiple seriously injured/trapped victims	Total 8

* Number of total personnel may be made up from mutual aid support.

**CRITICAL TASKING FOR
RESCUES OR TECHNICAL RESCUES**

RESCUES AND TECHNICAL RESCUES (water and rope) - Single Victim Rescue

(Presumes Rescue Only - NO SEARCH)

<i>TASKS</i>	<i>NUMBER OF FIREFIGHTERS</i>
Incident Command	1
Extrication/Technical Rescue	Mutual Aid / Outside resources
Firefighters for Rescue Support	
Patient Treatment	2
Single victim needing Rescue	Total 3

**CRITICAL TASKING FOR
LIGHT RESPONSES**

Critical Tasking for Other Calls for Service - the fire district receives a significant number of calls for service which do not fit into the above described critical tasks. These include investigation of hazardous situations, public assists, illegal burns, automatic alarms, chimney fires, vehicle fires and other minor requests for assistance. Most of these situations have a predetermined 9-1-1 dispatch response. However, based on the circumstances the Duty Officer, Incident Commander, or Dispatcher has the discretion to determine the appropriate response for assistance. Therefore, the response may be 1 Duty Officer, 1 Rescue (minimum of 2 people), or 1 Fire Engine (minimum) for these response situations based on dispatch or size-up information.

These responses include public assists, investigation of hazard, burning complaints, trash fires and other calls for assistance. Often the duty officer will handle these calls without assistance and on other occasions one fire engine will respond with the duty officer. Black Butte Ranch Fire District will request the most appropriate apparatus based on the type of call. As an example, a controlled illegal burn may have an engine (minimum staffing-3) or a brush unit (minimum staffing-2). This will depend upon the conditions found by the duty officer.

<p>CRITICAL TASKING FOR HAZARDOUS MATERIAL INCIDENTS</p>

Hazardous material incidents can vary greatly, from a small spill to large tanker trucks over turned. The fire district is trained to the Awareness and Operations Level. This Awareness and Operations Level is the basic Haz Mat training required of firefighters in Oregon. The training prepares firefighters to be aware and recognize Haz Mat situations, isolate the area and call for technically qualified Haz Mat Teams for incident mitigation. The actual clean-up will require private contractors and a considerable period of time to restore the occupancy or environment.

HAZARDOUS MATERIALS INCIDENT - *Initial Response*

<i>TASKS</i>	<i>NUMBER OF FIREFIGHTERS</i>
Incident Command	1
Responding Personnel	2
Minimum for Initial Haz Mat Response	Total 3