Bozeman Fire Department

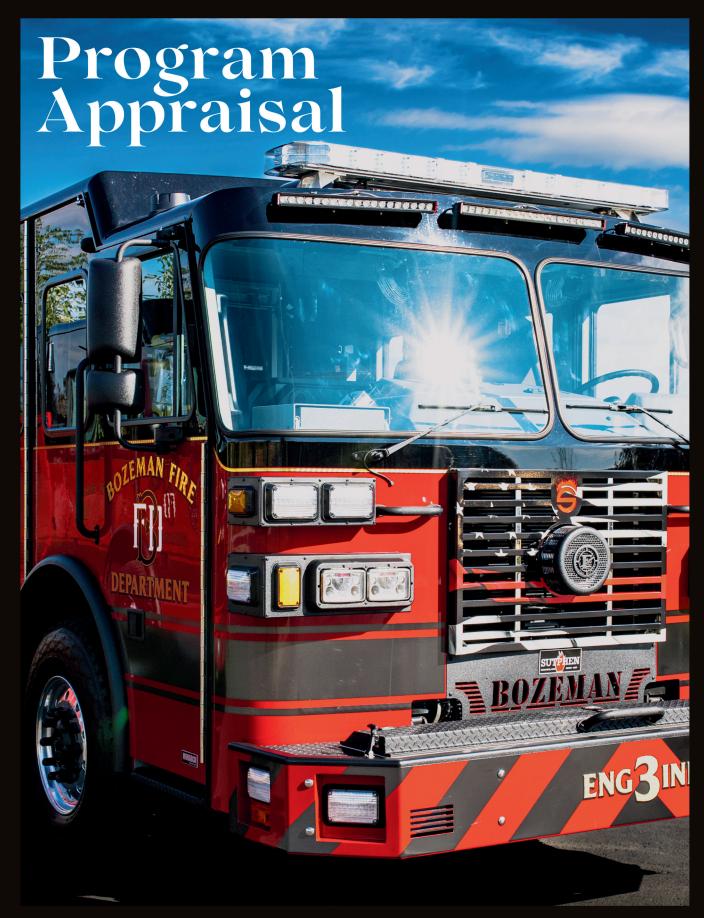


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https://www.bozeman.net/departments/fire

Annual Program Appraisal

Program: Communications Program

Category/PI: 9B (1-13)

Program Manager: ire Chief Josh Waldo

Date: 10/27/2023

Program Description

• Summary:

The communications program creates and dispatches calls for service to the BFD through Gallatin County 911 Dispatch Center. The program also includes the use and maintenance of radio communications systems, department notification systems, and CAD interfaces.

Program Resources

• Staffing:

Bozeman ire does not employ any communications program staff.

• Facilities:

Bozeman ire does not manage any communications program facilities.

• Special equipment:

Portable, Mobile and base station radio systems.

Mobile Data Terminals in responding apparatus.

• Finances/Budget:

\$55k for MDT replacements, station alerting, Zuercher contract, etc.

Program guidance:

- Standards of Cover/Community Risk Assessment:
- Improve reliability of MDT, AVL, and other systems to support improved data collection and dispatch reliability.
- Work with Gallatin County Dispatch to expand the system to include fire/EMS dedicated call-takers and dispatchers.
 - As the call volume and service demand increase, it will strain the Gallatin County Dispatch Center.
 The department should take proactive approaches to expand the center to dedicate resources to handle fire and EMS call processing.
 - 2022-2025 Strategic Plan/Strategic Initiatives:

Strategic Initiative 1: Community Risk Reduction

Objective 4: Update emergency management and communications

Critical Task: Develop an emergency communications plan to push critical messages to the community.

- Related Standard Operating Procedures/Standing Orders:
 SOP 802.01 Radio Operations
- Related self-assessment performance indicators:
 - CC 9B.1 A <u>system is in place to ensure communications</u> with portable, mobile, and fixed communications systems <u>in the field</u>. When an area is identified as not being capable of adequate emergency scene communications, such as inside buildings or below grade level, an operational plan is written.
 - 9B.2 The emergency communications system is <u>capable of receiving automatic and/or manual</u> early warning and other emergency reporting signals.
 - 9B.3 The agency's <u>communications center(s)</u> is/are adequately equipped and designed (e.g., security, telephones, radios, equipment status, alarm devices, computers, address files, dispatching circuits, playback devices, recording systems, printers, consoles, desks, chairs, lighting, and map displays).
 - 9B.4 The <u>uninterrupted electrical power supply</u> for the primary communications equipment in the communications center is reliable and tested and has automatic backup capability.
 - 9B.5 <u>Adequate numbers of fire or emergency telecommunicators, supervisors and management personnel</u> are on duty to handle the anticipated call volume.
 - 9B.6 A <u>maintenance program</u> is in place with regularly scheduled and documented system tests.
 - 9B.7 The agency has established <u>time-based performance objectives for alarm handling</u>. These objectives are formally communicated to communications center managers through direct report, contracts, service level agreements and/or memorandums of agreement and are reviewed at least annually to ensure time-based performance objectives are met.
 - 9B.8 <u>Communications training programs</u> for emergency telecommunicators and emergency response personnel ensure adequate, timely, and reliable agency emergency response.
 - 9B.9 The interoperability of the communications system is documented, tested and evaluated.

The agency has processes in place to provide for interoperability with other public safety agencies in the field including portable, mobile and fixed communications systems, tools and equipment.

9B.10 The dispatch process utilizes a <u>formal and recognized emergency medical dispatch (EMD)</u> <u>system</u> that allows for <u>pre-arrival instructions</u> and adequate triaging of medical calls for service.

9B.11 The agency has a documented and tested system in place for the <u>notification and recall of off-duty agency personnel and telecommunicators</u> for unplanned, large-scale incidents.

9B.12 The agency has a <u>documented plan</u>, <u>which is reviewed and tested annually</u>, to ensure continuity in communicating during any partial or total disruption or failure of a communications system or facility.

CC 9B.13 A <u>formal and documented appraisal is conducted</u>, at <u>least annually</u>, to determine the effectiveness of the emergency communications systems and their impact of meeting the agency's goals and objectives.

- Program mandates (training hours, maintenance needs): $\ensuremath{\mathsf{N}/\mathsf{A}}$
- Goals from previous program appraisal: N/A

Previous year data

• Staff hours (Training, response, service delivery, etc):

N/A

• Response Data (Alarm handling, turnout times, travel time, total response time):

Call tables will be updated at the end of 2023

• Service delivered (Call volume, public contacts, etc.):

Call tables will be updated at the end of 2023

• Trends:

N/A

Program results/outcomes

• Key Accomplishments:

Implemented a new radio system
Implemented Pulse Point notification system
Adopted Blue Card training for dispatchers

- Obstacles encountered:
 - nadequate staffing to meet the demands of the system.
 - nadequate alarm handling to meet the goals of the system.
 - New county wide radio system is unable to dispatch on designed channel.
 - County departments are slow to progress to technology needed to implement system as designed.

Evaluation

- Program goals and objectives:
 - Continue to work with communications system in order to improve alarm handling times.
 - Continue integration of new county wide radio system.
 - Support County in the acquisition and onboarding of critical staff.
 - Develop Bozeman ire specific plan to implement new radio system.
- Needed adjustments (new SOPs, budget increase, training course, etc):
 - Review and revise SOP 801.01
 - Implementation of new SOP created to define emergency callback for large scale incidents.



https://www.bozeman.net/departments/fire

Annual Program Appraisal

Program: Domestic Preparedness Program

Category/PI: 5D (1-9)

Program Manager: ire Chief Josh Waldo

Date: 10/27/2023

Program Description

• Summary:

Domestic preparedness is the plans and procedures in place in the event of a large scale disaster in the community. This includes the creation and maintenance of planning documents, acquisition of necessary resources and interlocal agreements, as well as building relationships with area partners.

Program Resources

• Staffing:

All B D employees

• Facilities:

All B D Facilities

• Apparatus:

All B D Apparatus

Program guidance:

- Standards of Cover/Community Risk Assessment:
- Consider significant event staffing planning including community events, weather events, and other stresses on the system.
 - Certain events can stress the response system and create overlapping calls for service, which in turn can increase travel times and decrease response zone reliability.
 - 2022-2025 Strategic Plan/Strategic Initiatives:

Objective 4: Update emergency management and communications. (CSP 1.2 & MPR 11, 21, & 22) Critical Tasks - Develop position description, in coordination with community preparedness, to fulfill emergency management and communications responsibilities. - Develop an emergency communications plan to push critical messages to the community. - Review and update current emergency planning documents and Bozeman Fire's roles and responsibilities.

Objective 3: Enhance internal communications. (CSP 7.3d & MPR 5 & 38) Critical Tasks - Establish a continuity of operations plan for necessary programs. - Develop internal communications improvement strategy. - Conduct annual climate surveys and create follow up strategy.

Strategic Inititaive III

Objective Develop position description and plan for Community Preparedness Position.

• Related Standard Operating Procedures/Standing Orders:

SOP 1001.01 DES/OEM notification

• Related self-assessment performance indicators:

CC 5D.1 The agency maintains a <u>local emergency operations/all-hazards plan</u> that defines roles and responsibilities of all participating departments and/or external agencies. The agency participates in maintaining and revising the plan with the AHJ.

5D.2 The agency <u>complies with</u> the National Incident Management System, or other appropriate incident management system, and its operational methods are compatible with all external response agencies.

5D.3 The agency has a <u>process in place for requesting</u> additional resources not readily available in the community served.

5D.4 The agency has processes to record <u>information and provide data on needed resources</u>, the scope and nature of the event, and field resources deployed to local, state/provincial, and federal agencies.

5D.5 The agency conducts and documents a vulnerability assessment and has operational plans to protect the agency's specific critical infrastructure, including but not limited to materials, supplies, apparatus, facilities security, fuel, and information systems.

5D.6 The agency has a <u>documented</u> continuity of operations plan, that is reviewed annually and updated at least every five years, to ensure essential operations are maintained.

5D.7 The agency has <u>processes in place for intelligence sharing</u> with other public safety agencies.

5D.8 The agency has a crisis communications or public information plan.

CC 5D.9 The agency conducts a <u>formal and documented program appraisal</u>, at <u>least annually</u>, to determine the program's impacts and outcomes, and to measure performance and progress in reducing risk.

Program mandates (training hours, maintenance needs):

N/A

• Goals from previous program appraisal:

N/A

Program results/outcomes

• Key Accomplishments:

N/A

• Obstacles encountered:

nadequate staffing to provide for needed program requirements.

Evaluation

Program goals and objectives:

Develop position description for community preparedness position.

• Needed adjustments (new SOPs, budget increase, training course, etc):

Increase in staffing budget to fund the Community Preparedness Position Review of SOP 1001.01

Develop plan to incorporate ICS training for essential positions City wide. (ICS 100, 200, 700, 800).



https://www.bozeman.net/departments/fire

Annual Program Appraisal

Program: Emergency Medical Services

Category/PI: 5 (1-9)
Program Manager: Josh Waldo
Date: 12/8/2023

Program Description

• Summary:

Emergency medical services is the delivery, management, and training related to calls for service related to medical emergencies.

Program Resources

• Staffing:

45 frontline response personnel

- 13 paramedics
- Facilities:

N/A

• Apparatus:

Medic 3, Bobcat 1

• Special equipment:

Cardiac Monitors, LUCAS devices, AEDS,

• Finances/Budget:

\$31k - Supplies

\$34k - Maintenance and contractual services for equipment.

\$12k - Medical Direction

Program guidance:

- Standards of Cover/Community Risk Assessment:
 - Short-Term Recommendations
 - Focus efforts on minimizing out-of-district times for all resources.
 - Work with Gallatin County Dispatch to develop an early alerting system before unit assignment.
 - Develop a move-up policy to staff high-demand zones when the home unit is on an extended event.
 - Improve reliability of MDT, AVL, and other systems to support improved data collection and dispatch reliability.

- Research third-party entities providing quality data that identifies trends and improves the BFD's reporting capabilities.
- Evaluate the availability of automatic and mutual aid departments.
- Improve mapping and preplanning.
- Consider significant event staffing planning. Include community events, weather events, and other stresses on the system.
- Work with local agencies to address construction closures and their impact on emergency services.
- Implement a robust quality assurance/quality improvement plan.
- Add additional response units to existing stations to cover districts with poor reliability.

Long-Term Recommendations

- Develop new stations and response units in the system.
- Work with Gallatin County Dispatch to expand the system to include fire/EMS dedicated call-takers and dispatchers.
- Work with area agencies to improve infrastructure, including roads and accessibility of developments.
- Expand the capability of emergency medical transport availability.
- Develop plans to upgrade training facilities and site location.

• 2022-2025 Strategic Plan/Strategic Initiatives:

- Develop position description and adopt EMS Operations position.
- Establish a Quick Response Unit.
- When completed review and work on incorporating Gallatin County EMS Study into operations.

• Related Standard Operating Procedures/Standing Orders:

- 201.04 EMT Evaluation Policy
- 201.05 New Paramedic Evaluation Policy
- 502.01 Minimum Initial Response Guidelines
- 502.04 Response to Violent Incidents
- 502.08 Incident Reporting
- 505.02 EMS Documentation
- 505.03 EMS Communications
- 505.04 Controlled Substance Security Plan
- 505.05 EMS Re-stocking
- 505.08 AMR Safety Net
- 505.08B Medic 3 Haz-mat & SRT responses
- 505.09 Medic Deployments
- SO 194 EMS run report review
- SO 231 Ambulance Staffing
- Gallatin County EMS Protocols 2021
- MT State EMS Protocols

• Related self-assessment performance indicators:

- CC 5F.1 Given the agency's community risk assessment/standards of cover and emergency performance statements, the <u>agency meets its</u> staffing, response time, station(s), apparatus, and equipment <u>deployment objectives</u> for each type and magnitude of <u>emergency medical incident(s)</u>.

- CC 5F.2 The agency has <u>standing orders/protocols in place</u> to direct EMS response activities to meet the stated level of EMS response including determination criteria for specialty transport and receiving facility destination.
- 5F.3 The agency <u>annually reviews and updates</u>, as needed, orders/protocols and engages external stakeholders in the process.
- CC 5F.4 The agency has <u>online and offline medical control</u>.
- CC 5F.5 The agency creates and maintains a patient care record, hard copy or electronic, for each patient encountered. This report records a provider impression, patient history, data regarding treatment rendered, and the patient disposition. The agency must make reasonable efforts to protect reports from public access and maintain them as per local, state/provincial, and federal records retention requirements.
- CC 5F.6 The agency has a <u>program to maintain compliance with privacy laws</u> such as the Health Insurance Portability and Accountability Act (HIPAA) or equivalent (e.g., Canada's Freedom of Information and Protection of Privacy) that meets federal and state/provincial guidelines. All personnel are trained in HIPAA/FOIP regulations and procedures.
- 5F.7 The agency has a <u>quality improvement/quality assurance (QI/QA)</u> program in place to improve system performance and patient outcomes including provisions for the exchange of patient outcome data between the agency and receiving facilities.
- 5F.8 The agency <u>has implemented or developed a plan</u> a cardiopulmonary resuscitation (CPR) and public access defibrillation program for the community.
- CC 5F.9 The agency conducts a <u>formal and documented program appraisal</u>, at <u>least</u> <u>annually</u>, to determine the impact, outcomes and effectiveness of the program and to measure its performance toward meeting the agency's goals and objectives.
- Program mandates (training hours, maintenance needs):

NREMT 2016 NCCP Training Requirements

- 40 hours biannually for EMT Basic
- 50 hours biannually for Advanced EMT
- 60 hours biannually for Paramedic
- Goals from previous program appraisal: N/A

Previous year data

- Staff hours (Training, response, service delivery, etc): 1,272 total hours (26/member average) from 11/30/2022-11/30/2023
- Response Data (Alarm handling, turnout times, travel time, total response time):

EMS - Low 90th Percentile Times Baseline Performance		2020-2022	2022	2021	2020	
Alarm Handling	Pick-up to Dispatch	Urban	2:44	2:18	2:49	2:11
Turnout Time	Turnout Time 1st Unit	Urban	1:36	1:40	1:34	1:40
Travel Time	Travel Time 1st Unit Distribution	Urban	5:50	5:53	5:46	5:54
Total Response Time	Total Response Time	Urban	10:01	9:58	10:02	9:50
	1st Unit on Scene Distribution		n=3,297	n=1,099	n=1,147	n=1,051

EMS - Medium 90th Percentile Times Baseline Performance		2020-2022	2022	2021	2020	
Alarm Handling	Pick-up to Dispatch	Urban	2:28	2:29	2:32	1:45
Turnout Time	Turnout Time 1st Unit	Urban	1:31	1:23	1:41	2:10
Travel Time	Travel Time 1st Unit Distribution	Urban	5:26	6:04	5:04	5:07
	Travel Time ERF Concentration	Urban	6:36	6:44	6:01	5:51
	Total Response Time 1st Unit on Scene	Urban	8:58	8:58	8:32	7:38
Total Response Time	Distribution	Orban	n=98	n=45	n=27	n=26
	Total Response Time ERF	Urban	10:27	10:36	10:06	9:43
	Concentration	n=71	n=35	n=20	n=16	

• Service delivered (Call volume, public contacts, etc.):

1,937 EMS related calls (non-MVA) from 11/30/2022-11/30/2023

• Trends:

- Training and onboarding new paramedics
- Reduced EMS responses (approximately 500 fewer responses in 2023 than in the previous year)
- Increase to the number of EMS calls related to homelessness.

• Injuries, Exposures, Property damage:

- 2022 Claims
 - o 4 EMS related claims, 1 of which followed up with treatment (lifting patient).
 - o No exposures

Program results/outcomes

Key Accomplishments:

- Delivered Covid and flu vaccines
- Delivering narcan training for city staff.
- City staff training in CPR and AED.
- Two employees trained and certified as paramedics.
- Upgraded EMS equipment to increase care delivery
- Instituted training with BDH quarterly and Air Methods training.
- Increase training in rescue task force.

• Obstacles encountered:

- 272 Medic transports under the AMR safety net agreement.
- No dedicated EMS training program to maintain proficiency and certifications.
- ALS staffing cannot be provided on every apparatus and shift.
- Backorders and shortages impact equipment and medication availability.
- Lack of dedicated EMS staff to manage workload required for program objectives.
- EMS transport service provider does not meet the needs of the community. (There is no performance contract with the EMS transport provider, therefore little leverage to mandate changes
- Increase in demand for lift assist calls in care facilities stresses the system.
- Rescue Task orce has not been refined to fit the needs of the communities.

Evaluation

Program goals and objectives:

- Implement findings of 3rd party EMS study.
- Request additional funding for increase in paramedic school attendance.
- Develop job description for EMS Captain.
- Utilize technology for inventory systems control.
- Improve use of training and certification learning management system.
- Develop and implement a formal QA/QI process.
- Research and institute EMS continuing education program.
- Develop organization specific RTF principles and acquire funding for equipment and additional training.

• Needed adjustments (new SOPs, budget increase, training course, etc):

- Budget increase request for 3 members to attend paramedic school annually.
- Develop SOP based on implementation of QA/QI process.
- Increase instructor base for in-house EMS training.
- Develop RTF best practices jointly with BPD.



https://www.bozeman.net/departments/fire

Annual Program Appraisal

Program: ire Investigation

Category/PI: 5C (1-4)

Program Manager: Deputy Chief Scott Mueller, Engineer Brian Rudge

Date: 10/16/2023

Program Description

• Summary:

ire origin and cause expert witnesses through fire dynamics. Determine area of origin for all fires within the City of Bozeman per department SOP.

Program Resources

• Staffing:

Lead investigator - Brian Rudge

T – Charles, Parizon, and Hansen.

• Facilities:

BPD provided testing facilities State of Montana Laboratory

• Apparatus:

ire investigation pick up - ord F150

• Special equipment:

acepieces with filters

• Finances/Budget:

This program does not have a specific budget, it is supported through suppressions and training.

Program guidance:

• Standards of Cover/Community Risk Assessment:

N/A

• 2022-2025 Strategic Plan/Strategic Initiatives:

Strategic Initiative 3: Resource Deployment/Planning

Objective 3: Review and update resource deployment

Critical task: Review and update (...) fire investigations

• Related Standard Operating Procedures/Standing Orders:

SOP 301.04 Fire Investigations

• Related self-assessment performance indicators:

CC 5C.1 The agency's <u>fire investigation</u>, <u>origin</u>, <u>and cause program is authorized</u> by adopted statute, code, or ordinance.

CC 5C.2 The agency uses a <u>systematic approach based on the scientific method</u> to investigate all fire and explosion incidents. The investigation should determine or render an opinion as to the incident's origin, cause, responsibility and/or prevention to include the damage and injuries that arise from such incidents.

CC 5C.3 The program has <u>adequate staff with specific expertise</u> to meet the fire investigation, origin, and cause program goals, objectives, and identified community risks. CC 5C.4 The agency conducts a <u>formal and documented program appraisal</u>, <u>at least annually</u>, to determine the program's impacts and outcomes, and to measure performance and progress in reducing risk.

- Program mandates (training hours, maintenance needs):
 - Training minimum of 12 hours a year for Active Fire Investigators, Semi-Annual Meetings between Bozeman ire Investigators and Bozeman Police Investigators, and annual refresher for Line officers, Acting Officers, and Battalion Chiefs.
 - Maintenance needs keeping respiratory filters up-to-date and disposal of expired filters, personal protective gear checks to comply with NFPA 1971, obtaining current NFPA 921's when updated, and inspection of investigation rig and its equipment quarterly.
- Goals from previous program appraisal: N/A

Previous year data

- Staff hours (Training, response, service delivery, etc):
- Two members went to IAAI Fire Fighter Investigations Technician Program (47 Hours), One investigator attended IAAI Vehicle Fire Endorsement Course (34 hours), Maintained relationship with Bozeman Police Investigators, and advanced fire origin and cause analysis if needed.
- Response Data (Alarm handling, turnout times, travel time, total response time): $\ensuremath{\mathrm{N/A}}$
- Service delivered (Call volume, public contacts, etc.):
 Advanced fire origin and cause analysis provided on 3 fires.
- Trends:

N/A

• Injuries, Exposures, Property damage:

N/A

Program results/outcomes

- Key Accomplishments:
- Two new IT investigators to the team, establish better relations with neighboring departments to help benefit our country with fire investigations. Able to handle current investigation load.
- Obstacles encountered:
 - Minimal certified staffing to account for needs of the program.
 - nsufficient training for operational personnel to conduct and determine preliminary investigation needs.

Evaluation

- Program goals and objectives:
 - Increase the total number of certified fire explosion investigators by 1.
 - Institute an annual company level fire investigation training to include fire investigation SOP review.
- Needed adjustments (new SOPs, budget increase, training course, etc):
 - Review and update SOP 301.04
 - Assign fire investigation online course with SOP review through Target Solutions.
 - Add PPE for Fire Investigators including coveralls and respiratory protection.



https://www.bozeman.net/departments/fire

Annual Program Appraisal

Program: ire Suppression Program

Category/PI: 5E (1-3)

Program Manager: Operations Chief Jason Kolman

Date: 10/27/2023

Program Description

• Summary:

The fire suppression program relates to all activities related to control and extinguishment of fires, structural and wildland. This includes the operational equipment, apparatus, and personnel assigned to the BFD Operations division.

• Program subcategories:

Wildland Fire Suppression

Program Resources

• Staffing:

45 Suppression

• Facilities:

ire stations 1, 2, & 3

• Apparatus:

List apparatus

• Special equipment:

HazMat 1 for Air Support

TICs, SCBAs, Hose, Nozzles Firefighter PPE

• Finances/Budget:

\$102,300 for small tools and equipment covering hose, nozzles, tools, etc.

Program guidance:

• Standards of Cover/Community Risk Assessment:

Short-Term Recommendations

- ocus efforts on minimizing out-of-district times for all resources.
 - Develop a policy to hold shift-wide meetings and training utilizing web-based conferences when appropriate.
 - When meetings and training must be conducted with all available response personnel, Station 1 should be utilized and backfill staffing should be considered for Station 2.

- Work with Gallatin County Dispatch to develop an early alerting system before unit assignment.
 - Early notification of call type and address will enable units to start their response while dispatch continues to gather data to refine the resource package.
- Develop a move-up policy to staff high-demand zones when the home unit is on an extended event.
 - o Based on historical data, call volume in the downtown corridor exceeds other areas within the city. When Station 1 or Station 2 units are dispatched to an extended event, such as a commercial gas leak or CPR in progress call, the on-duty battalion chief should request the Station 3 company move to cover the areas with a higher probability of calls for service.
- Improve reliability of MDT, AVL, and other systems to support improved data collection and dispatch reliability.
 - Technology can improve total response times, information available to responders, and the output data used to make system adjustments. When this technology is down, it has a negative impact on operations.
 - o Institute a program that ties prevention resources inspection and preplan data) to emergency operations can maximize the use of collected data relevant to a particular call.
- Evaluate the availability of automatic and mutual aid departments.
 - Ongoing evaluation of outside agencies' ability to commit resources for the BFD is essential to ensure these programs deliver the intended results.
- Improve mapping and preplanning.
 - Increased growth drives an increase in newly named streets and buildings. Instituting a way
 to capture newly created infrastructure into maps can improve response accuracy and
 decrease travel delays.
- Add additional response units to existing stations to cover districts with poor reliability.
 - o Increased staffing will reduce the reliance on automatic and mutual aid departments providing ERF critical resources.
 - Additional resources within the system will improve the reliability of all planning zones and current response apparatus.
 - o Adding one unit to the system will reduce the impact of multiple calls in the system.

Long-Term Recommendations

- Develop new stations and response units in the system.
 - Additional stations and units are necessary to address current issues in reliability, travel times, and increased calls for service stress on the system.
 - o urther growth already planned within the area will exacerbate issues in the system. Considering time-to-completion for additional stations and resources, the B D should take a proactive approach to secure resources for forecasted needs.
 - 2022-2025 Strategic Plan/Strategic Initiatives:

Strategic Inititative 3 -- Objective 3: Review and update resource deployment. (CSP 3.1 & 4.3) Critical Tasks - Establish a Quick Response Unit (QRU).

- Identify areas for collaboration with mutual aid partners.
- Review and update special operations programs such as wildland, technical rescue,

hazardous materials response, and fire investigations

- When completed, review and work on incorporating Gallatin County EMS study into operations.
 - Conduct critical staffing needs analysis to support department programs
 - Related Standard Operating Procedures/Standing Orders:

500 Series – Operational SOPs Standing Orders: 173, 186, & 193

- Related self-assessment performance indicators:
 - CC 5E.1 Given the agency's community risk assessment/standards of cover and emergency performance statements, the <u>agency meets its</u> staffing, response time, station(s), pumping capacity, apparatus and equipment <u>deployment objectives</u> for each type and magnitude of <u>fire suppression</u> <u>incident(s)</u>.
 - CC 5E.2 The agency uses a standardized <u>incident command/management</u> <u>system</u>, which is supported by agency <u>policy and training</u> programs.
 - CC 5E.3 The agency conducts a <u>formal and documented program appraisal, at least annually</u>, to determine the impacts, outcomes, and effectiveness of the program, and to measure its performance towards meeting the agency's goals and objectives.
- Program mandates (training hours, maintenance needs):

• Training facilities

Drill tower

Live fire training structure (including smoke room 2-acre training area

Use of facilities

18 hours per year per firefighter (for maximum credit

Company training

Company training at fire stations, 16 hours per member per month (for maximum credit

Classes for officers

Certification of all officers

12 hours per year of continuing education for all officers (for maximum credit

New driver and operator training

Classes for new drivers and operators, 60 hours (for maximum credit

• Existing driver and operator training

Classes for existing drivers and operators, 12 hours (for maximum credit

• Training on hazardous materials

6-hour session per member per year (for maximum credit

Recruit training

- 240 hours per recruit in the first year (for maximum credit
- Annual UL testing of ladders (ground and aerial), fire pumps
- Annual fire hose testing
- Annual SCBA and compressor testing

- Annual Fit testing for all employees who wear SCBA
- Annual medical/physical evaluations for staff
- Preventative maintenance program for fire apparatus

$\bullet \quad \mbox{Goals from previous program appraisal:} \\ N/A$

Previous year data

• Staff hours (Training, response, service delivery, etc):

2020 – 293.8 per member

2021 – 305.9 per member

2022 – 368.8 per member

• Response Data (Alarm handling, turnout times, travel time, total response time):

Fire - Minimal 90th Percentile Times Baseline Performance		2020-2022	2022	2021	2020	
Alarm Handling	Pick-up to Dispatch	Urban	2:07	1:57	2:07	2:21
Turnout Time	Turnout Time 1st Unit	Urban	2:10	1:54	1:55	2:08
Travel Time	Travel Time 1st Unit Distribution	Urban	6:39	6:39	6:45	5:23
	Travel Time ERF Concentration	Urban	9:32	10:50	7:44	N/A
Total Response Time	Total Response Time		9:50	8:56	9:57	9:40
	1st Unit on Scene Distribution	Urban	n=18	N=6	N=6	N=6
	Total Response Time ERF	Urban	13:37	14:42	11:27	N/A
	Concentration	Orban	n=5	N=3	N=2	N=0

Fire - Low 90th Percentile Times Baseline Performance		2020-2022	2022	2021	2020	
Alarm Handling	Pick-up to Dispatch	Urban	2:29	2:35	2:32	2:03
Turnout Time	Turnout Time 1st Unit	Urban	2:09	2:07	2:09	2:08
Travel Time	Travel Time 1st Unit Distribution	Urban	6:10	6:19	6:05	6:09
Total Response Time	Total Response Time 1st Unit on Scene Distribution	Urban	9:38 n=739	9:40 N=285	9:45 N=220	9:38 N=234

Fire – Medium 90th Percentile Times Baseline Performance		2020-2022	2022	2021	2020	
Alarm Handling	Pick-up to Dispatch	Urban	2:02	1:52	2:09	1:48
Turnout Time	Turnout Time 1st Unit	Urban	2:10	2:03	2:19	2:09
Travel Time	Travel Time 1st Unit Distribution	Urban	5:29	5:36	5:23	5:10
	Travel Time ERF Concentration	Urban	24:57	17:19	26:39	20:24
	Total Response Time 1st Unit on Scene	Urban	8:49	8:20	9:07	9:06
Total Response Time	Distribution	Croan	n=20	n=8	n=4	n=8
	Total Response Time ERF	Huban	26:32	18:49	28:17	21:34
	ERF Urban - Concentration	n=9	n=3	n=3	n=3	

Fire – High 90th Percentile Times Baseline Performance		2020-2022	2022	2021	2020	
Alarm Handling	Pick-up to Dispatch	Urban	2:17	3:37	2:03	1:16
Turnout Time	Turnout Time 1st Unit	Urban	2:19	2:25	2:08	1:34
Travel Time	Travel Time 1st Unit Distribution	Urban	5:40	5:13	5:00	6:01
	Travel Time ERF Concentration	Urban	26:54	29:05	17:57	16:33
	Total Response Time 1st Unit on Scene	Urban	10:23	10:55	9:32	8:36
Total Response Time	Distribution	Orban	n=10	n=2	n=3	n=5
	Total Response Time ERF	Heban	30:18	32:57	19:41	17:14
	Concentration	Urban	n=3	n=1	n=1	n=1

• Service delivered (Call volume, public contacts, etc.):

11/30/2022 through 11/30/2023

- 81 total fire suppression related calls for service

• Trends:

Response times are trending in a negative direction (Taking longer to get to calls This could be due to changes in reporting (using 90^{th} percentile vs average) Total responses are trending lower

• Injuries, Exposures, Property damage:

No specified fire suppression related injuries reported, no exposures reported.

Program results/outcomes

• Key Accomplishments:

- Took delivery and placed two new engines in service. This increases total number of reserve apparatus.
- nstituted a third party hose testing service.
- Expanding suppression staffing by three new FTEs

• Obstacles encountered:

- Staffing issues related to leave/injuries/etc, staffing solutions are generally reactive as it takes 6 months to on-board any new staff.
- EMS service demands are detrimental to fire suppression capabilities.
- Poor dispatch call processing times are delaying fire suppression total response times.
- Unit and zone reliability issues from out of district companies.
- Overlapping incidents create increased demand on critical incidents and are detrimental to fire suppression resource availability.
- Lack of organizational standardization of service delivery guidelines.

Evaluation

• Program goals and objectives:

- mprove turnout times across all shifts and stations (pre-alerts, improved crew staging, SOP on unit availability during training). *Set specific goals
- mprove reliability by incorporating methods to reduce out of district time for companies, as well as move-up policy to cover for training, etc.
- Review ongoing county wide EMS study and implement appropriate recommendations.
- Monitor new staffing model's impact on overall staffing demand.
- Develop and implement response guidelines built upon industry best practices specific for the resources and capabilities of Bozeman Fire.

• Needed adjustments (new SOPs, budget increase, training course, etc):

- Review and revise SOP 107.02 on unit availability during training.
- New SOP on training requirements.
- Increase funding to support adding a QRV at Station 2 to increase suppression resources available in the City.



https://www.bozeman.net/departments/fire

Annual Program Appraisal

Program: azardous Material Program

Category/PI: 5 (1-3)
Program Manager: James Short
Date: 10/19/2023

Program Description

• Summary:

The Hazardous Materials program incorporates the Hazardous Materials Technician team, its equipment, response, apparatus, personnel and training. This program also details the company response as hazardous materials operators, the equipment, PPE, response, personnel and training related to calls for service related to hazardous conditions.

• Program subcategories:

Unmanned Aerial Device(Drone) team.

Program Resources

Staffing:

Hazardous Materials Program							
Program							
Oversight	Kol	man					
Program Manager:	Short						
Training	Equipment	Outreach					
Layton*	0'Brien*	Charles*					
Carroll	Radcliffe	Dimas					
Brown	Smith	Clark					
Rudge	Shepherd						
* Group lead	Drab						

Facilities:

Bozeman ire Station 3: Mezzanine

• Apparatus:

- HazMat 1 Tow vehicle
- Hazardous Materials Tech Trailer

- Boom trailer
- Special equipment:
 - Hazmat ID
 - Cobalt Ramen
 - Air Monitors
 - Multithreat suits
 - SCBAs
 - Air cascade and scavenger system
- Finances/Budget:
 - \$14,400 from the City of Bozeman, \$9,700 from Gallatin County, \$22k from State of MT
 - HMEP grant for \$80k for equipment covers 2024 and 2025

Program guidance:

- Standards of Cover/Community Risk Assessment:
 - N/A
- 2022-2025 Strategic Plan/Strategic Initiatives:

Strategic Initiative II:

- Objective 3 Enhance internal communications

Critical Task – Establish a continuity of operations plan for necessary programs.

Strategic Initiative III:

- Objective 2 – Establish a fire department staffing plan.

Critical Task – Develop position description and hire Battalion Chief of Support Services.

- Objective 3 – Review and update resource deployment.

Critical Task – Review and update special operations (...) hazardous materials response.

• Related Standard Operating Procedures/Standing Orders:

SOP 601.02 County Haz-Mat Responses

• Related self-assessment performance indicators:

CC 5H.1 Given the agency's community risk assessment/standards of cover and emergency performance statements, the <u>agency meets its</u> staffing, response time, station(s), apparatus and equipment <u>deployment objectives</u> for each type and magnitude of <u>hazardous materials</u> incident(s).

5H.2 The agency complies with all aspects of <u>applicable hazardous material regulations</u> such as annual refresher training, medical monitoring of response personnel, annual physical examinations as applicable per standards, and exposure record retention.

CC 5H.3 The agency conducts a <u>formal and documented program appraisal</u>, at <u>least annually</u>, to determine the impacts, outcomes, and effectiveness of the program, and to measure its performance toward meeting the agency's goals and objectives.

Program mandates (training hours, maintenance needs):

Technicians require 48 hours refresher training every two years Annual full-deployment drill Operations level require 6 hours refresher training annually.

• Goals from previous program appraisal:

N/A

Previous vear data

• Staff hours (Training, response, service delivery, etc):

382.5 training hours

Response Data (Alarm handling, turnout times, travel time, total response time):

Hazardous Materials - Medium 90th Percentile Times Baseline Performance		2020-2022	2022	2021	2020	
Alarm Handling	Pick-up to Dispatch	Urban	2:17	2:19	2:19	2:14
Turnout Time	Turnout Time 1st Unit	Urban	1:42	1:40	1:53	1:39
Travel Time	Travel Time 1st Unit Distribution	Urban	6:37	6:34	6:39	6:38
Total Response Time 1st Unit on Scene Distribution	Haban	10:24	9:55	10:55	10:27	
		Urban	n=210	n=81	n=65	n=64

• Service delivered (Call volume, public contacts, etc.):

464 total hazardous materials responses (11/30/22 through 11/30/23)

- No HazMat Team activations

• Trends:

N/A

• Injuries, Exposures, Property damage:

N/A

Program results/outcomes

• Key Accomplishments:

Darigold

Purchased new entry suits, updated toximed drugs, new MSA-PID, 2 new Sensits

- Obstacles encountered:
 - Lack of defined organizational structure, training program, and team commitment.
 - Poorly attended meetings, additional trainings, and on-shift participation.
 - Equipment maintenance and calibration has not been accomplished by defined standards

Evaluation

- Program goals and objectives:
 - Develop defined organizational roles and responsibilities and account for team participation requirements.
 - Update equipment maintenance programs and delegate responsibilities to team members.
 - Identify needed training, updates, and processes to recruit new team members and retain current members.
- Needed adjustments (new SOPs, budget increase, training course, etc):
 - Review and update SOP 601.02
 - Update and finalize grant purchasing plan



https://www.bozeman.net/departments/fire

Annual Program Appraisal

Program: ealth and Wellness

Category/PI: 11B 1-6)
Program Manager: Gary O'Brien
Date: 12/8/2023

Program Description

• Summary:

The Bozeman ire Dpt. maintains a wellness and fitness program for personnel. This comes in the form or physical fitness equipment allocated at each of our three stations, annual medical evaluations, employee assistance plan benefits, Critical ncident Stress debriefings and defusing's, and a trained Peer Support Team.

• Program subcategories:

Peer Support Team Annual fit for duty physicals Critical Incident Stress Management

Program Resources

• Staffing:

Peer Support group (8 members), CISM team (4 members

• Facilities:

N/A

• Apparatus:

N/A

• Special equipment:

N/A

• Finances/Budget:

\$28k for physicals and annual service of gym equipment

Program guidance:

• Standards of Cover/Community Risk Assessment:

N/A

• 2022-2025 Strategic Plan/Strategic Initiatives:

Strategic Initiative 3: Workforce Development and Enhancement

- Objective 3, Task 3 Conduct annual climate surveys and create follow up strategy.
- Related Standard Operating Procedures/Standing Orders:

202.1: Critical Incident Stress

903.02: First Report of Injury & Property Damage Report

• Related self-assessment performance indicators:

- CC 11B.1 The agency provides for initial, regular, and rehabilitative medical, and fitness evaluations.
- o 11B.2 The agency provides personnel with access to fitness facilities and equipment.
- 11B.3 The agency makes available wellness/fitness training to all employees/members.
- 11B.4 The agency provides an employee/member assistance program with timely access to critical incident stress debriefing, peer support and counseling, and other behavioral health resources.
- 11B.5 The agency provides for cancer and behavioral health screenings and a cardiac assessment.
- CC 11B.6 A formal and documented appraisal is conducted, at least annually, to determine the effectiveness of the wellness/fitness programs and its impact on meeting the agency's goals and objectives.

• Program mandates (training hours, maintenance needs):

Annual fit for duty exams for all line personnel.

Requirements for azMat technicians to receive lung x-rays every 3 years.

Peer support team members must take peer support training.

CISM team members must be trained and certified.

• Goals from previous program appraisal:

N/A

Previous year data

• Staff hours (Training, response, service delivery, etc):

Approximately 150 hours per year in annual physicals, 120 hours in peer support team meetings.

• Trends:

Injuries in each joint probationary firefighter academy.

Work comp claims

irst report of injury

• Injuries, Exposures, Property damage:

- njuries in each joint probationary firefighter academy.
- No reported exposures (2022
- 15 reported injuries in 2022

Program results/outcomes

Key Accomplishments:

- Conducted annual physicals for entire organization.
- Initiated quarterly peer support meetings
- Recruited new peer support team members
- Instituted new physical training evaluation and fitness planning in fall 2023 joint academy.
- Developed and implemented climate survey with targeted health and wellness metrics.

• Obstacles encountered:

- Lack of comprehensive cardiac, cancer, and behavioral health screenings
- Lack of culturally competent couseling options for members.
- The fitness evaluation and planning has not been incorporated into training planning and is limited to probationary firefighters enrolled in academy.
- Budget is limited to expand programming.

Evaluation

• Program goals and objectives:

- Research and develop appropriate screening tools to implement for cardiac, cancer, and behavioral health. Incorporate these tools into annual health screenings.
- Continue to work with HR and PD to vet first responder competent counseling options.
- Review appropriate department programs for wellness and fitness training.
- Review probationary firefighter academy plan and identify physical injury risk factors.
- Increase funding to match program needs.
- Improve records management to help identify trends.

• Needed adjustments (new SOPs, budget increase, training course, etc):

- Review and update SOP pertaining to N PA 1500 901.01 Occupational Safety and Health Program).
- Create document outlining the process of fit for duty physical evaluations including references to NFPA 1582.
- Increase budget to the Health and Wellness program to account to accomplish identified program goals and objectives.
- Identify and send member to FDSOA Health and Safety Officer course.
- Host IAF Peer Support Training course locally.



https://www.bozeman.net/departments/fire

Annual Program Appraisal

Program: ire Prevention
Category/PI: Category 5A (1-7)
Program Manager: Scott Mueller

Date: October 16th, 2023

Program Description

• Summary:

The BFD's fire prevention program addresses risks to the community through plan review, fire and life safety inspections of new and existing buildings, and code enforcement.

• Program subcategories:

- New occupancies
- Existing occupancies

Program Resources

• Staffing:

ire Marshall S. Mueller

ire Inspectors S. Brandhorst, T. Hansen, J. Parizon

9 Company Officers

• Facilities:

Bozeman Public Safety Campus - Fire Station 1: Fire Marshall Office & Fire Inspector's office

• Apparatus:

ire 3: 2020 ord Ranger Prevention 1: ord Explorer Prevention 2: ord Explorer Prevention 3: Durango

• Special equipment:

3 iPads

Sound Meter

Digital Laser

Light Meter

N PA Codes Online Access

ICC I-Codes subscription

Adopted code reference material and standards

• Finances/Budget:

iscal year 2024 Budget

\$26,100 allocated \$1,999.32 used up until 1-1-2024 \$24,100.68 available

Program guidance:

• Standards of Cover/Community Risk Assessment:

- Improve mapping and preplanning.

Increased growth drives an increase in newly named streets and buildings. Instituting a way to capture newly created infrastructure into maps can improve response accuracy and decrease travel delays.

- Work with local agencies to address construction closures and their impact on emergency services.
- o Street closures can negatively impact travel times. The BFD should take an active role in the closure permitting process to minimize the impact on service delivery.
- o Projects are currently tracked through the dispatch system, but the mapping system most units utilize during call response does not always account for street closures

• 2022-2025 Strategic Plan/Strategic Initiatives:

Strategic Initiative 1: Community Risk Reduction

Goal – Provide effective prevention programs designed to reduce risk to the community.

Objective 1 – Conduct a Community Risk Assessment and Standards of Cover

Objective 2 – Develop public outreach, engagement, and education.

Objective 3 – Develop prevention planning.

Objective 5 – Update fire and life safety code.

Strategice Inititative 3: Resource Deployment/Planning

Objective 2 – Establish a fire department staffing plan.

Objective 3 – Review and update resource deployment.

• Related Standard Operating Procedures/Standing Orders:

301.01 Company Inspections

301.02 Knox Box Key Policy

301.03 Procedures for Open Burning

• Related self-assessment performance indicators:

CC 5A.1 The authority having jurisdiction has an adopted fire prevention and building code(s).

CC 5A.2 The code enforcement program ensures <u>compliance</u> with <u>applicable fire protection</u> <u>law(s)</u>, <u>local jurisdiction</u>, hazard abatement, and agency objectives as defined in the community risk assessment/standards of cover.

CC 5A.3 The prevention program has <u>adequate staff with specific expertise</u> to meet the goals, objectives and identified community risks.

5A.4 A <u>plan review process</u> ensures that adopted codes and ordinances determine the construction of buildings and infrastructure (such as hydrants, access, and street width).

5A.5 The prevention program identifies the frequency that occupancies are inspected.

5A.6 The agency sets <u>specific</u>, <u>targeted</u>, <u>and achievable annual loss reduction benchmarks</u> for fire incidents and fire casualties based upon the community risk assessment and baseline performance.

CC 5A.7 The agency conducts a <u>formal and documented program appraisal</u>, <u>at least annually</u>, to determine the program's impacts and outcomes, and to measure performance and progress in reducing risk <u>based on the community risk assessment/standards of cover</u>.

- Program mandates (training hours, maintenance needs):
- Inspectors are required to obtain and maintain Fire Inspector I and Commercial Building Inspector.
- Credentials are valid for three (3) years and must be renewed on or before the expiration date to remain current. Depending on the number of credentials will dictate the number of CEU's needed for recertification along with the Minimum number of Part 1 CEU's required.
 - See attached sheet for exact requirements needed for recertification. (Renewal _EIB)
- Inspectors attend an annual MT building code conference. Conference lasts a week at various cities throughout the state.
- Goals from previous program appraisal: N/A

Previous vear data

- Staff hours (Training, response, service delivery, etc):
- Response Data (Alarm handling, turnout times, travel time, total response time):
 N/A
- Service delivered (Call volume, public contacts, etc.):
- Trends:

ire Prevention has seen a rise in the number of permits issued by an overall of 118% in the following categories:

- o ire Alarm Systems (Increase of 115%)
- o Hood Suppression Systems (Increase of 71%
- o ire Sprinkler Systems (Increase of 122%)
- o Clean Agent Systems

Inspections:

- In 2022 there were 755 completed inspection for new construction or Ti renovations. In 2023 there was 1382 inspections completed for new construction or TI renovations. This was an increase in inspection by 83%
- Existing Occupancies:
 - 2022 Occupancies Inspected 512 / 2023 678 for an increase of 32% of occupancies inspected
 - 2022 Inspections (initial, re-inspections) 716 / 2023 983 for an increase of 37% inspections performed
 - 2022 Observations 17,807 / 2023 27,018 for an increase 0f 52% observations.
- Injuries, Exposures, Property damage:

N/A

- Inspectors attend an annual MT building code conference. Conference lasts a week at various cities throughout the state.
- All inspectors and fire marshal have their fire inspector I and commercial building inspector certifications

Program results/outcomes

- Key Accomplishments:
 - 1 ICC Commercial Building Certification obtained
 - 1 ICC Plans Examiner Certification
 - 2 Fire Investigator (40 hr) courses and 2 Fire Investigator Technician T) certificates Implemented a new ee schedule

New inspection software and fire protection systems software

• Obstacles encountered:

- -Rapid growth of the city has created pressure on the limited staffing of the program.
- -Training plan for fire prevention program is insufficient to account for continuity of operations.
- Growth of the city has created hardships in tracking total number of needed services for the program.

Evaluation

Program goals and objectives:

- Develop a training plan to ensure staffing is prepared to provide needed services and succession planning.
- Support the new records management systems to account for the growth of new occupancies and needed services in the city.
- Conduct a staffing needs assessment based upon the workload projected for the program.

- Review and update current SOPs.
- Review CIP plan for vehicle replacement to ensure it meets the needs of the prevention program.
- Training needs to include company officer ongoing training for Fire Inspector I.
- Identify budget needs for potential staffing increases.



Bozeman Fire Department 300 East Oak Street Bozeman, MT 59718 (406) 582-2350

https://www.bozeman.net/departments/fire

Annual Program Appraisal

Program: Public Education

Category/PI: 5B (1-4)

Program Manager: Scott Mueller **Date:** 10/16/2023

Program Description

• Summary:

The public education program provides educational resources, outreach, and communication with the public and other city departments. These programs range from school visits, fire prevention talks, CPR instruction, station tours and additional programming.

• Program subcategories:

Child Safety Seat

School System

General public

Program Resources

• Staffing:

Program oversight Deputy Chief of Prevention Scott Mueller Program manager Jonathon Hopkins

General Staff

• Facilities:

N/A: All fire stations are used in tours and community events.

Apparatus:

N/A: Fire apparatus are used in tours, outreach, and community events.

• Special equipment:

Smoke demonstration travel trailer

CPR training equipment

Sprinkler demonstration trailer

• Finances/Budget:

No specific line item, however \$12k in prevention budget for supplies and equipment.

Program guidance:

• Standards of Cover/Community Risk Assessment:

N/A

• 2022-2025 Strategic Plan/Strategic Initiatives:

Strategic Initiative 1: Community Risk Reduction

Objective 2: Develop public outreach, engagement, and education

Critical tasks: Review current programming and recommend updates; Develop position description and adopt concept of community preparedness position; Create overall public outreach, engagement, and education strategic plan.

Related Standard Operating Procedures/Standing Orders:

301.05 Child Car Safety Seat Checks;

• Related self-assessment performance indicators:

CC 5B.1 The public education program targets specific risks, behaviors and audiences identified through incident, demographic and program data analysis and the community risk assessment/standards of cover.

CC 5B.2 The program has adequate staff with specific expertise to address identified risks and meet the public education program goals, objectives.

5B.3 Programs are in place to identify <u>large loss potential or high-risk audiences</u> (such as low socio-economic status, age and cultural/ethnic differences, where appropriate), forge partnerships with those who serve those constituencies, and enable specified programs to mitigate fires and other emergency incidents (such as home safety visits, smoke alarm installations, free bicycle helmet programs, fall prevention programs, etc.).

CC 5B.4 The agency conducts a formal and documented program appraisal, at least annually, to determine the program's impacts and outcomes, and to measure performance and progress in reducing risk.

• Program mandates (training hours, maintenance needs):

Child Passenger Safety Technician – 32 hour certification course, requires check-up event.

- Ongoing certification requirements: \$75/every three years, 5 verified child passenger seat checks
- Goals from previous program appraisal:

N/A

Previous vear data

• Staff hours (Training, response, service delivery, etc):

Records have not been maintained to determine total time spent delivering public education.

- Service delivered (Call volume, public contacts, etc.):
- Records have not been maintained to determine total time spent delivering public education
- Trends:

N/A

• Injuries, Exposures, Property damage:

N/A

Program results/outcomes

• Key Accomplishments:

N/A

• Obstacles encountered:

- Inconsistent reporting program to capture metrics of the program.
- Minimal staffing to accomplish hours required to deliver elementary school outreach program.
- Outdated public education resources (smoke demonstration trailer, educational and promotional resources).
- Lack of interest in program participation from operational staff.
- Lack of program objectives and direction to derive achievable goals.

Evaluation

• Program goals and objectives:

- Establish reporting standards for all public education programs to achieve valid and reliable reporting data. (Tracking for smoke detectors, CPSS
- Review existing programs to identify needs and improvements.
- Develop an updated educational resource replacement and upgrade plan.
- Develop evaluation methods for existing programs.

- Review and update SOPs, including creation of needed SOP for public education records management.
- Consider viable public education programs that have demonstrated success in other department. (i.e. public outreach animal).



Bozeman Fire Department 300 East Oak Street Bozeman, MT 59718 (406) 582-2350

https://www.bozeman.net/departments/fire

Annual Program Appraisal

Program: Technical Rescue

Category/PI: 5G (1-2)

Program Manager: Britton Clark

Date: November 3rd, 2023

Program Description

• Summary:

The Tech Rescue program is responsible for the response, training, and maintenance to all risk level of technical resuce emergencies. This includes rope rescue, confined space, trench, MVA/Extrication, Elevator/machinery, Ice, and Collapse. The department functions at an operations level in most categories with some technical level responders and equipment availability.

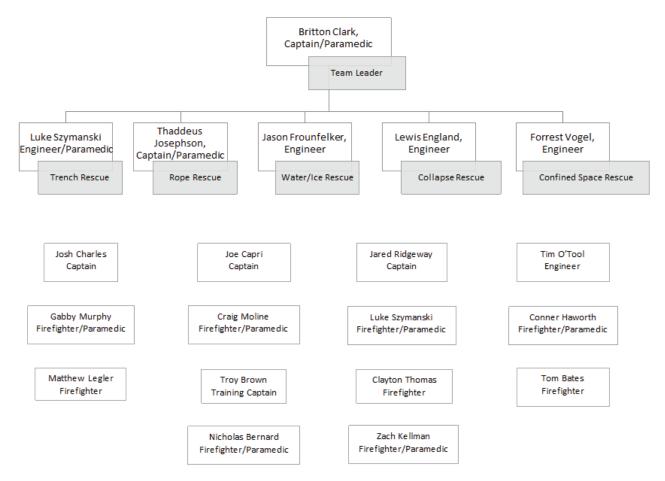
• Program subcategories:

- -Rope Rescue
- -Confined Space
- -Trench Rescue
- -MVA/Extrication
- -Elevator/Machinery
- -Ice Rescue
- -Collapse/USAR

Program Resources

Staffing:

Technical Rescue Team Organizational Chart



• Facilities:

No specific facilities dedicated to tech resuce.

• Apparatus:

Technical Rescue Trailer

- Special equipment:
 - Stanley tools
 - Extrication tools
 - Struts
 - Tripod
- Finances/Budget:

\$25,000 (does not include extrication equipment maintenance)

Program guidance:

• Standards of Cover/Community Risk Assessment:

2023 YTD Stats

- 175 Calls for service (emergent leaving the station)
- 90th Percentile Turnout: 01:43

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• 2022-2025 Strategic Plan/Strategic Initiatives:

Strategic Initiative 3: Resource Deployment/Planning

Objective 2 – Establish a fire department staffing plan.

Critical tasks -- Develop position description and hire Battalion Chief of Support Services.

Objective 2 – Review and update resource deployment.

Critical tasks - Review and update special operations programs.

• Related Standard Operating Procedures/Standing Orders:

601.03 Water Rescue

601.04 Ice Rescue

601.06B Con-Space Class I Life Safety Harness Inspections

601.08 County - Regional Technical Rescue Respons

• Related self-assessment performance indicators:

CC 5G.1: Given the agency's community risk assessment/standards of cover and emergency performance statements, the agency meets its staffing, response time, station (s), apparatus, and equipment deployment objectives for each type and level of risk of a technical rescue incident.

CC 5G.2: The agency conducts a formal and documented program appraisal, at least annually, to determine the impacts, outcomes and effectiveness of the program, and to measure its perforamance toward meeting the agency's goals and objectives.

• Program mandates (training hours, maintenance needs):

Confined Space needs vertical and horizontal entry

The dInitial Training to be completed by all new hires in academy:

Vehicle Extrication/Stabilization: 18 hours

Rope Rescue: 12 hours

Annual department wide training to be completed by line personnel:

Vehicle Extrication/Stabilization Continuing Ed: 8 hours

Elevator/Machine RescueRefresher: 2 hours Surface water/Ice Rescue Refresher: 2 hours

Rope Rescue Refresher: 4 hours

Confined Space Rescue Refresher: 4 hours

Trench Rescue Refresher: 4 hours

Technical Rescue Team Training:

Rope Rescue: 15 hours* Trench Rescue: 6 hours

Confined Space Rescue: 6 hours

*To be completed annually by all team members unless profiecency is proven during a

'testing' day

Maintenance (to be completed annually):

Small engines (chain saws, Stanley tools, generator): Inspection/service by Tech Team members

E-Draulic Tools: Inspection/service by HURST rep

Rope rescue soft goods (ropes, webbing, harnesses, P Ds, Mustang suits): Inspection &

repair/replacement by Tech Team members

Rope rescue hard goods (carbiners, DCDs, ascdenders, litters, etc): Inspection &

repair/replacement by Tech Team members
SABA systems (air manifold, air cart, hoses, escape packs, air bottles, etc):
Inspection/testing by qualified 3rd partyepartment operates at an operations level on

 Goals from previous program appraisal: N/A

Previous year data

- Staff hours (Training, response, service delivery, etc):

 Training records management needs to be improved to refine data to report on this section.
- Response Data (Alarm handling, turnout times, travel time, total response time):

Tech Rescue – Low 90th Percentile Times Baseline Performance			2020-2022	2022	2021	2020
Alarm Handling	Pick-up to Dispatch	Urban	1:51	1:55	1:45	1:51
Turnout Time	Turnout Time 1st Unit	Urban	1:55	2:01	1:58	1:44
Travel Time	Travel Time 1st Unit Distribution	Urban	5:28	5:33	5:25	5:21
Total Response Time	Total Response Time 1st Unit on Scene Distribution	Urban	10:03 n=69	10:12 n=23	9:18 n=20	9:12 n=26

Tech Rescue - Medium 90th Percentile Times Baseline Performance			2020-2022	2022	2021	2020
Alarm Handling	Pick-up to Dispatch	Urban	3:17	3:22	3:27	3:12
Turnout Time	Turnout Time 1st Unit	Urban	1:47	1:46	1:44	1:58
Travel Time	Travel Time 1st Unit Distribution	Urban	5:21	5:22	5:39	5:14
	Travel Time ERF Concentration	Urban	5:40	5:38	5:46	5:20
Total Response Time	Total Response Time 1st Unit on Scene	Urban	10:14	10:14	10:33	10:13
	Distribution		n=660	n=220	n=214	n=226
	Total Response Time ERF	Urban	10:36	10:38	11:01	10:24
	Concentration		n=197	n=59	n=62	n=76

• Service delivered (Call volume, public contacts, etc.):

276 Technical rescue related calls in 2023 YTD (322-381 call type).

• Trends:

N/A

• Injuries, Exposures, Property damage:

Small repair needed to the front of the tech rescue trailer on the diamond plating from an incident that occurred while moving the trailer.

Program results/outcomes

• Key Accomplishments:

Monthly tech rescue training, shift level rope and trench rescue training. Increased our operational level in rope and ice rescue significantly. Completed an overhaul of the rope rescue equipment.

Obstacles encountered:

- Short staffing has resulted in a decline in the team's ability to train and respond.
- nability to revise and develop SOPs needed for the program due to organization wide demands
- Lack of technician level training offerings
- Lack of organizational definition of response capabilities and parameters.

Evaluation

• Program goals and objectives:

- Entire response staff to become operations level in confined space and trench rescue.
- dentify response capability for all technical rescue programs (SOPs
- Create a three year plan for response capability for all technical rescue disciplines and achieve that mission for water, ice, rope, MVA/Extrication, and elevators in 2024.
- Entire team to reach Confined Space Rescue Technician level
- Plan and schedule a trench rescue technician level course to be delivered in 2025.

- Develop and revise SOPs and guiding documents specific to technical rescue disciplines to reflect department capabilities.
- Attendance by all non-certified technical rescue team members in Spring confined space rescue technician program.
- Budget request increase to support Trench rescue technician program to be delivered in 2025 (\$35k for delivery of the class).
- Increase technical rescue team membership and participation.
- Identify future apparatus and equipment needs to support technical rescue call response based on historical and projected data.
- Budget increase to purchase confined space capable communications equipment (\$17,000).



Bozeman Fire Department 300 East Oak Street Bozeman, MT 59718 (406) 582-2350

https://www.bozeman.net/departments/fire

Annual Program Appraisal

Program: Training

Category/PI: Category 8 (A1-C5)

Program Manager: Jason Kolman **Date:** 12/8/2023

Program Description

• Summary:

The B D training program provides training for all levels of the organization, tracks and manages the learning management system, develops an annual training plan, and maintains training specific equipment and facilities.

- Program subcategories:
- Probationary firefighter academy
- Department fire training
- EMS training

Program Resources

• Staffing:

Training Captain Troy Brown Department staff instructors

• Facilities:

Training grounds:

- Connex Container structure (3-stories with interior stairs, standpipe connections
- Pavillion with concrete slab floor.
- Concrete trench box prop

Training classrooms at Stations 1 and 3

• Apparatus:

ire 5 – 2007 Chevrolet Tahoe 2003 Chevrolet Silverado 2500 crewcab

All department apparatus are utilized in training evolutions.

Special equipment:

N/A

• Finances/Budget:

Training Budget: \$52k

Program guidance:

- Standards of Cover/Community Risk Assessment:
 - Focus efforts on minimizing out-of-district times for all resources.
 - Develop a policy to hold shift-wide meetings and training utilizing web-based conferences when appropriate.
 - When meetings and training must be conducted with all available response personnel, Station 1 should be utilized and backfill staffing should be considered for Station 2.

Training Site Plans

- The department's current training site is poorly situated. The site is in the northeast corner of the city, and the two main roadways leading from the training site to the city have railroad crossings frequently blocked by a large volume of train traffic. The B D should plan for a training facility between planning zones or incorporate it into additional station locations. This will reduce delays and improve travel time and reliability when responses are initiated from the training site.
- 2022-2025 Strategic Plan/Strategic Initiatives:

Strategic Initiative 2 -- Objective 1:

Tasks:

- Review and update Bozeman Fire's acting out of class position qualifications and training process.
- Update annual employee evaluations.
- Review and update professional development plan.
- Review and update promotion assessment processes.
- Develop chief officer level training program for all captains and chief officers.

Objective 2. Develop a workforce training program.

- Establish a training and operational steering group.
- Institute minimum company standard evolutions.
- Review and update annual training plan.
- Develop job description for Battalion Chief of Support Services to direct the Training Division.
- Support joint recruit academy and other joint ventures with automatic aid partners.

Strategic Initiative 3 -- Objective 1:

- Conduct needs analysis for training ground.
- Related Standard Operating Procedures/Standing Orders:
 - 401.01 Outside training request
 - 401.02 Paramedic program attendance
- Related self-assessment performance indicators:
- CC 8A.1 The organization has a <u>process in place to identify training needs</u>, including tasks, activities, knowledge, skills and abilities.
- 8A.2 The agency's <u>training program is consistent with the mission statement, goals and objectives</u>, and helps the agency meets those goals and objectives.
 - 8A.3 The training program is consistent with legal requirements for mandatory training.
- 8A.4 The agency <u>identifies minimum levels of training and education required</u> for all positions in the organization.

- 8B.1 A process is in place to ensure that personnel are appropriately trained.
- 8B.2 The agency provides a training schedule that meets the organization's needs.
- CC 8B.3 The agency <u>evaluates</u> individual and crew performance <u>through validated</u> and documented <u>performance-based measurements</u>.
 - 8B.4 The agency analyzes student evaluations to determine reliability of training conducted.
 - 8B.5 The agency maintains a <u>training records management system that meets its needs</u>.
- CC 8B.6 The agency conducts a <u>formal and documented program appraisal</u>, at <u>least annually</u>, to determine the program's effectiveness and compliance with meeting the needs of the organization.
- CC 8C.1 <u>Facilities and apparatus are provided</u> to support the agency's all-hazards training needs. The agency has plans addressing any facilities and apparatus not available internally to complete training activities.
- CC 8C.2 The agency has access to <u>instructional personnel</u>, within the organization or from identified external resources, with <u>teaching qualifications and expertise to meet its</u> needs.
- 8C.3 <u>Instructional materials are current</u>, easily accessible, and support the training program's stated objectives.
- 8C.4 The agency has a <u>process</u> for purchasing, developing or modifying existing curriculum to meet its needs.
- 8C.5 <u>Equipment utilized for training is adequately maintained</u> in accordance with the agency's operational procedures. The agency makes training equipment readily accessible to instructional personnel.
 - 8C.6 The agency maintains a <u>current inventory</u> of all training <u>equipment and resources</u>.
 - 8C.7 A selection <u>process is in place</u> for training and educational <u>resource materials</u>.
 - CC 8C.8 <u>Training materials are evaluated, at least annually</u>, to reflect current practices and meet the needs of the agency.

Program mandates (training hours, maintenance needs):

Use of facilities

18 hours per year per firefighter (for maximum credit)

- Company training
 - Company training at fire stations, 16 hours per member per month (for maximum credit)
- Classes for officers
 - Certification of all officers
 - 12 hours per year of continuing education for all officers (for maximum credit
- New driver and operator training
 - Classes for new drivers and operators, 60 hours (for maximum credit)
- Existing driver and operator training
 - Classes for existing drivers and operators, 12 hours (for maximum credit)
- Training on hazardous materials
 - 6-hour session per member per year (for maximum credit)
- Recruit training
 - 240 hours per recruit in the first year (for maximum credit)
- Goals from previous program appraisal:

N/A

Previous year data

- Staff hours (Training, response, service delivery, etc): 335 hours per employee in fire related training (11/30/2022 through 11/30/2023)
- Response Data (Alarm handling, turnout times, travel time, total response time): $\rm N/A$
- Service delivered (Call volume, public contacts, etc.): N/A
- Trends:

Probationary firefighter academy is demanding majority of dedicated staff time.

- Injuries, Exposures, Property damage:
 - Approximately 6 injuries in the last year in the probationary academy.

Program results/outcomes

- Key Accomplishments:
 - 2 Joint probationary firefighter academies with a total of 11 BFD recruits.
 (Largest sinlge year hire in history
 - Annual training plan published
 - 335 hours of training per member on average.
 - Spring and all Officer development academies.

• Obstacles encountered:

- The demand for staffing hours in the training program outweighs the availability of staff.
- Training is reliant on the use of response equipment in most aspects of the program.
- Training facility is inadequate for the overall needs of the program.
- Budget request for staffing increase was denied leaving the program without an oversight and support position.
- Learning management system isn't being used to its potential.
- Certified training (I, F , etc) is not accounted for in probationary academy or annual training plan.

Evaluation

- Program goals and objectives:
 - Establish a training steering group.
 - Continue request for Battalion Chief of Support Services.
 - Continue evaluation of new training facility location.
 - Expand the use of the learning management system to better meet the needs of the organization.
 - Seek grant and budget funding for specific training equipment and course needs.
 - Investigate and evaluate injury risk factors for recruit academy and any organization physical training.
 - Explore the ability for the department to conduct lateral training for specific positions ().
 - Identify direction for acquiring certification for training (I, F , etc.).

- Once training steering group is formed the team will develop and review needed SOPs.
- Seek grant and budget funding for specific training equipment and course needs.
- Send members to become certified as live fire instructors.
- Research and request realistic driver training program.
- Pursue training officer credential program for Training Captain.
- Account for the need of certification training.

The following is a list of tactical and strategic objectives identified by the Bozeman Fire Department to improve operational efficiencies and department performance

Short-Term Recommendations from the Standards of Cover:

- ocus efforts on minimizing out-of-district times for all resources.
 - Develop a policy to hold shift-wide meetings and training utilizing web-based conferences when appropriate.
 - When meetings and training must be conducted with all available response personnel, Station 1 should be utilized and backfill staffing should be considered for Station 2.
- Work with Gallatin County Dispatch to develop an early alerting system before unit assignment.
 - Early notification of call type and address will enable units to start their response while dispatch continues to gather data to refine the resource package.
- Develop a move-up policy to staff high-demand zones when the home unit is on an extended event.
 - Based on historical data, call volume in the downtown corridor exceeds other
 areas within the city. When Station 1 or Station 2 units are dispatched to an
 extended event, such as a commercial gas leak or CPR in progress call, the onduty battalion chief should request the Station 3 company move to cover the
 areas with a higher probability of calls for service.
- mprove reliability of MDT, AVL, and other systems to support improved data collection and dispatch reliability.
 - Technology can improve total response times, information available to responders, and the output data used to make system adjustments. When this technology is down, it has a negative impact on operations.
 - nstitute a program that ties prevention resources (inspection and preplan data) to emergency operations can maximize the use of collected data relevant to a particular call.
- Research third-party entities that provide quality data identifying trends and improving the BFD's reporting capabilities.
 - mprovements to the data reporting methodologies could improve the overall validity and reliability of data used in the data-informed decisionmaking process.
- Evaluate the availability of automatic and mutual aid departments.
 - Ongoing evaluation of outside agencies' ability to commit resources for the BFD is essential to ensure these programs deliver the intended results.

- mprove mapping and preplanning.
 - ncreased growth drives an increase in newly named streets and buildings.
 nstituting a way to capture newly created infrastructure into maps can improve response accuracy and decrease travel delays.
- Consider significant event staffing planning including community events, weather events, and other stresses on the system.
 - Certain events can stress the response system and create overlapping calls for service, which in turn can increase travel times and decrease response zone reliability.
- Work with local agencies to address construction closures and their impact on emergency services.
 - Street closures can negatively impact travel times. The BFD should take an
 active role in the closure permitting process to minimize the impact on
 service delivery.
 - Projects are currently tracked through the dispatch system, but the mapping system most units utilize during call response does not always account for street closures.
- mplement a robust quality assurance/quality improvement plan.
 - Dedicated resources monitoring system performances can identify trends and develop improvement strategies. These programs should track call processing, turn-out time, and travel times.
 - mprovement to the delay reporting and tracking procedures could identify patterns to be addressed by performance improvement strategies.
- Add additional response units to existing stations to cover districts with poor reliability.
 - ncreased staffing will reduce the reliance on automatic and mutual aid departments providing ERF critical resources.
 - Additional resources within the system will improve the reliability of all planning zones and current response apparatus.
 - Adding one unit to the system will reduce the impact of multiple calls in the system.

Annual Program Appraisal Goals and Needs:

Training

- Program goals and objectives:
 - Establish a training steering group.
 - Continue request for Battalion Chief of Support Services.
 - Continue evaluation of new training facility location.

- Expand the use of the learning management system to better meet the needs of the organization.
- Seek grant and budget funding for specific training equipment and course needs.
- nvestigate and evaluate injury risk factors for recruit academy and any organization physical training.
- Explore the ability for the department to conduct lateral training for specific positions (F).
- dentify direction for acquiring certification for training (FF, F, etc.).

• Needed adjustments (new SOPs, budget increase, training course, etc):

- Once training steering group is formed the team will develop and review needed SOPs.
- Seek grant and budget funding for specific training equipment and course needs.
- Send members to become certified as live fire instructors.
- Research and request realistic driver training program.
- Pursue training officer credential program for Training Captain.
- Account for the need of certification training.

Fire Suppression

• Program goals and objectives:

- mprove turnout times across all shifts and stations (pre-alerts, improved crew staging, SOP on unit availability during training). 5% improvement across all emergent responses.
- mprove reliability by incorporating methods to reduce out of district time for companies, as well as move-up policy to cover for training, etc.
- Review ongoing county wide EMS study and implement appropriate recommendations.
- Monitor new staffing model's impact on overall staffing demand.
- Develop and implement response guidelines built upon industry best practices specific for the resources and capabilities of Bozeman Fire.

- Review and revise SOP 107.02 on unit availability during training.
- New SOP on training requirements.
- ncrease funding to support adding a QRV at Station 2 to increase suppression resources available in the City.

Emergency Medical Services

• Program goals and objectives:

- mplement findings of 3rd party EMS study.
- Request additional funding for increase in paramedic school attendance.
- Develop job description for EMS Captain.
- Utilize technology for inventory systems control.
- mprove use of training and certification learning management system.
- Develop and implement a formal QA/QI process.
- Research and institute EMS continuing education program.
- Develop organization specific RTF principles and acquire funding for equipment and additional training.

• Needed adjustments (new SOPs, budget increase, training course, etc):

- Budget increase request for 3 members to attend paramedic school annually.
- Develop SOP based on implementation of QA/Q process.
- ncrease instructor base for in-house EMS training.
- Develop RT best practices jointly with BPD.

Fire Investigation

• Program goals and objectives:

- ncrease the total number of certified fire explosion investigators by 1.
- nstitute an annual company level fire investigation training to include fire investigation SOP review.

Needed adjustments (new SOPs, budget increase, training course, etc):

- Review and update SOP 301.04
- Assign fire investigation online course with SOP review through Target Solutions.
- Add PPE for Fire Investigators including coveralls and respiratory protection.

Technical Recue

Program goals and objectives:

- Entire response staff to become operations level in confined space and trench rescue.
- dentify response capability for all technical rescue programs (SOPs)
- Create a three year plan for response capability for all technical rescue disciplines and achieve that mission for water, ice, rope, MVA/Extrication, and elevators in 2024.
- Entire team to reach Confined Space Rescue Technician level

- Plan and schedule a trench rescue technician level course to be delivered in 2025.

• Needed adjustments (new SOPs, budget increase, training course, etc):

- Develop and revise SOPs and guiding documents specific to technical rescue disciplines to reflect department capabilities.
- Attendance by all non-certified technical rescue team members in Spring confined space rescue technician program.
- Budget request increase to support Trench rescue technician program to be delivered in 2025 (\$35k for delivery of the class).
- ncrease technical rescue team membership and participation.
- dentify future apparatus and equipment needs to support technical rescue call response based on historical and projected data.
- Budget increase to purchase confined space capable communications equipment (\$17,000).

Hazardous Materials

• Program goals and objectives:

- Develop defined organizational roles and responsibilities and account for team participation requirements.
- Update equipment maintenance programs and delegate responsibilities to team members.
- dentify needed training, updates, and processes to recruit new team members and retain current members.

• Needed adjustments (new SOPs, budget increase, training course, etc):

- Review and update SOP 601.02
- Update and finalize grant purchasing plan

Fire Prevention

• Program goals and objectives:

- Develop a training plan to ensure staffing is prepared to provide needed services and succession planning.
- Support the new records management systems to account for the growth of new occupancies and needed services in the city.
- Conduct a staffing needs assessment based upon the workload projected for the program.

- Review and update current SOPs.
- Review C P plan for vehicle replacement to ensure it meets the needs of the prevention program.

- Training needs to include company officer ongoing training for Fire Inspector I.
- dentify budget needs for potential staffing increases.

Public Education

• Program goals and objectives:

- Establish reporting standards for all public education programs to achieve valid and reliable reporting data. (Tracking for smoke detectors, CPSS
- Review existing programs to identify needs and improvements.
- Develop an updated educational resource replacement and upgrade plan.
- Develop evaluation methods for existing programs.

• Needed adjustments (new SOPs, budget increase, training course, etc):

- Review and update SOPs, including creation of needed SOP for public education records management.
- Consider viable public education programs that have demonstrated success in other department. (i.e. public outreach animal).

Health and Wellness

• Program goals and objectives:

- Research and develop appropriate screening tools to implement for cardiac, cancer, and behavioral health. Incorporate these tools into annual health screenings.
- Continue to work with R and PD to vet first responder competent counseling options.
- Research the use and availability of a fitness evaluation and training tool.
- Review probationary firefighter academy plan and identify physical injury risk factors.
- ncrease funding to match program needs.
- mprove records management to help identify trends.

- Review and update SOP pertaining to NFPA 1500 (901.01 Occupational Safety and Health Program).
- Create standard description based on NFPA 1582 to identify process for fit for duty physical exams.
- ncrease budget to the Health and Wellness program to account to accomplish identified program goals and objectives.
- dentify and send member to FDSOA Health and Safety Officer course.
- ost IA Peer Support Training course locally.

Communications (Dispatch)

- Program goals and objectives:
 - Continue to work with communications system in order to improve alarm handling times.
 - Continue integration of new county wide radio system.
 - Support County in the acquisition and onboarding of critical staff.
 - Develop Bozeman Fire specific plan to implement new radio system.
- Needed adjustments (new SOPs, budget increase, training course, etc):
 - Review and revise SOP 801.01
 - mplementation of new SOP created to define emergency callback for large scale incidents.

Domestic Preparedness

- Program goals and objectives:
 Develop position description for community preparedness position.
- Needed adjustments (new SOPs, budget increase, training course, etc):
 ncrease in staffing budget to fund the Community Preparedness Position
 Review of SOP 1001.01
 Develop plan to incorporate ICS training for essential positions City wide. (ICS 100, 200, 700, 800).