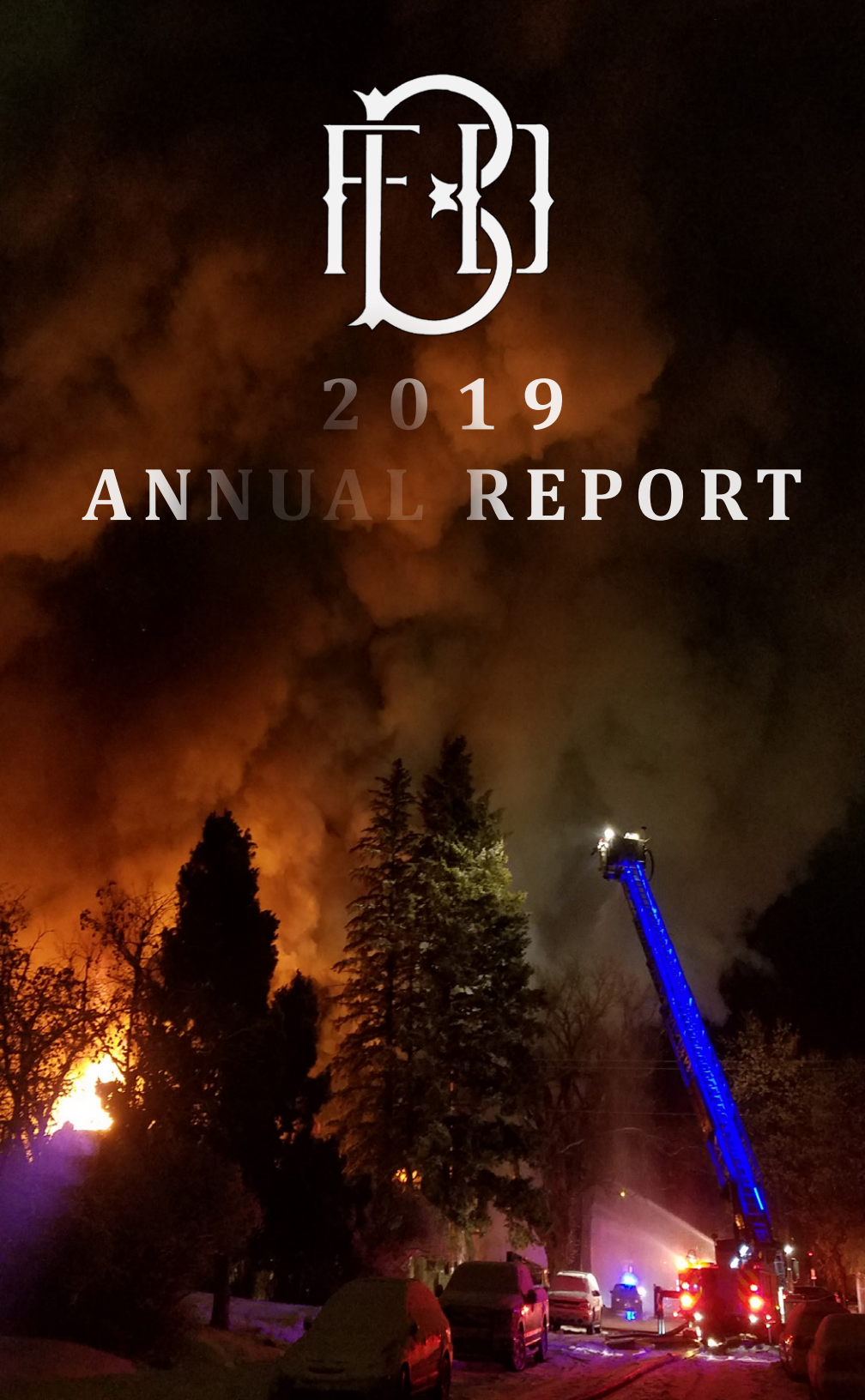




2019

ANNUAL REPORT



## MISSION

*Problem Solving Through Professionalism  
and Compassionate Service since 1884*

## VISION

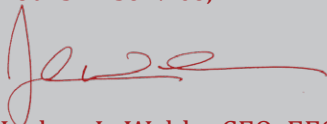
*We will provide exceptional service as a unified team to promote  
a professional department that grows with the community*

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## MESSAGE FROM FIRE CHIEF JOSH WALDO

The Bozeman Fire Department completed its 135th year of service in 2019 and the members of the fire department are as proud to serve our community as those firefighters were in 1884. There have been a tremendous number of changes in the department as the community has grown and we know there are many more changes to come. The following report will show that 2019 was another year full of growth and progress for the fire department. The department saw a new record number for call volume, accomplished new training benchmarks, and continued our work towards excellence within our service. We continue to use the 2017 Fire Protection Master Plan and the 2019 Fire Department Strategic Plan as our guiding documents in meeting the needs of the community. The department has made good strides in accomplishing several of the objectives outlined in these plans and looks to continue this implementation in 2020. I am proud of the accomplishments made in the last year and look forward to continuing to serve our community in the upcoming year. On behalf of the men and women of the Bozeman Fire Department, I am happy to present you with our 2019 Annual Report.

Yours in service,



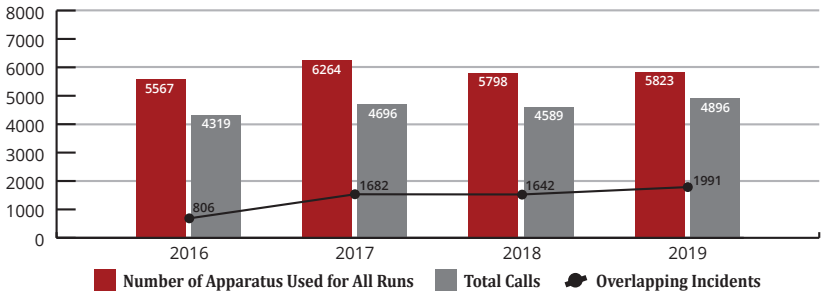
Joshua L. Waldo, CFO, EFO  
Fire Chief



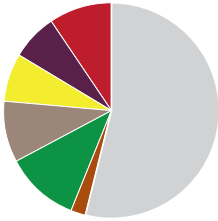
The Bozeman Fire Department is comprised of 50 members, 49 sworn and 1 civilian, who provide the following services to the community:

- Fire Suppression
- Emergency Medical Services
- Hazardous Materials Response
- Technical Rescue Response  
(confined space, trench, rope, ice, and collapse)
- Wildland Fire Response
- Fire Protection Systems Plans Review
- Car Seat Check and Installation
- Fire Inspection
- Fire Investigation
- Public Education
- Emergency Planning and Preparedness

## INCIDENT NUMBERS



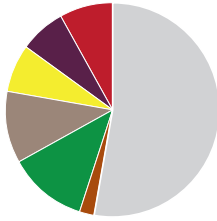
## RESPONSE BREAKDOWN



### 2017

- Fire (2%)
- EMS (53%)
- Vehicle Accidents (9%)
- Service Calls (7%)
- Good Intent Calls (9%)
- False Calls (11%)
- Hazardous Condition (7%)

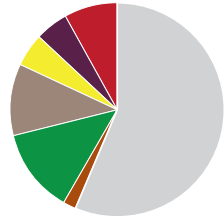
TOTAL RUNS: 6,264



### 2018

- Fire (2%)
- EMS (53%)
- Vehicle Accidents (8%)
- Service Calls (7%)
- Good Intent Calls (11%)
- False Calls (12%)
- Hazardous Condition (7%)

TOTAL RUNS: 5,798



### 2019

- Fire (2%)
- EMS (57%)
- Vehicle Accidents (8%)
- Service Calls (5%)
- Good Intent Calls (11%)
- False Calls (13%)
- Hazardous Condition (5%)

TOTAL RUNS: 5,823

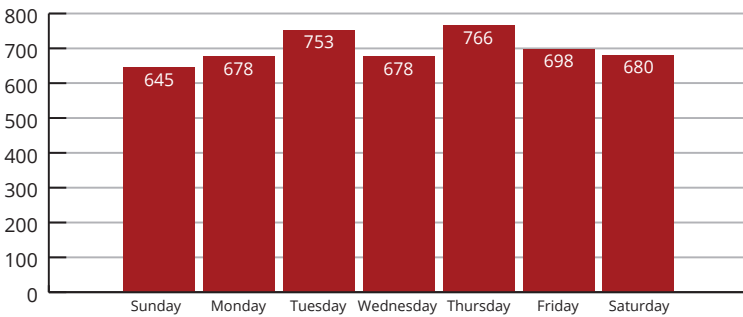
When a request for fire department response is made, an incident is created in the computer aided dispatch (CAD) system. Depending on the type of incident, the number of fire department apparatus / units that respond will vary. Incidents are different from runs, as each incident can create a number of different run totals. For most EMS type events, a single apparatus would run the incident, whereas a fire alarm at a nursing home would trigger three fire apparatus to run on the incident. It is important to track the total number of runs that a department makes as it is a more accurate reflection of the workload on the emergency response system. The fire department has made multiple adjustments in our deployment plans to ensure a response to incidents that is in line with industry standards and best practices. On the facing page are the total number of runs each primary unit made in 2019.

## OVERLAPPING INCIDENTS

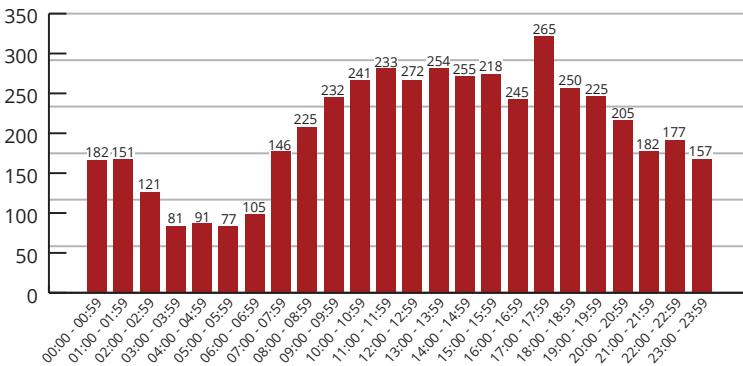
2019 — 1,991 (41%) 2018 — 1,700 (37%) 2017 — 1,682 (36%)

Overlapping incidents occur when the department has more than one incident response going at the same time. This is an important data point to track as some incidents require more than one fire department unit to respond. Having two or more calls overlapping at the same time could result in a situation where not enough units are available for response or units experience extended response times as they are responding across town to cover additional calls.

### CALLS FOR SERVICE BY DAY OF THE WEEK



### CALLS FOR SERVICE BY HOUR OF THE DAY



### TOTAL NUMBER OF RUNS OF EACH PRIMARY UNIT

Engine 1 - 1,967

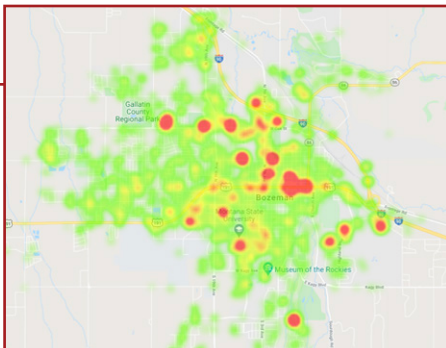
Truck 3 - 1,189

Engine 2 - 1,959

Battalion 1 - 448

*Does not include all apparatus, only the primary in service units.*

Heat map showing call distribution for 2019



## RESPONSE TIMES

An emergency response can be broken down into numerous segments or intervals of an event. To measure emergency response times, the fire department uses two standards from the National Fire Protection Association (NFPA) for benchmarking and evaluating emergency response times.

- NFPA 1221, 2019 Edition: *Standard for the Installation, Maintenance, and Use of Emergency Services Communications Systems*
- NFPA 1710, 2020 Edition: *Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Career Fire Departments*

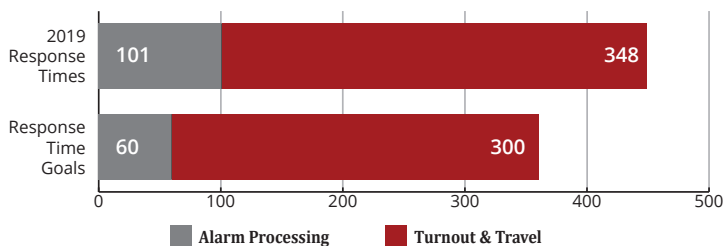
These two standards allow the fire department to measure the time from a call being answered by the 911 center until a fire department unit arrives on scene to provide service. To measure our performance, the department evaluates the following time intervals of an emergency call.

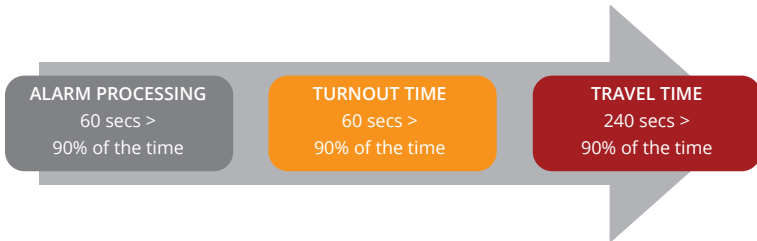
**Alarm Processing Time:** The time interval from when the alarm is acknowledged at the communication center until response information begins to be transmitted via voice or electronic means to emergency response facilities and emergency response units.

**Turnout Time:** The time interval that begins when the emergency response facilities and emergency response units notification process begins by either an audible alarm or visual annunciation or both and ends at the beginning point of travel time.

**Travel Time:** The time interval that begins when a unit is enroute to the emergency incident and ends when the unit arrives at the scene.

## AVERAGE RESPONSE TIME IN SECONDS





NFPA provides the following recommendations for emergency response times:

Alarm Processing from NFPA 1221 states, “emergency alarm processing for the highest prioritization level emergency events shall be completed within 60 seconds, 90 percent of the time”. NFPA 1221 goes on to define the highest prioritization level calls to be the following:

- Trauma
- Neurologic emergencies
- Cardiac-related events
- Unconscious / unresponsive patients
- Allergic reactions
- Patient not breathing
- Choking
- Fire involving or potentially extending to a structure(s)
- Explosion
- Other calls as determined by the Authority Having Jurisdiction (AHJ)

For 2019 the average call processing time for calls that the department responded emergent on was **1:41 or 101 seconds**. The 90th percentile for this same period was **3:12 or 192 seconds**.

Once a call has been answered, processed, and dispatched, NFPA 1710 states that

- The fire department should have an 80 second turnout time for fire and special operations response and 60 second turnout time for EMS response”.
- The fire department should have a “240 seconds or less travel time for the arrival of the first engine company at a fire suppression incident”.
- The fire department should have a “240 seconds or less travel time for the arrival of a unit with a first responder with automatic external defibrillator (AED) or higher-level capability at an emergency medical incident.

For 2019 the average combined turnout and travel time for calls that the department responded emergent on was **5:48 or 348 seconds**. The 90th percentile for this same period was **8:57 or 537 seconds**.



## **NEW RECRUIT FIREFIGHTERS**

The fire department brought on 6 new members of the fire department in 2019. These positions were to fill existing vacancies from retirements and to add one member to each shift as part of a change is the department work schedule. This represents the largest number of employees brought on by the department at one time in the department's history.

## **STATION ALERTING SYSTEM**

The department implemented the use of the Phoenix G2 Station Alerting system for notification of responders of an emergency. The system replaced the use of alpha numeric pagers and provides faster and more reliable means of notification. Additionally the system offers notification of specific stations for calls which improves the overall response time of crews to emergencies.

## **CONTINUITY OF OPERATIONS PLANNING (COOP) WITH MSU**

The fire department, along with other city departments, joined MSU in a joint partnership to develop a continuity of operations plan (COOP). As the City of Bozeman and Montana State University have a long standing relationship, it made sense to develop a plan that could continue this relationship and leverage existing partnerships and resources for this planning effort. COOP plans address how organizations will continue to provide mission critical functions in the event of an emergency.



## UTV

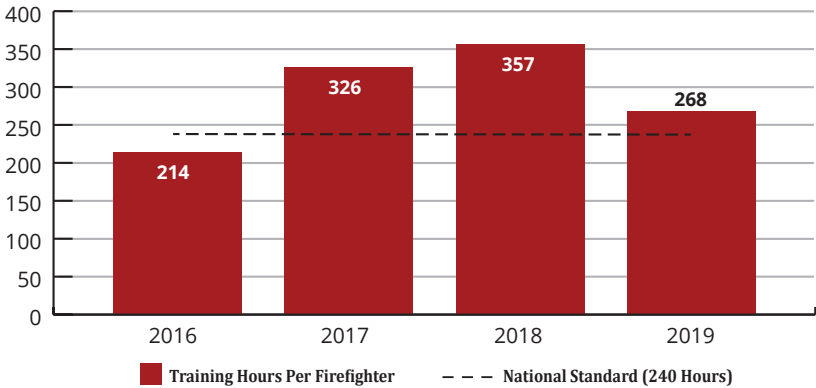
As the needs and circumstances of emergency response continue to change in our community, the fire department continues to look for new ways to answer those requests. From large public events on main street to responses occurring in natural areas of the community, sometimes a fire engine is not the best tool for these responses. The department has implemented a utility vehicle (UTV) that can be used to answer emergencies where a fire engine may not be able to. The UTV can be used for a number of applications including EMS and wildland fires.



## WILDLAND TRAINING PROGRAMS

The department implemented new personnel protective equipment in 2018 as part of a FEMA grant and spent 2019 training with this new equipment to ensure that members meet the minimum standards of the National Wildland Coordinating Group (NWCG). NWCG standards establish common practices and requirements that enable efficient and coordinated national interagency wildland fire operations.

## TOTAL TRAINING HOURS



The Bozeman Fire Department strives to ensure that its members are trained to meet or exceed consensus national standards and best practices. In 2019 the department logged **11,553 hours of training total** or **268 hours per member**. The 11,553 hours exceed the required minimums set by the Insurance Service Office and the National Fire Protection Association by over 1,200 hours.

Some key components that contributed to our training numbers for 2019 were the completion of several key training programs by our members,

- Acquired structure training
- New recruit firefighter academy
- Wildland Firefighter
- Enhancements to our Technical Rescue training





The department has several training goals for 2020 as members will have the ability to move on to Fire Officer II and will begin the process of obtaining national certifications for all of our Engineers via the Montana Fire Service Training School. The department continues to pursue professional certifications and professional credentials for our members and currently has 11 members who hold professional designations via the Center for Public Safety Excellence. The department's goal is to ensure that each member receives 240 hours of training per calendar year to meet the requirements of the Insurance Service Office (ISO) and the National Fire Protection Association (NFPA).

### PROFESSIONAL CERTIFICATIONS (2016 →2019)

Firefighter I - 62% → 100%

Firefighter II - 38% → 100%

Fire Instructor I - 9% → 100%

Fire Officer I - 9% → 100%

### PLANNED TRAINING EFFORTS FOR 2020

Fire Officer II - 9% → 100%

Pumper Driver / Operator - 0% → 100%

Aerial Driver / Operator - 0% → 100%



The Bozeman Fire Department has a full service fire prevention and community risk reduction division that provides services such as plans review, inspections, fire investigation, public fire education, car seat installation, and many other public programs. The fire department prevention and risk reduction programs are under the supervision of the Deputy Chief – Fire Marshal, who is assisted by three full-time fire inspectors and support from firefighters assigned to emergency response.

The department conducts plans review of all new commercial buildings constructed in the city and completes onsite inspections of these buildings to ensure code compliance during construction.

<b>NUMBER OF PLANS REVIEWED</b>			
2016:	415	2018:	770
2017:	383	2019:	694

**NUMBER OF INSPECTIONS COMPLETED**

2016:	1,734	2018:	2,348
2017:	2,678	2019:	5,083

**NUMBER OF CAR SEATS INSTALLED OR CHECKED: 92**

**NUMBER OF COMMUNITY OUTREACH EVENTS: 118**



The Fire Protection Master Plan was updated in 2017 by the Center for Public Safety Management. The plan resulted in 42 recommendations that were broken down into 3 phases for implementation. An implementation guide was created from the master plan to provide quick reference to recommendations from the plan. The entire plan can be viewed by visiting our website at [www.bozeman.net/government/fire](http://www.bozeman.net/government/fire). The following shows the status of recommendations from the master plan,

**GREEN — Complete    Yellow — In Progress    White — Not Started**

<b>PHASE I — IMMEDIATE</b>	(Within 6 months of plan adoption)
During the remaining term of the current labor agreement, the city and the fire union should consider an amendment or side agreement that formalizes the Kelly Day arrangement. (Recommendation 1, p.9)	
In future negotiations with the IAFF, the city should pursue the elimination of the Kelly Day and move to a 56-hour workweek for all line fire personnel. (Recommendation 2, p.9)	
Bozeman should review its interpretation of “in paid status” when considering overtime eligibility for 53-hour fire personnel and consider the exclusion of any leave time as hours worked when calculating overtime eligibility. (Recommendation 3, p.12)	
BFD should consider the expansion of program management duties for field personnel and utilize these assignments for career development and consideration in promotional testing. (Recommendation 4, p.13)	
BFD should institute a periodic meeting forum (weekly/monthly/quarterly) to discuss departmental initiatives and new directives. The forum should include all on-duty members of the organization and chief officers and should be conducted through an internet based conference calling or video conferencing application. (Recommendation 5, p.14)	
BFD should improve and expand the use of the employee performance appraisal process in the career development of all personnel. (Recommendation 7, p.15)	

BFD should work with the city's Human Resources office to institute periodic and post-accident drug testing for all fire personnel. (Recommendation 8, p.15)

The City should consider a restructuring of supplemental pay for EMT-Basic, EMT-Advanced, and Paramedic in future negotiations with the IAFF Local 613. (Recommendation 9, p.54)

Bozeman should consider the relocation of Fire Stations 1 and 2 to address the significant structural and design issues related to these aging structures and to better position these resources to serve the burgeoning growth that is occurring in the southwestern areas of the city. (Recommendation 12, p.18)

The Bozeman Fire Department should continue its efforts to implement a prefire planning process for all target hazards and ensure these documents are stored in the onboard mobile data terminals (MDTs) for ease of accessibility by company and chief officers during a response. (Recommendation 19, p.42)

BFD should work with the 911 dispatch center to develop a monthly report that identifies the distribution of emergency and nonemergency response activities for both fire and EMS responses. (Recommendation 25, p.51)

BFD should continue to work with the 911 Dispatch Center to implement a pre-alerting system for fire and EMS notifications. (Recommendation 28, p.67)

BFD and the 911 Dispatch Center should work cooperatively on efforts to improve dispatch handling and turnout times for emergency responses. (Recommendation 29, p.74)

The 911 dispatch center should institute a regular program that tests the transfer of its operations to its alternate 911 center located within the City/County Emergency Coordination Center. (Recommendation 31, p.91)

BFD should pursue, through its contractual arrangement with AMR, expanded joint training activities and cooperative purchasing agreements for medical equipment. (Recommendation 33, p.55)

The Fire and Building Departments should re-assess their coordination of work assignments of the two Building Fire Life Safety Specialists to insure the clarity of direction and prioritization of assignments. (Recommendation 34, p.80)

The BFD should establish a training steering committee composed of Battalion Chiefs, Captains, Drivers, Firefighters, and EMS staff to conduct a training needs assessment, develop priorities, and provide direction regarding the training efforts of the department. (Recommendation 38, p.85)

BFD should consider assigning a designated rank to the Training Officer that is consistent with the authority and duties assigned to this position. (Recommendation 39, p.85)

BFD should designate a Fire Captain on each shift to serve as the shift training coordinator to help facilitate in-service training activities, both for fire and EMS. (Recommendation 41, p.86)

BFD should continue in its effort to institute online training software to assist in the coordination and monitoring its training efforts. (Recommendation 42, p.86)





**PHASE II — SHORT TERM**

(Within 6–18 months of plan adoption)

Bozeman should establish a practice that institutes the regular scheduling of promotional testing processes for Driver Engineer and Captain. (Recommendation 6, p.14)

BFD should implement a series of performance measures that enable ongoing review of service outcomes. The process of developing these measures should utilize input from BFD members, the community, the Mayor and City Commission, and city administration. (Recommendation 10, p.77)

The City should officially designate an alternative Emergency Management Director and ensure that this individual is fully trained and well versed in the duties of the Emergency Management Director. (Recommendation 11, p.88)

The City and Montana State University should explore the option for a joint fire station / training facility on the university campus. (Recommendation 14, p.29)

The City should adopt a fire apparatus replacement schedule that includes an evaluation process that takes into account vehicle age, miles/hours of usage, maintenance records, and historical repair costs. (Recommendation 15, p.32)

The Bozeman-Gallatin County Emergency Management Plan should include department and agency critical action checklists. (Recommendation 21, p.88)

The Bozeman-Gallatin County Emergency Manager should lead an effort for every city and county department to develop a Continuity of Operations Plan (COOP). (Recommendation 22, p.88)

BFD should expand the effectiveness of its interagency cooperation with mutual aid partners through increased joint training activities, annual multi-agency drills, and move-up operations. (Recommendation 23, p.45)



BFD should work with the 911 dispatch center and the EMS ambulance provider to develop methodologies that improve the call screening process in order to alter response patterns when calls are determined to be minor or nonemergency. (Recommendation 24, p.50)

BFD and AMR should evaluate options for jointly staffing a peak-period ambulance squad to supplement both the city's and AMR's current deployment of resources. (Recommendation 26, p.55)

The 911 Dispatch Center should adopt dispatching performance measures and these should be reported to both fire and city administration on a monthly basis. (Recommendation 32, p.91)

BFD should expand the fire loss determination and damage assessment training for its company officers and fire investigators. (Recommendation 37, p.83)

The Bozeman Fire Department should institute written and practical skills testing as part of the department's comprehensive fire training program. (Recommendation 40, p.86)

**PHASE III — LONG TERM**

(Within 2–5 years of plan adoption)

Relocate Station 1 north to N. Rouse Ave. and E. Oak St.  
(Recommendation 13, p.26)

BFD should consider the assignment of vehicle apparatus maintenance and recordkeeping to an existing Driver Engineer as a project management assignment.  
(Recommendation 16, p.34)

BFD should consider the relocation of its fire training structure to a more appropriate location and a possible colocation at a fire station site. (Recommendation 17, p.87)

Continue to use the VISION product to conduct a community risk assessment and analyze/utilize the results in the planning of fire station locations, apparatus needs, and staffing requirements. (Recommendation 18, p.38)

Bozeman should pursue CPSE fire accreditation in the future. (Recommendation 20, p.42)

BFD should move to a permanent cross-staffing model for the operation of its ladder truck with the AMR medic unit assigned to Station 3. (Recommendation 27, p.58)

The City of Bozeman should work through the 911 Dispatching Cooperative to take the steps necessary to ensure that the 911 Dispatch Center operates with a dedicated 911 Call Taker. (Recommendation 30, p.90)

BFD should develop an integrated risk management plan that focuses on structure fires throughout the community.  
(Recommendation 35, p.49)

The City should redesign and update the business licensing system so that information regarding each occupancy is correctly listed and retrievable through this data base.  
(Recommendation 36, p.80)



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## **RETIREES**

Captain Sean Grabbe  
1998 -2019

Captain Ray Johnson  
1999 - 2019

Fire Inspector Jack Coburn  
2001 - 2019

## **PROMOTIONS**

Captain Josh Charles

Captain Joe Capri

Engineer Dillon Smith

Engineer Jason Frounfelker

## **NEW HIRES**

Firefighter / Paramedic Cameron Gallegos

Firefighter / Paramedic Samantha Shepherd

Firefighter / Paramedic Ryan Greenwell

Firefighter / EMT Gabrielle Walker

Firefighter / EMT Forrest Vogel

Firefighter / EMT Thomas Bates

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**STATION 2**  
410 S. 19th Ave.



**STATION 1**  
34 N. Rouse Ave.



**STATION 3**  
1705 Vaquero Parkway

**BOZEMAN**<sup>MT</sup>

FIRE DEPARTMENT

34 N. Rouse Ave.

Bozeman, MT 59715

(406) 582-2350