



2020

ANNUAL REPORT



MESSAGE FROM FIRE CHIEF JOSH WALDO

The year 2020 brought many new challenges to the fire department, some that none of us had experienced in our careers or lifetimes. The complexity of the COVID-19 global pandemic and wildland fire activity in the Bozeman area with the Bridger Foothills Fire were two large events that required the use of our training, planning, and partnerships like never before. These large-scale events coupled with the traditional duties of the fire department taxed resources and asked more of our firefighters, partners, and community than ever before. I am proud of the work of our members and the partnerships that helped us safely navigate through these challenges, while continuing to enhance our department

and leadership in the region and state. While we cannot forecast all of the challenges and opportunities that lie ahead of us, the work of our organization in 2020 reaffirms my confidence that we are prepared to handle whatever comes our way.

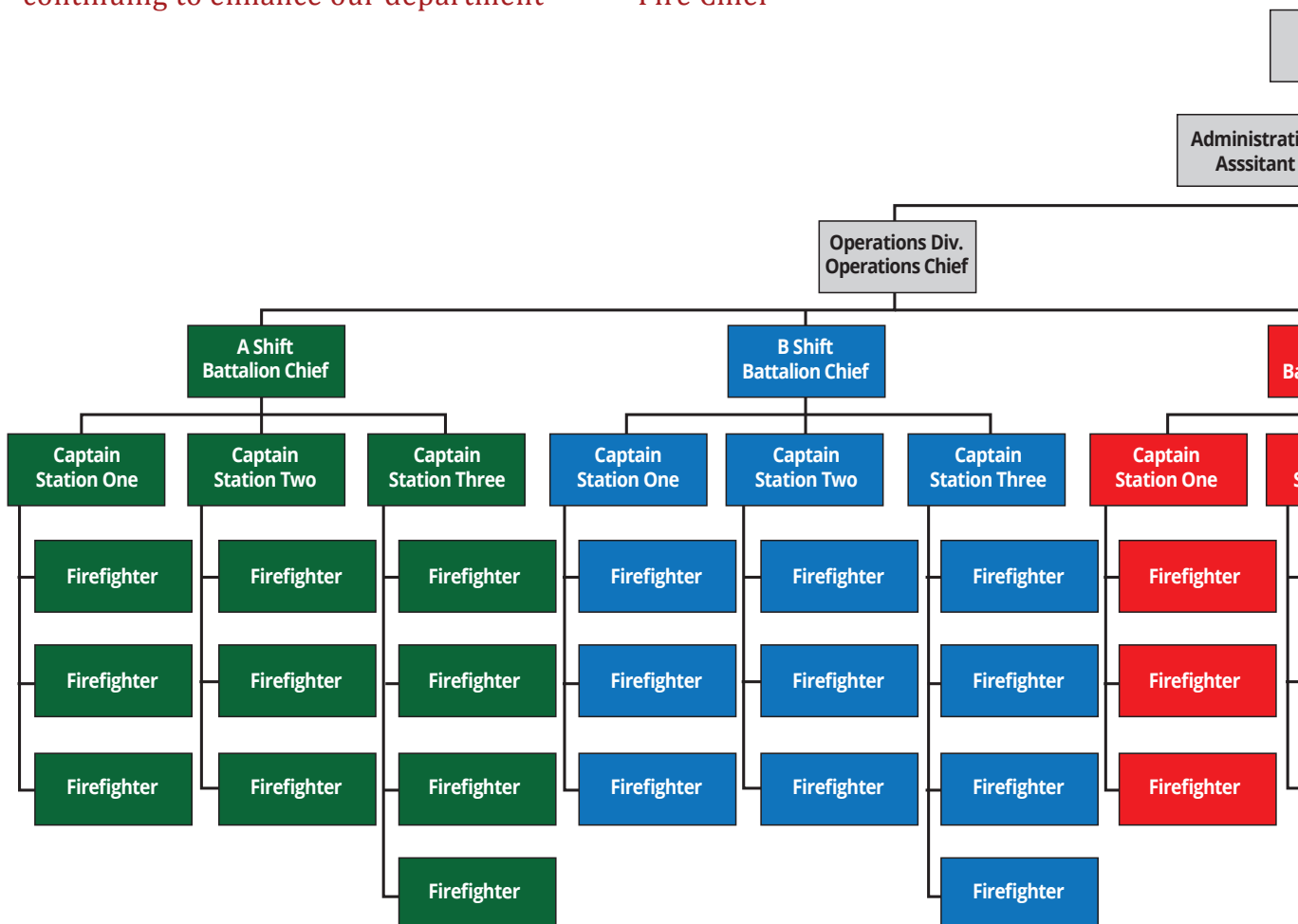
On behalf of the men and women of the Bozeman Fire Department, I am happy to present you with our 2020 Annual Report.

Yours in service,



Joshua L. Waldo, CFO, EFO
Fire Chief

2



MISSION

Problem Solving Through Professionalism
and Compassionate Service since 1884

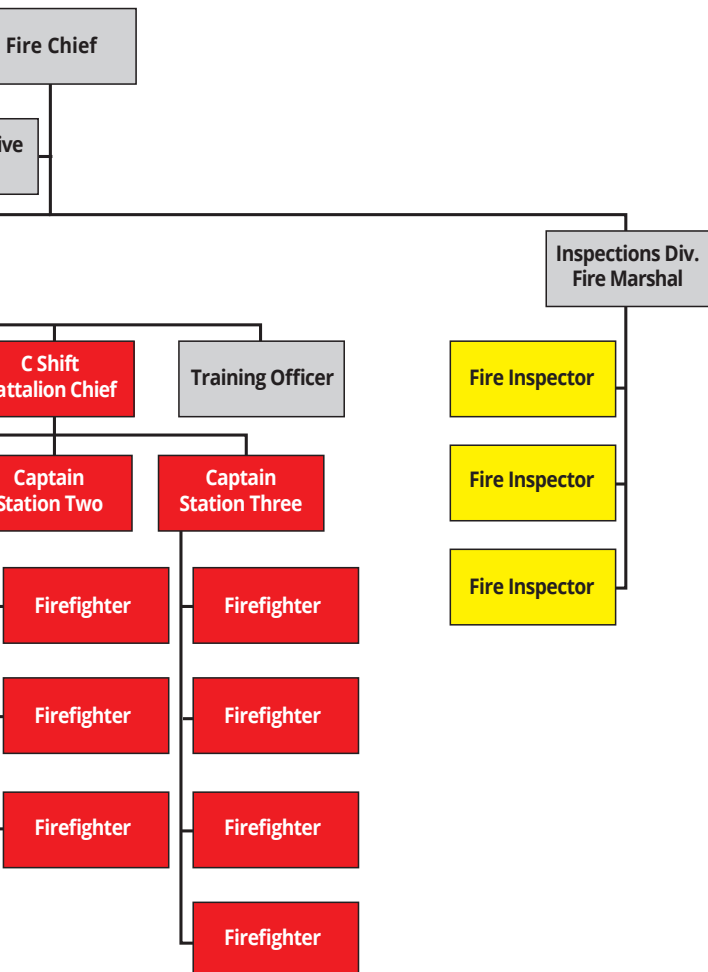
VISION

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

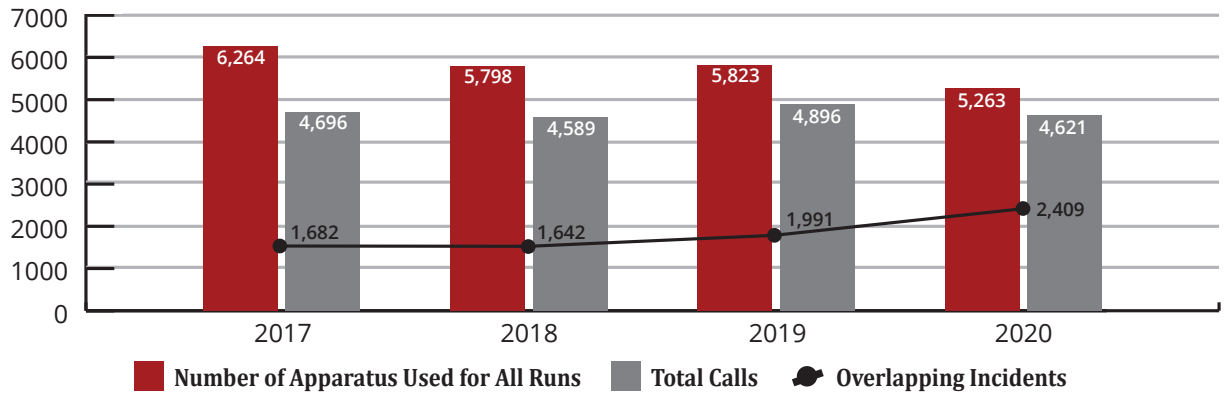
ORGANIZATIONAL CHART

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

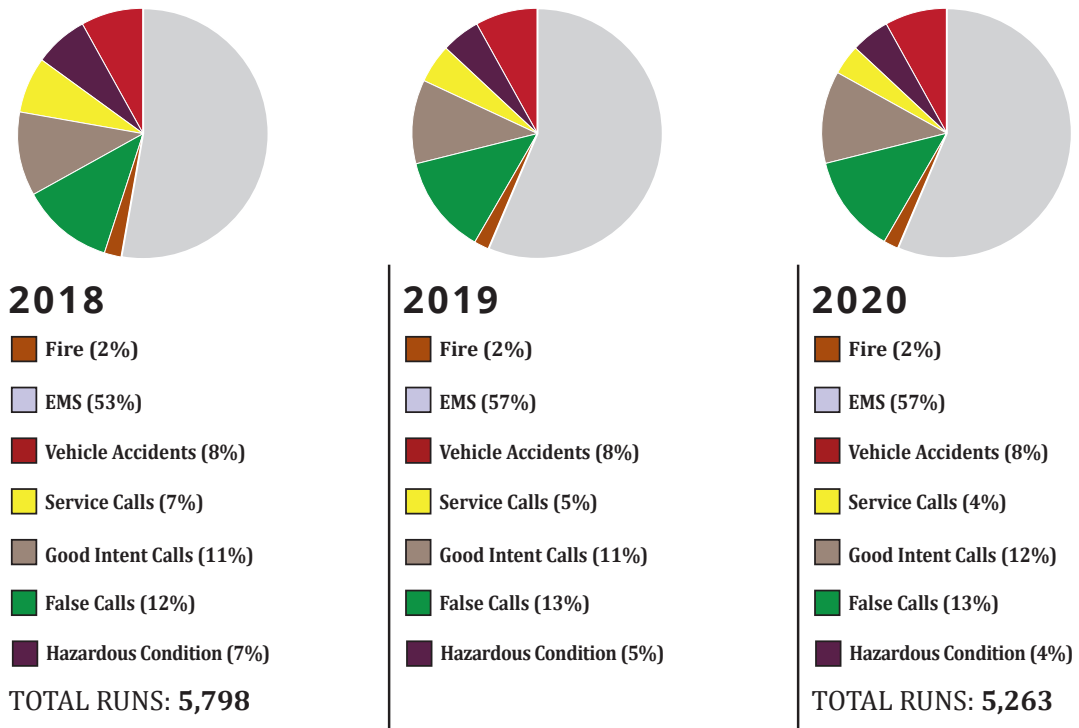
- Fire Suppression
- Emergency Medical Services
- Hazardous Materials Response
- Technical Rescue Response (confined space, trench, rope, ice, and collapse)
- Wildland Fire Response
- Fire Protection Systems Plans Review
- Car Seat Check and Installation
- Fire Inspection
- Fire Investigation
- Public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



INCIDENT NUMBERS



RESPONSE BREAKDOWN



4

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.

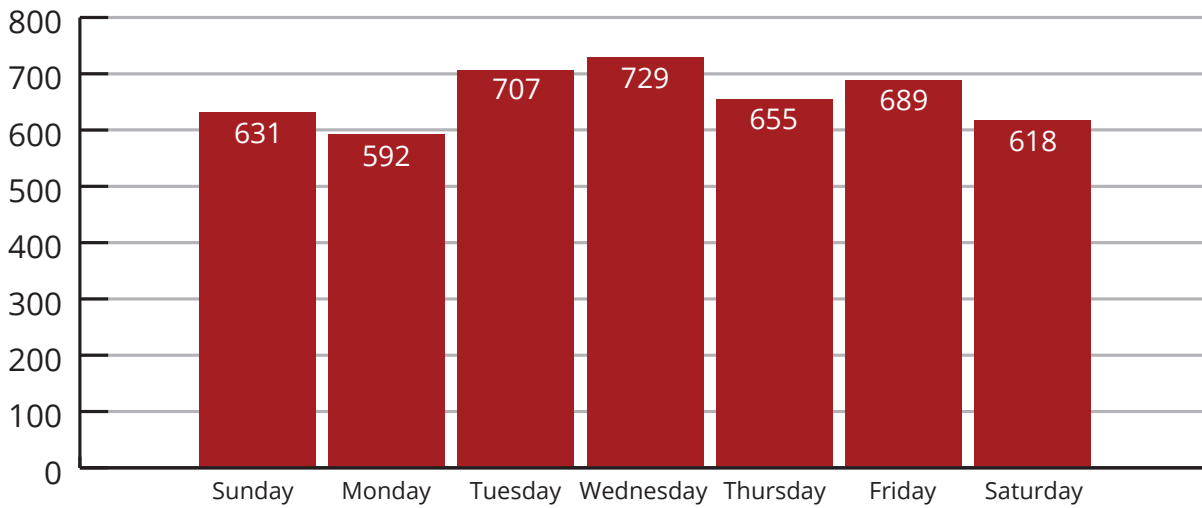
OVERLAPPING INCIDENTS

2020 — 2,409 (52%) 2019 — 1,991 (41%) 2018 — 1,700 (37%)

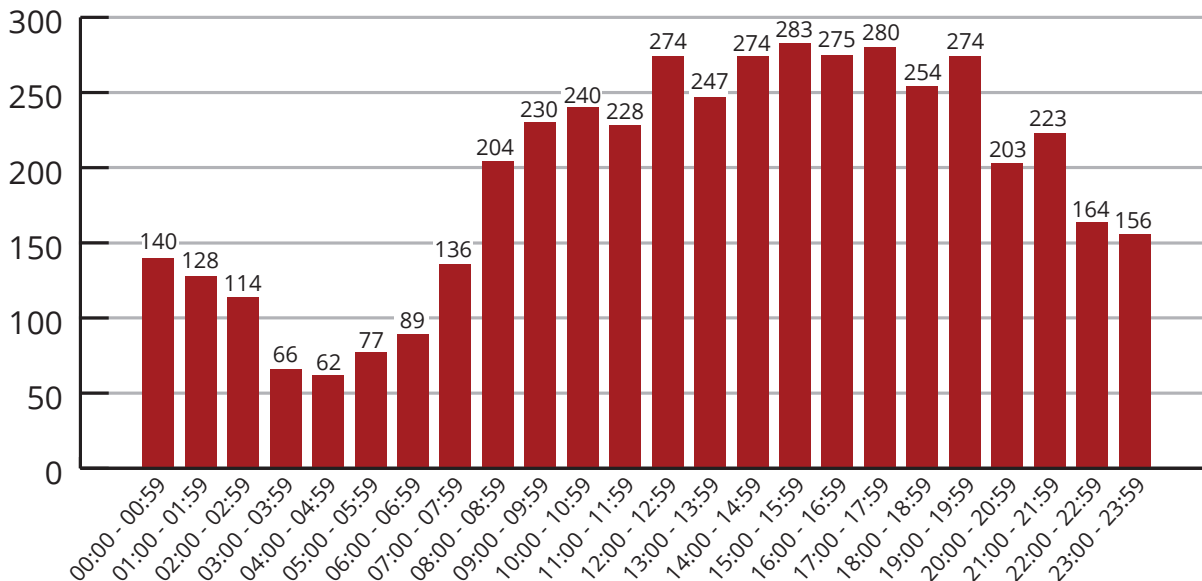
Overlapping incidents occur when the department has more than one incident response going at the same time. This is an important data point to track as some incidents require more than one fire department unit to respond. Having

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



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.

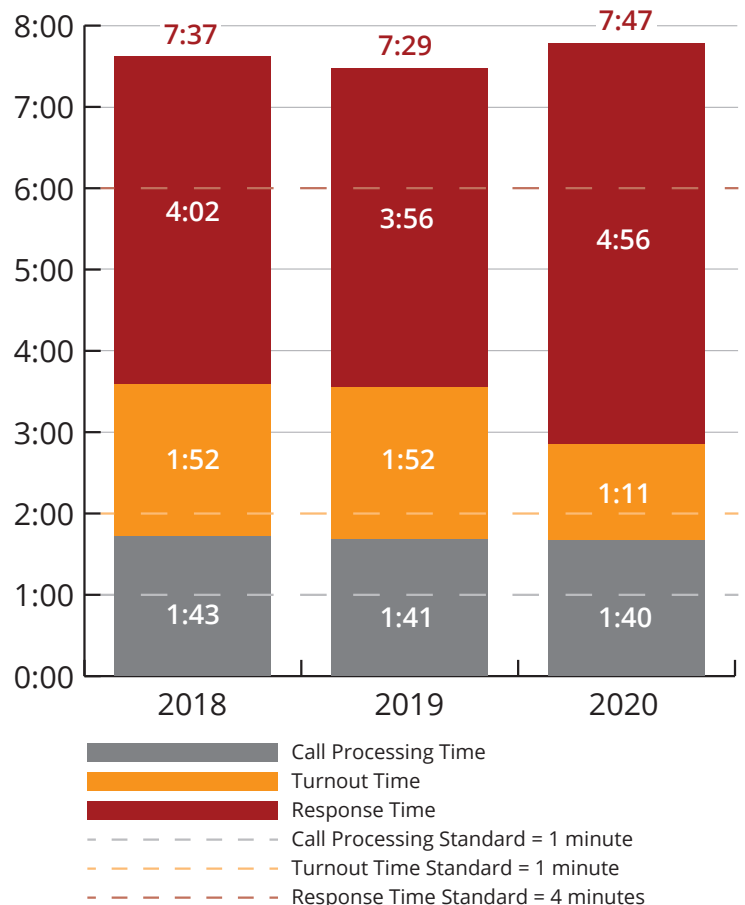
Travel Time: The time interval that begins when a unit is enroute to the emergency incident and ends when the unit arrives at the scene.

6

TOTAL NUMBER OF RUNS OF EACH PRIMARY UNIT

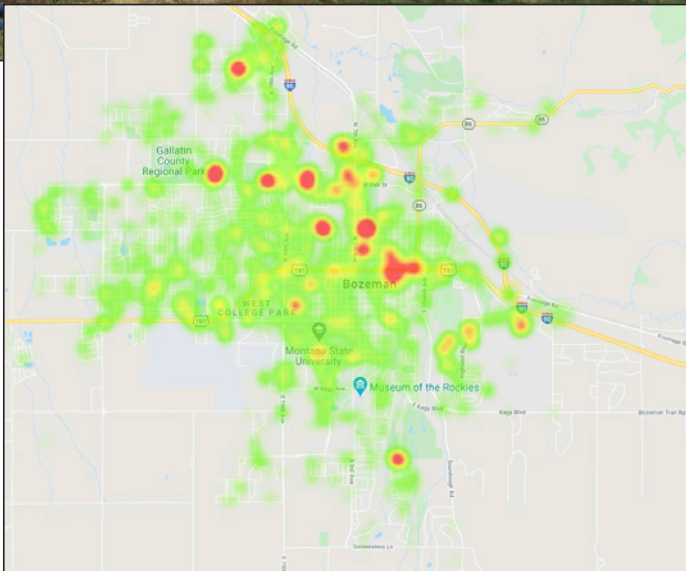
Engine 1 – 1,737
 Engine 2 – 1,632
 Engine 4 – 313
 Truck 3 – 1,055
 Battalion 1 – 298

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





HEAT MAP SHOWING CALL DISTRIBUTION



ALARM PROCESSING

60 secs >
90% of the time

TURNOUT TIME

60 secs >
90% of the time

TRAVEL TIME

240 secs >
90% of the time



COVID-19

The fire department navigated the challenges of continuing to provide services to the community in the middle of a global pandemic. Multiple fire department personnel engaged in local, regional, and statewide incident command systems to lead planning and response efforts to the

COVID-19 pandemic. Multiple adjustments were made in response protocols, personal protective equipment, and medical procedures to continue necessary medical treatments while keeping responders and the public safe.

8

EMERGENCY MEDICAL DISPATCH PROTOCOLS

The department implemented the use of Emergency Medical Dispatch (EMD) protocols. The implementation of these EMD protocols is another step to ensure that the appropriate unit and the appropriate number of units are dispatched to calls at the appropriate

response level. These nationally adopted protocols not only improve unit availability, keeping fire trucks in service for more critical calls, but they improve responder and public safety by ensuring consistent and appropriate levels of response.



PROVIDED SUPPORT TO THE BRIDGER FOOTHILLS FIRE

The Bridger Foothills Fire was one of the largest wildland fires experienced by the Bozeman community in several decades. While the fire was not located within the city limits of Bozeman, the fire department supported operations at the fire in various ways including Incident Command,

operational support, and firefighting crews. As the fire stretched available fire resources thin in the entire Gallatin Valley, BFD was able to provide support to this community event while continuing to provide services in the city.

NEW BRUSH TRUCK

The fire department, via a partnership with Montana Department of Natural Resources and Conservation (DNRC), placed in service an additional brush truck. The fire department provided

the truck chassis and DNRC provided the firefighting skid. The hybrid vehicle provides the fire department with a second wildland apparatus for use both in the city and surrounding county areas.



CARDIAC MONITOR REPLACEMENT

The department updated all of its cardiac monitors in 2020. The new cardiac monitors continue to allow for interoperability with EMS providers and

hospital staff in our community while also providing new patient enhancements by allowing our paramedics to monitor carbon monoxide in the blood system.

10





INSTALLED ON-BOARD DIESEL FILTERS

The department installed on-board diesel filters on all of the diesel apparatus to improve firefighter safety both in and out of the station. The on-board filters replace the previous system used by the department, which were station mounted

and only provided exhaust filtration when the apparatus were in the station. The new filters provide exhaust filtration anytime the diesel engines are running, which is also beneficial in the city's sustainability efforts.

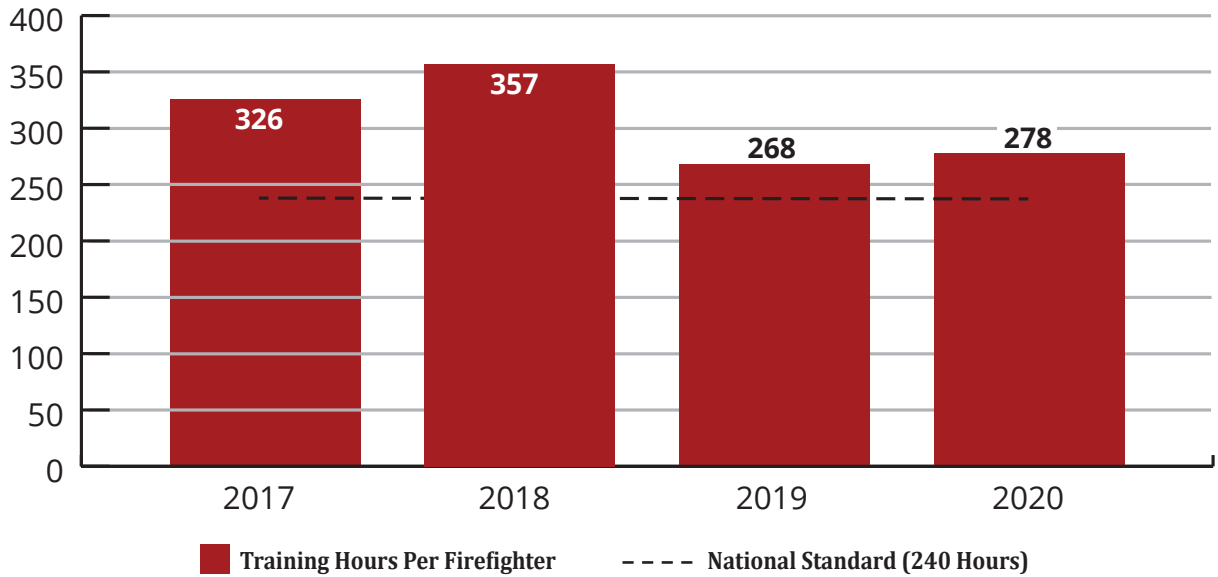
NEW EXTRICATION EQUIPMENT

The department purchased new extrication equipment for all of the fire engines and ladder truck. The new equipment is 100% electric as opposed to the older equipment that was powered by truck mounted pumps and hoses. The new equipment is far more

portable than previous equipment, making it easier for firefighters to access patients who are trapped or pinned. The equipment standardizes the department fleet and replaces equipment that ranged anywhere from 10 – 25 years old.



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 2020 the department logged **11,676 hours of training total**, or **278 hours per member**. The 11,676 hours exceed the required minimums set by the Insurance Service Office and the National Fire Protection Association by nearly 1,600 hours.

The department has several training goals for 2021 and we will continue to pursue national certifications for all of our members via the Montana Fire Service Training School. The department continues to pursue professional certifications and professional credentials and currently has 13 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).





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 on-site inspections of these buildings to ensure code compliance during construction.

NUMBER OF PLANS REVIEWED			
2017:	383	2019:	694
2018:	770	2020:	716



NUMBER OF INSPECTIONS COMPLETED

2017: 2,678

2019: 5,083

2018: 2,348

2020: 6,660

NUMBER OF CAR SEATS INSTALLED OR CHECKED: 50

NUMBER OF COMMUNITY OUTREACH EVENTS: 17



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. The boxes on the right show the status of recommendations from the master plan.

PHASE I — IMMEDIATE	(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)	

GREEN	Complete	YELLOW	In Progress	WHITE	Not Started
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<p>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)</p>
<p>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)</p>
<p>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)</p>
<p>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)</p>
<p>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)</p>
<p>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)</p>
<p>BFD should pursue, through its contractual arrangement with AMR, expanded joint training activities and cooperative purchasing agreements for medical equipment. (Recommendation 33, p.55)</p>
<p>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)</p>
<p>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)</p>
<p>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)</p>
<p>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)</p>
<p>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)</p>



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)



RETIREES

Captain Joel Fassbinder

NEW HIRES

Firefighter / EMT Colter Dimas



PROMOTIONS

Captain Jared Ridgeway
Engineer Cody Wetmore
Engineer Tim O'Tool
Fire Inspector David Kulbacki





STATION 1
34 N. Rouse Ave.



STATION 2
410 S. 19th Ave.



STATION 3
1705 Vaquero Pkwy.

BOZEMAN^{MT}

FIRE DEPARTMENT

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Bozeman, MT 59715
(406) 582-2350