

# Valley County EMS District Cascade, Idaho

# EMS System Evaluation for Improvement Study

# **ESCI** Emergency Services Consulting International

Providing Expertise & Guidance that Enhances Community Safety

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# Our sincere appreciation is extended to each of you...



Valley County

Doug Miller Valley County Clerk



## Cascade RFPD

**Steven Hull** Fire Chief

Keri Donica **EMS** Director

Dr. Murry Sturkie EMS Medical Director



# **Donnelly RFPD**

Juan Bonilla Fire Chief

Jayme Berheim **EMS** Coordinator

Dr. James Dardis EMS Medical Director



# McCall FPD

Garrett de Jong Fire Chief

Jan Julian Office Administrator

Dr. Sarah Curtin **EMS Medical Director** 

...and each of the volunteer, resident, and career firefighters and support staff who daily serve the citizens and visitors of Valley County with honor and distinction.



# **INTRODUCTION**

In late 2019, the Valley County EMS District retained Emergency Services Consulting International (ESCI) to conduct a comprehensive analysis of each of the components of the EMS delivery system in Valley County, and subsequently measure them against accepted national standards and industry best practices. It was also necessary for the study to take into account the impact on fire protection and special operations provided by each of the three fire districts participating in the study.

In addition, the study was to include recommendations on potential effective and efficient service delivery models that would address future growth and the increasing service demand throughout the County.

The report begins with a basic description of the demography of Valley County, which is then followed by an evaluation of the current conditions of the three primary providers of EMS and fire protection in Valley County.

ESCI understands that the fire districts may use different monikers. However, for purposes of clarity and consistency, the following names and acronyms will be utilized in this report:

- Cascade Rural Fire Protection District (CRFPD)
- Donnelly Rural Fire Protection District (DRFPD)
- McCall Fire Protection District (MFPD)

Unless otherwise specified, throughout this report, the terms "Medic Unit" and "ambulance" may be used interchangeably to describe vehicles configured to provide around emergency medical transport—regardless of the level of service provided (Basic Life Support, Intermediate Life Support, Advanced Life Support) and vehicle equipment.

The report concludes with a comprehensive section describing future projections, recommended goals, and implementation strategies and considerations for improving the delivery of EMS and fire protection throughout Valley County.

# **VALLEY COUNTY**

The following section provides a general description of Valley County, including its demographic composition and geographic features.

# General Description of the County

Valley County is a predominantly rural county located in central Idaho, and consists of approximately 3,733 square miles—of which water comprises 68 square miles. The County's primary highway is State Highway 55 (Payette River Scenic Byway), running north-south, which is designated as a national scenic byway.

Within the County are the cities of Donnelly, McCall, and Cascade—which serves as the County seat. McCall is the most populated of the cities. Smiths Ferry and Yellow Pine are unincorporated communities, but are censusdesignated locations.

# Valley County Demographics



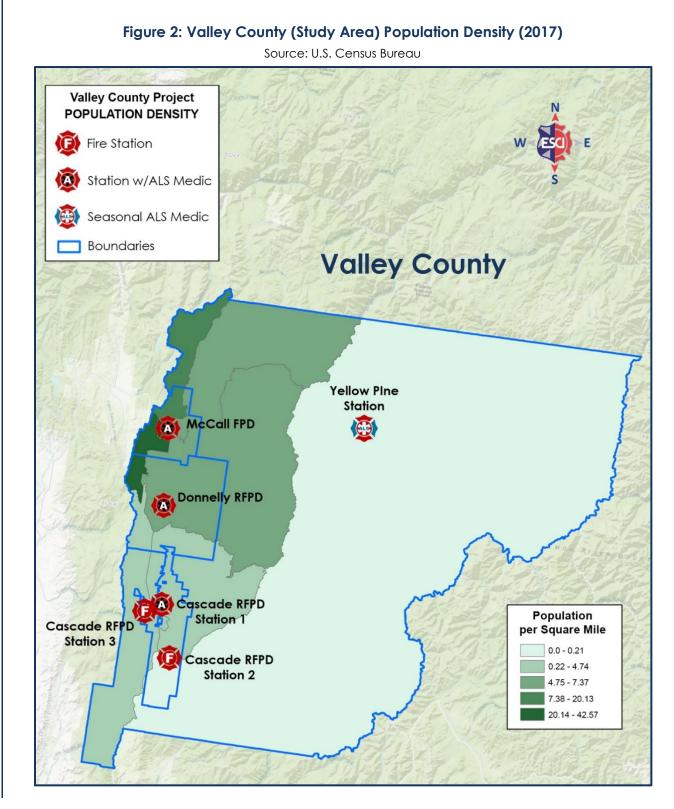
The 2018 estimated population of Valley County was 11,041 persons, which was an approximate increase of 12% since 2010. The majority of the permanent population resides in the City of McCall, with an estimated population of 3,470 persons.<sup>1</sup> The 2018 population estimate of Cascade was 1,000, while the City of Donnelly had a 2017 population estimate of 169 persons.<sup>2</sup>

It is important to note that the population estimates from the Census Bureau represent only the year-round permanent residents. These figures do not account for the thousands of annual tourists and visitors to the County annually—which can substantially impact EMS service demand. In addition, the configuration of the census blocks and boundaries prevent an accurate determination of each district's resident population.

Just over 25% of the County's population is age 65 years or older, and more than 18% are less than 18 years of age. Nearly 96% of the residents are white, followed by Hispanic or Latino persons comprising nearly 5% of the population.<sup>3</sup> As of 2018, there were 12,250 housing units and an estimated 3,532 households in the County. The average number of persons per household was 2.81.4

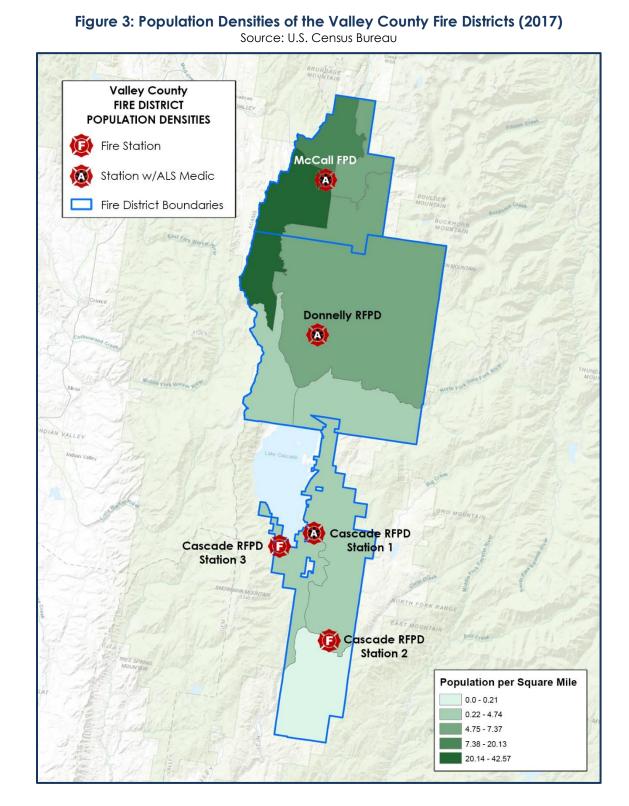


The following image shows the latest (2017) available population density of Valley County, as estimated by the U.S. Census Bureau.





The following figure illustrates a more detailed view of the population densities within the boundaries of each of the three fire districts participating in this study.





#### Health & Income

The general health of a community often has an impact on the service demand of the local Emergency Medical Services delivery system. In Valley County, the U.S. Census

Bureau estimates that nearly 12% of the population under the age of 65 years are without health insurance. About 14% of the population under the age of 65 has some type of disability.<sup>5</sup>

Nearly 12% of Valley County's population under the age of 65 years are without health insurance.

During the period 2013–2017, the median household income in Valley County was \$54,015

annually. The per capita income during the same period was \$28,515, and 10.4% of the population was below the poverty level.<sup>6</sup>

#### **Business & Industry**

According to the U.S. Census Bureau, in 2016 (latest available data) the top ten, by quantity, types of business establishments in Valley County were as follows:<sup>7</sup>

- Construction: 146
- Accommodation & Food Services: 74
- Retail Trade: 72
- Real Estate & Rentals: 55
- Professional, Scientific, & Technical Services: 43
- Other Services (except Public Administration): 42
- Healthcare & Social Assistance: 30
- Administrative & Support and Waste Management: 26
- Arts, Entertainment, & Recreation: 24
- Manufacturing: 17

Finance and Insurance establishments equaled the same as Manufacturing. This was followed by Transportation and Warehousing and Wholesale Trade, respectively.

## Cost of Living

Undoubtedly, the cost of living (COL) in a community can be one factor in a fire department's ability to attract and retain a stable workforce. In ESCI's experience, it has found in many communities similar to Valley County, that firefighters and other staff must reside outside of such areas and commute to work, as the COL prohibits them from living in the same community where they work.

The next figure compares the cost of living in Idaho, Valley County, and the major cities. The COL indices are based on a U.S. average of 100 points. An amount below 100 means the community is less expensive than the U.S. average. A COL index above 100 means it is more expensive.

| Cost of Living   | Cascade   | Donnelly  | McCall    | County    | ldaho     |
|------------------|-----------|-----------|-----------|-----------|-----------|
| Grocery          | 91.3      | 93.3      | 95.1      | 93.5      | 94.4      |
| Health           | 92.6      | 92.6      | 92.6      | 92.6      | 95.1      |
| Housing          | 106.8     | 59.2      | 150.2     | 145.2     | 114.1     |
| Utilities        | 89.6      | 88.6      | 87.4      | 89        | 89.3      |
| Transportation   | 69        | 69        | 69        | 69        | 81.6      |
| Miscellaneous    | 100.7     | 100.1     | 100.8     | 100.5     | 95.3      |
| Median Home Cost | \$246,900 | \$136,800 | \$347,300 | \$335,600 | \$263,900 |
| Overall Score:   | 93.6      | 79        | 107.1     | 105.5     | 97.7      |

#### Figure 4: Comparison of Cost of Living Indices in Valley County<sup>8</sup>

As shown, overall, Valley County has a higher COL index than both the U.S. and Idaho averages. The most significant factor contributing to the higher score is housing and the median home cost. However, the average cost of rent for a three-bedroom home in Valley County is just below the average in Idaho (\$1,119 versus \$1,129), and well below the U.S. average of \$1,537.<sup>9</sup>

## **Recreation & Tourism**

Tourism is the third-largest industry in the State of Idaho.<sup>10</sup> Valley County has many opportunities for recreational activities such as hunting, fishing, boating, snowmobiling, and a variety of other winter and summer activities. The County is also home to three ski areas: Brundage Mountain, Little Ski Hill, and Tamarack Resort.

Valley County has more than 300 lakes and four major river drainages within a 20-mile radius. Just north of McCall, Payette Lake consists of approximately 5,300 acres. Northwest of Cascade and south of Donnelly, Lake Cascade is a 28,000-acre reservoir.



Valley County has nearly 500 miles of

groomed snowmobiling trails that provide access to thousands of acres of off-trail riding on the north end of the County.<sup>11</sup> Hundreds of forest service roads and other trails offer many options for off-road riding.

The large number of year-round annual visitors and recreational activities in Valley County indicate a potential challenge for the fire departments and emergency services providers. In order to mitigate the potential emergency incidents associated with recreational activities, there must be adequately trained personnel, special equipment, and other resources.



# **Section I: EVALUATION OF CURRENT CONDITIONS**



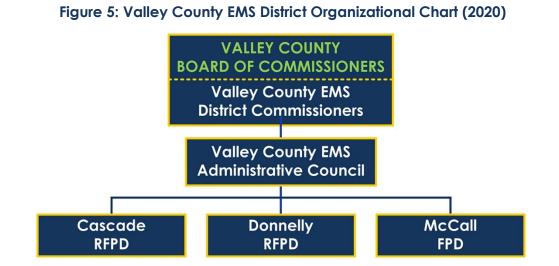
# **ORGANIZATIONS OVERVIEW**

The following section provides a current overall and detailed description of each of the three EMS (and fire departments) provider organizations included in this study.

# Valley County Emergency Medical Services District

The Valley County Ambulance District—more often referred to as the Valley County EMS District (VCEMSD)—was originally established by a resolution of the Valley County Board of County Commissioners (VCBCC). The VCEMSD subsequently entered into service agreements with CRFPD, DRFPD, and MFPD. The governing boards of each then approved the Valley County EMS System Operating Plan to establish a countywide EMS system. The plan called for the establishment of an Administrative Council and accompanying by-laws.

As shown in the following figure, the VCEMSD is overseen by the three elected members of the VCBBC, who also function as the Valley County EMS District Commissioners. The by-laws included the creation of the Valley County EMS Administrative Council (VCEMSAC), which is comprised of one fire district representative each and their respective EMS Medical Directors. The responsibility of the VCEMSAC is to provide recommendations to the VCEMSD regarding system management, oversight, planning, budgeting, and other issues.



The VCEMSD by-laws address the types of recommendations that can be made, meeting requirements, voting, meeting minutes and agendas, and handling of Council funds. However, they do not include specific operational performance or other standards, which are outlined in the individual interlocal agreements with each fire district.



The following figure shows the study area and boundaries of the Valley County EMS District.

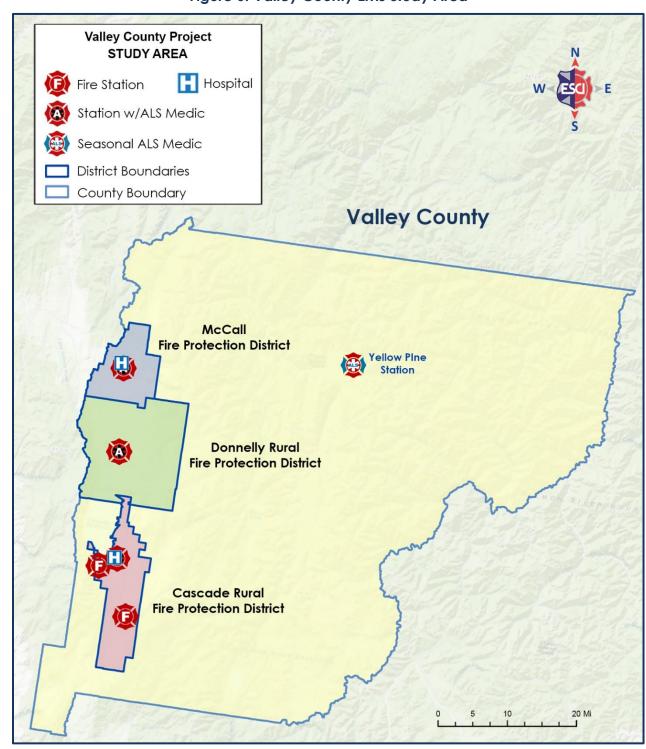


Figure 6: Valley County EMS Study Area



#### Interlocal Agreements with the Fire Districts

The terms of the current agreements (October 1, 2019–September 30, 2020) contain requirements involving personnel, scheduling, equipment, and payments to each fire district from the countywide EMS property tax levy.

Each district must provide two employees to operate an ambulance and provide prehospital EMS 24-hours daily—at least one of which must be certified at no less than an "Emergency Medical Technician (EMT) level Intermediate 85 Advanced, as defined by the State of Idaho's EMS Bureau."

The agreements require each fire district to provide a minimum of one ambulance vehicle licensed in Idaho by the Idaho EMS Bureau. The fire districts must own and maintain their ambulances in working condition at their own expense.

The Valley County EMS District levies a property tax for the purpose of providing EMS, and each fire district receives a proportionate share of the tax revenue, which is an amount equal to one-third of the total funds collected. At present, the fire districts are each receiving about \$295,000 annually. However, the terms of the agreements do not allow for an amount to exceed \$350,000 annually to each fire district.

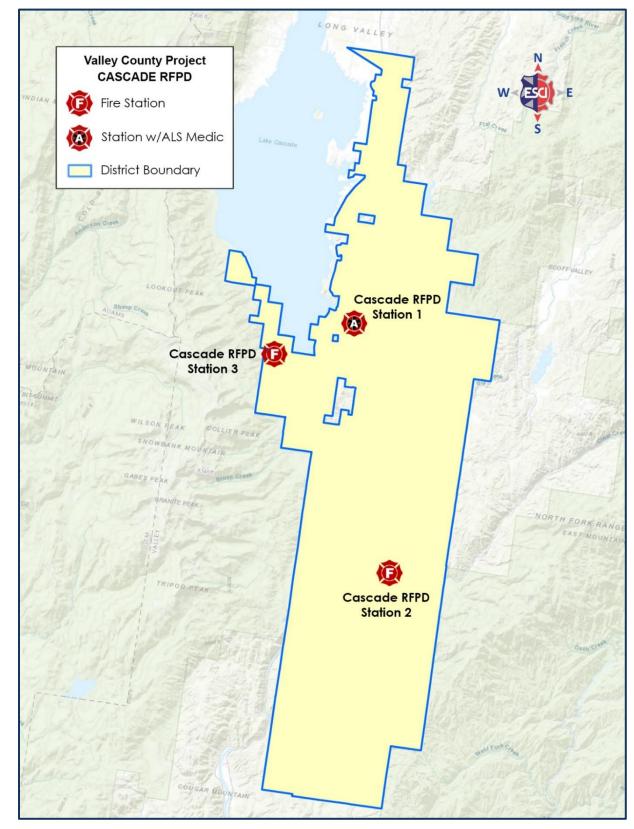
#### Cascade Rural Fire Protection District

The Cascade Rural Fire Protection District (Cascade Rural Fire Department) was established in 1984, with its EMS District formed in 2010. An elected Board of Fire Commissioners oversees CRFPD in accordance with State of Idaho statutes.

CRFPD service areas consist of approximately 110 square miles for fire protection and other emergency services, and a 1,300 square mile Emergency Medical Services District for ambulance transport. The current District population is comprised of approximately 981 persons, of which about 5% are urban, 15% suburban, 20% rural, and 60% in remote areas.<sup>12</sup>

The next figure shows the Cascade Rural Fire Protection District boundaries and locations of each of its three fire stations.



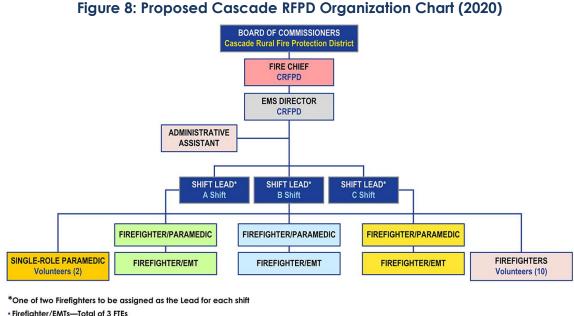






#### **CRFPD** Organizational Structure

CRFPD utilizes career staff, volunteers, and residents for emergency operations. The following figure shows the proposed organizational structure of CRFPD, which is expected to be adopted in 2020.



• Firefighter/Paramedics—Total of 3 FTEs and 1 part-time

As shown, the District employs a career Fire Chief, EMS Director, Captain, and Administrative Assistant. A total of eight career firefighters certified as either Emergency Medical Technicians (EMT) or Paramedics are assigned to operations, and supplemented with volunteer firefighters and volunteer single-role EMS providers. In the new structure, one firefighter will serve as the "Lead" on each shift.

## **CRFPD** Operations & Deployment

CRFPD deploys apparatus and personnel from three primary fire stations, with one station staffed 24-hours daily. The District provides traditional fire protection services along with Medical First Response (MFR) at both the Basic Life Support (BLS) and Advanced Life Support (ALS) levels, using certified Emergency Medical Technicians (EMT) and Paramedics. In addition, CRFPD provides BLS and ALS ambulance transport services. In 2015, CRFPD was given an *Idaho Surveying & Rating Bureau, Inc.* (ISRB) Public Protection Classification (PPC) score of 5.



Special operations and other services provided by CRFPD include:

- Vehicle Extrication
- Swiftwater Rescue
- Rope Rescue
- Hazmat Response (Operations Level)
- Public Education & Prevention Programs (CPR, First Aid classes, etc.)

During the summer months (May through October), CRFPD staffs and deploys an ALS ambulance from a fourth station in the community of Yellow Pine, which is within its EMS District and located about 54 miles northeast of Cascade (with an estimated travel time of 2.5 hours).

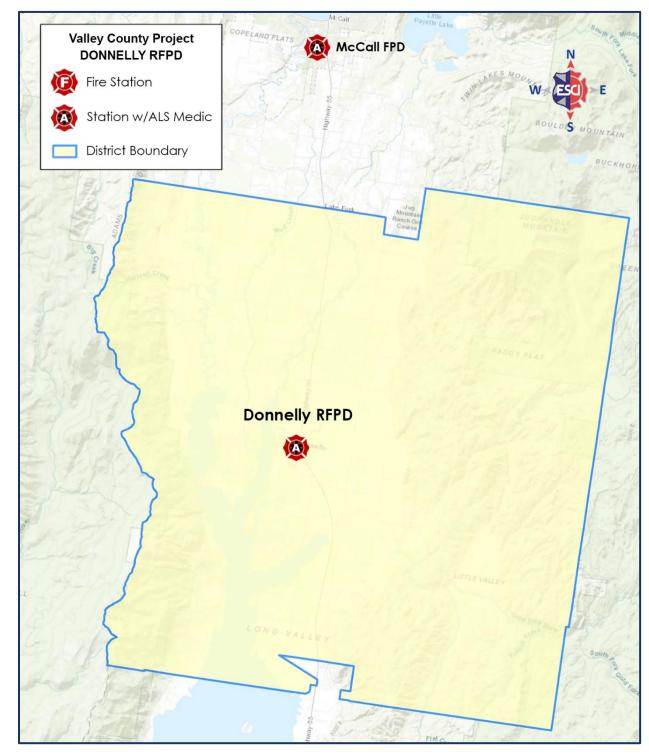
# **Donnelly Rural Fire Protection District**

The DRFPD is based out of the City of Donnelly and overseen by a three-member elected Board of Commissioners, with a Fire Chief responsible for the daily operations of the District. The District is comprised of approximately 156 square miles, with EMS transport services provided to a total area of about 180 square miles.

Accurate population statistics for DRFPD were not available. The U.S. Census Bureau estimated the City's population at 169 persons. The District may have an estimated transient population of more than 10,000 due to recreational activities during the summer months. The ISRB gave the District a PPC score of 4 in 2013.

The following figure outlines the boundaries of the Donnelly Rural Fire Protection District and the location of its single fire station.

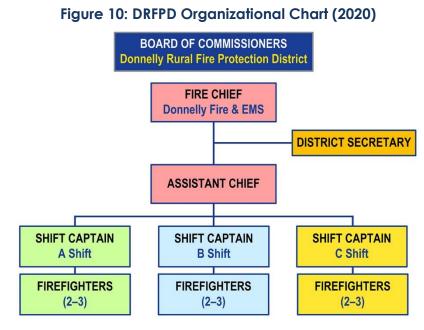




#### Figure 9: Donnelly Rural Fire Protection District Boundaries

#### **DRFPD** Organizational Structure

As shown in the next figure, the Fire Chief and Assistant Chief manage the daily operations of the fire district. A Captain is assigned to each shift in a supervisory role.



Note: Shift Captains & Firefighters certified as EMTs or Paramedics

Shift personnel assigned to operations have also been assigned to the duties of EMS Coordinator, Fire Marshal/Training Officer, and Billing Clerk. The DRFPD Fire Chief also serves as the Valley County Emergency Manager.

#### **DRFPD** Operations & Deployment

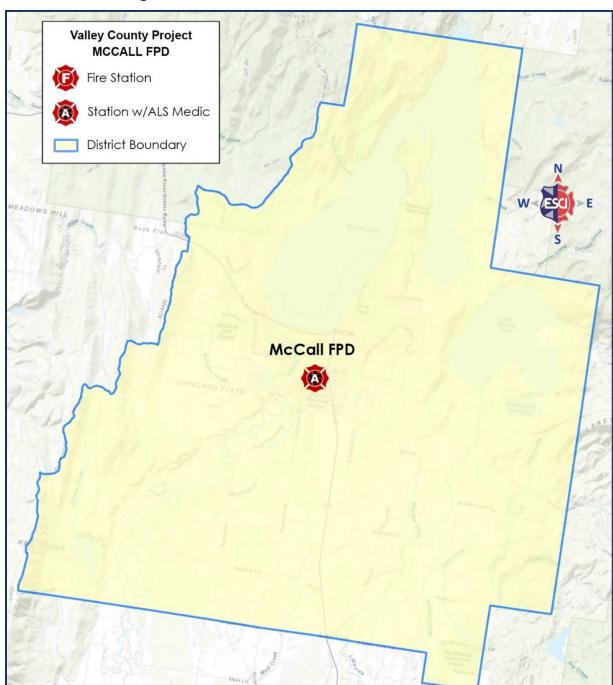
The Donnelly Rural Fire Protection District was formed in 1974. It deploys its apparatus and personnel from a single fire station in Donnelly, which is staffed 24 hours daily with career personnel. The District provides traditional fire protection services along with MFR at both the BLS and ALS levels, using certified EMTs and Paramedics. In addition, DRFPD provides BLS and ALS ambulance transport services.

The District does not currently provide technical rescue or hazardous materials response, and instead relies on mutual aid in such incidents. The District provides a variety of lifesafety (i.e., prevention) services that include fire inspections and code enforcement, plan reviews, fire and arson investigations, and public education programs. It is evident from DRFPD's Facebook® page that District personnel are actively involved in their community.



## **McCall Fire Protection District**

The McCall Fire Protection District (McCall Fire & EMS) covers an area of approximately 100 square miles that includes some areas outside the District that contract for service. The following figure shows the McCall Fire Protection District boundaries.



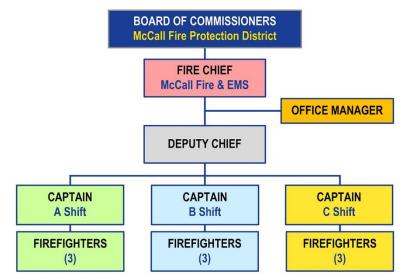




The City of McCall Fire Department was formed in 1932, and eventually consolidated with the rural fire district at the end of 1995. MFPD is overseen by a three-member Board of Commissioners, with one serving as the Board Chair. The Fire Chief is responsible for administration and daily operations, has hiring and firing authority, and is currently employed through a three-year contract.

#### **MFPD Organizational Structure**

The following figure is an illustration of the 2020 organizational chart of the McCall Fire Protection District.



#### Figure 12: McCall FPD Organizational Chart (2020)

The position of Deputy Chief has been unfilled since 2017, but was filled in January 2019. The McCall Fire Protection District employs six career Firefighter/Paramedics, three career Firefighter/EMTs, and an Office Manager.

#### **MFPD** Operations & Deployment

The McCall Fire Protection District operates from a single fire station located within the McCall city limits. For emergency operations, the District provides traditional fire protection, medical first-response, and EMS transport at the BLS and ALS levels. In addition, MFPD provides EMS transport to portions of Adams and Idaho Counties, and ALS rendezvous with several BLS agencies to the north (Riggins, New Meadows, and Council). The ISRB gave the District a PPC score of 3/8/9 in 2017.

Special operations provided by MFPD include: Backcountry Rescue (summer and winter), Swiftwater Rescue, Open Water Rescue, and Hazmat Response (Operations level).

In addition, the District provides limited fire inspections and plan reviews, public education and prevention programs, and fire/arson investigations with support from the Idaho State Fire Marshal's Office.



# **OTHER COMPONENTS OF THE EMS SYSTEM**

The following section describes other components, individuals, and organizations that comprise and contribute to the EMS system in Valley County.

# **Emergency Communications**

Emergency response organizations, regardless of mission, require reliable communications systems to ensure safe and effective emergency operations. Significant advances in radio and phone system technologies have been made in the past decade to meet new government-mandated standards.

The Valley County Emergency 911 Center (VC911) is the designated Public Safety Answering Point (PSAP) and dispatch center for law enforcement, fire, and EMS agencies in the County. The Communications Division of the Valley County Sheriff's Office administers VC911, which is minimally staffed with one dispatcher 24 hours daily and is E911-compliant with cell phone locator capability. Six dispatchers work an 8-hour rotating shift schedule, and two supervisors also work the radio consoles as well. The Center also uses the Code Red<sup>®</sup> emergency notification system to warn and instruct resident subscribers.

Dispatchers are trained and certified in the Medical Priority Dispatch® emergency medical dispatch (EMD) system, which allows them to triage calls and provide pre-arrival instructions. The Division has not adopted call answering, call processing, or dispatch time performance standards. However, it does have an overall quality management program as well as an EMS quality assurance program based on the International Academies of Emergency Dispatch standards and the ProQA<sup>™</sup> software application.

An E-911 advisory board, called the Valley County 911 Committee, consisting of fire and law enforcement representatives, provides input and feedback on dispatch operations, planning, and logistical issues with the countywide emergency communications system. A combination of 911 Funds, user fees, grants, and other sources fund the Division.



VC911 utilizes the CAI Information Systems<sup>®</sup> computer-aided dispatch (CAD) system, which is linked to a few mobile data computers (MDC) and station computers in select CRFPD and MFPD locations. However, they do not have the ability or capacity to use these mobile units in real-time during emergency incidents, as the County limits the number of system licenses allocated to each agency. Further, the County Information Technology Department does not allow direct connection to the dispatch records management or CAD systems due to security concerns. This severely limits each district's ability to access available dispatch data in the field and results in cumbersome data entry in each fire district's RMS.

The fire departments in Valley County primarily use a VHF analog radio system, and are paged out for emergency responses on this system. Due to the region's rugged terrain, there are numerous areas where radio and data reception from the dispatch transmission tower on Brundage Mountain is weak or non-existent. As a result, several repeater sites are located strategically throughout the service area. However, these repeaters support only specific tactical channels for each area, and do not simulcast the dispatch frequencies.

The districts also use the State of Idaho's licensed EMS radio frequencies to communicate with Medical Control, air ambulance services, and hospitals.

## Medical Direction & Control

Each of the three fire districts has its own EMS Medical Director. CRFPD's EMS Medical Director (Murry Sturkie, DO) is board-certified in Emergency Medicine, and is paid \$7,000 annually in accordance with a formal contract with the District. He participates in quarterly review meetings with CRFPD personnel and is not required to participate in ride-alongs with the ambulance crews.

DRFPD's EMS Medical Director (Dr. James Dardis) is a family medicine specialist with 33 years of experience. He is under contract to provide EMS medical direction for \$600 per month. He does not have a regular schedule for meeting with the ambulance crews, and is not required to participate in ambulance ride-alongs.

MFPD's EMS Medical Director (Sarah Curtin, MD) is a board-certified Emergency Physician under contract for \$6,500 annually. She is scheduled to meet with the ambulance crews biannually, and unscheduled monthly in the Emergency Department. She is not mandated contractually to participate in ride-alongs on the ambulance.



On-line medical control is provided by the on-duty emergency physicians at both St. Luke's McCall Medical Center in McCall and Cascade Medical Center located in Cascade. Local EMS providers typically participate in the development of prehospital care protocols (off-line medical control).

## EMS Quality Management

A robust clinical quality improvement (QI) program is essential for ensuring that an EMS system is delivering effective patient-centered care. Sometimes referred to as Continuous Quality Improvement (CQI), Total Quality Management (TQM), and/or Quality Assurance (QA), they essentially serve the same purpose.

Until recently, many EMS systems only analyzed operational performance standards, such as response times for first responder and EMS transport units, time spent on the scene, and hospital turnaround times. Little attention was focused on clinical outcomes and patient (or customer) satisfaction.

Changes in healthcare delivery at the national level are starting to impact the delivery of EMS clinical care, placing an increased emphasis on clinical measurements of system performance and assessment of cost-effectiveness. The federal government and other "payor" organizations are focusing on evidence-based medicine and utilizing "value-based payments" to compel healthcare providers to move to these new standards. Additionally, the national healthcare system has adopted the Institute for Healthcare Improvement's (IHI) "Triple Aim" concept, which focuses on improving individual patient health, community health, and patient satisfaction—all while reducing costs.

As a healthcare industry, EMS has lagged in adopting clinical performance measures and the development of comprehensive quality improvement programs. Well-designed, comprehensive EMS quality improvement programs generally include the following components:

Quality Assurance (QA) programs typically focus on reviewing electronic patient care reports (ePCR) to evaluate compliance with treatment protocols, and clinical and billing documentation standards. Alternatively, QA reviews can focus on certain types of EMS incidents (i.e., strokes, cardiac incidents, non-transports, and patient refusals, etc.), or individual EMS providers, such as new employees. QA programs must deliver individual providers with consistent feedback to improve system performance. Effective QA review and feedback programs can consume significant amounts of EMS staff time.



- EMS system Key Performance Indicators (KPI)—also known as performance metrics are analyzed to benchmark an EMS system's performance with regional, state, or national standards. The federal government, through the Department of Transportation's Compass Initiative, has developed national EMS performance standards.
- Investigation of unusual occurrences and sentinel events is critical for riskmanagement purposes. EMS provider agencies often receive complaints or inquiries regarding perceived clinical errors and customer-service issues. Hospitals, physicians, and citizens can generate these complaints.
- Customer satisfaction surveys are an important component of EMS quality management. Such surveys give a voice to customers (patients) and provide direct feedback on their impression of the EMS system. Additionally, Medicare, Medicaid, and commercial payors are now using customer satisfaction as a variable that impacts reimbursement for healthcare organizations. While EMS has not yet been impacted, many industry leaders believe that these standards will be applied to EMS providers in the near future.

#### **Patient Outcomes**

The ultimate measure of an EMS delivery system is its impact on the outcomes of the patients it treats and transports. Acquiring patient outcome data is not an easy task, and smaller systems usually do not have the capacity and technology to determine their impact on patients. None of the fire districts in Valley County have a systematic process in place to capture and report patient outcomes.

#### **Operational Quality Improvement**

Operational quality improvement involves the ongoing evaluation of the various elements of EMS system operations. Likely, the most common metric analyzed in most fire service and EMS systems is the ongoing measurement of response time performance, and compliance with adopted objectives.

There are several national response time performance standards for both fire departments and single-role EMS organizations. These include the National Fire Protection Association (NFPA), Commission on Fire Accreditation International (CFAI), and Commission on Accreditation of Ambulance Services (CAAS).

#### EMS Quality Management in Valley County

Quality management processes tend to vary among the three fire districts, as summarized in the following figure.

| Quality Management Component                    | CRFPD | DRFPD | MFPD |
|---|-------|-------|------|
| EMS system (operational) QM process in place    | Yes   | Yes   | Yes  |
| Areas for improvement identified                | Yes   | No    | No   |
| System performance-objectives established       | No    | No    | Yes  |
| System performance evaluated                    | No    | No    | Yes  |
| EMS clinical QM process in place                | No    | No    | Yes  |
| Key clinical-performance indicators established | No    | No    | Yes  |
| Internal EMS QI committee in place              | No    | No    | Yes  |
| Medical director participates in QI committee   | N/A   | N/A   | Yes  |
| Feedback provided to EMS field providers        | Yes   | Yes   | Yes  |
| Patient refusals & non-transports reviewed      | No    | Yes   | Yes  |
| PCRs spot-evaluated for accuracy                | Yes   | Yes   | Yes  |
| Annual reports on EMS QM published              | No    | No    | Yes  |
| Patient outcomes tracked                        | No    | No    | No   |

#### Figure 13: EMS Quality Management Components among the Fire Districts

#### **EMS Quality Management Discussion**

The preceding figure does not illustrate the complete picture of EMS quality management among the fire districts. Each of the EMS Medical Directors has access to electronic patient-care reports and conducts regular reviews of these. In the case of MFPD, the QA Coordinator spot-checks ePCRs for accuracy.

Only one of the three fire districts has established both operational performance-objectives and key clinical performance indicators. None are formally tracking the outcomes of their patients.

Maintaining a comprehensive EMS quality management program is time-consuming and somewhat labor-intensive. ESCI recognizes that each of the fire districts in this study has staff limitations and must prioritize its activities. This may indicate a rationale for considering a countywide EMS quality management program involving all of the EMS Medical Directors and fire districts.



# **Hospitals & Clinical Facilities**

Cascade Medical Center (CMC) in Cascade, and St. Luke's McCall Medical Center (SLMC) in McCall, are the two community hospitals in Valley County. Both facilities maintain Emergency Departments in which on-duty Emergency Physicians provide on-line medical control to EMS field providers.

SLMC is designated as a Level IV Trauma Center, while CMC is not designated. Neither of these facilities is a designated Stroke Center nor can provide cardiac catheterization and Percutaneous Coronary Intervention (PCI).

In certain high-acuity medical or trauma cases, both local hospitals will transfer patients by ground or air to St. Alphonsus Regional Medical Center or St. Luke's Boise Medical Centerboth of which are located in Boise. Both of these facilities have PCI capabilities. Pediatric patients are typically transported to St. Luke's, while psychiatric and patients requiring hyperbaric treatment are transported to St. Alphonsus. Burn patients may be transported to the Eastern Idaho Regional Medical Center in Idaho Falls, or the University of Utah Intermountain Burn Center in Salt Lake City.

# **Air Medical Services**

Two EMS helicopter and fixed-wing services are available to Valley County. Both the Life Flight Network and Air St. Luke's offer critical care treatment and transport using wellqualified staff.

Depending on the condition of the patient, Air St. Luke's utilizes Critical Care Flight Nurses, Critical Care Flight Paramedics, Maternal-Child Flight Nurses, and other specialists when indicated. In addition, St. Luke's provides interfacility ground emergency medical transport services with ambulances staffed with EMTs and Paramedics.

Life Flight primarily staffs its aircraft with Critical Care Flight Nurses and Critical Care Flight Paramedics, but has access to other healthcare specialists when patient-condition indicates.

Depending on the location and patient-acuity, both air medical services will provide incident-scene responses when practical. As of May 2020, St. Luke's has implemented a ground transfer ambulance service to transport hospital patients to Boise when necessary.



#### **Rescue & Hoist Missions**

Neither Life Flight nor Air St. Luke's is capable of providing rescue or hoist services. In these cases, the fire districts must rely on either the Idaho National Guard in Boise or Two Bear Air Rescue out of White Fish, Montana. Two Bear is an air-rescue service only, which provides aviation support for search and rescue operations in the Northwest United States.

#### **Community Health Emergency Medical Services**

As a part of the Idaho Statewide Healthcare Innovation Plan (SHIP), Community Health Emergency Medical Services (CHEMS) programs have been developed to incorporate EMS into the general healthcare delivery system and extend the reach of primary care into the patient's environment—particularly in rural and underserved communities.

CHEMS personnel receive additional education and can function in an expanded role within their current scope of practice. Examples of the roles CHEMS personnel may fill:<sup>13</sup>

- Acting as healthcare navigators for patients
- Transitional care for patients after hospital discharge
- Basic medical therapeutics

Some of the DRFPD and CRFPD Paramedics have received CHEMS training. No MFPD personnel have been trained in CHEMS. Currently, the program in Valley County focuses primarily on patients with mental health or behavioral issues.

- Vaccinations
- Medication inventories
- Resource coordination

# **MANAGEMENT & ADMINISTRATION**

Effectively managing a fire department is a complex task, often impacted by financial constraints, political pressures, and demanding community expectations. Today's fire department must address these complexities by ensuring an efficient and flexible organizational structure, adequacy of response, maintenance of competencies and a qualified work force, and financial sustainability.

In the following section, ESCI examines each district's current efforts to manage their organizations and may ultimately recommend changes and best practices that should be implemented.

The development of baseline management components in an organization enables it to move forward in an organized and efficient manner. In the absence of foundational management elements, the organization can flounder, lost in ineffective leadership with divergent views of purpose and vision.

A well organized and efficiently administered organization has appropriate documentation, policies, procedures, and clearly understands, acknowledges, and addresses internal and external issues affecting the agency. Processes must also be established to direct the flow of information and communications within each district, and with their respective constituents.

#### Foundational Management Tenants

To be effective, the management of a fire department needs to be grounded in the acceptance and adoption of a strong mission, vision, and values. Each district has an adopted mission statement that is prominently displayed. CRFPD is currently revising its mission, vision, and values statements as part of an internal planning process.

DRFPD is the only district that has an adopted strategic plan. This plan was created in 2017 and is reviewed annually. Creating, adopting, and implementing a strategic plan is critical to ensuring that everyone in the organization and the community understands why the fire agency exists, the level of services it provides, the vision for the agency over the next three to five years, and the goals and objectives to get there.

In a future consolidation, conducting a strategic planning process that results in tangible and realistic goals and objectives of the new organization should be given a very high priority.



#### Management Documents & Processes

For any organization, documentation of activities is not only required to meet the organizational mission, but it is also a legal requirement in many aspects of district operations. This practice is critical both because state and federal regulations govern document management and provide a mechanism for measuring performance. Policy and procedure development and maintenance is critical to ensuring a stable, effective, and cohesive organization. Proper documentation management also provides a formal method for memorializing organizational decisions and processes.

None of the districts have formal capital facilities or capital equipment replacement plans. As a result, all three districts identified capital equipment and apparatus replacement as critical issues that need to be addressed. CRFPD is the only district that has a capital expenditure plan.

All three districts have contemporary policies and procedures regulating business and operational practices. MFPD is transitioning its policies to the Lexipol<sup>®</sup> web-based subscription company.

#### Management Discussion

In a consolidation of two or more districts, homogenizing each district's policies and procedures will be critical. The fire districts should expend considerable effort in creating a capital facilities plan, especially given the continued growth in the county. Increased population and buildings will not only result in increased emergency service demand but may also shift call density away from currently located stations. In addition, changes in building safety codes and NFPA standards should be referenced and incorporated into capital facilities planning to ensure a safe working and living environment for firefighters and staff.

# Internal Assessment of Critical Issues & Future Challenges

#### **Critical Issues**

As a part of this study, each district was asked to list the most critical issues facing its organization. ESCI evaluated the responses, looking for commonalities that could lead to more cohesive planning in the future. The next figure summarizes the issues facing each fire district.



| No. | CRFPD              | DRFPD                   | MFPD                     |
|-----|--------------------|-------------------------|--------------------------|
| 1   | Outdated Apparatus | Retention & Recruitment | Training Standards/SOPs  |
| 2   | Personnel          | Staff Housing           | Capital Replacement Plan |
| 3   | Outdated Equipment | CIP                     | Staffing                 |
| 4   | Funding            | Impact Fees             | Volunteer Program        |
| 5   | None               | None                    | Retention & Recruitment  |

#### Figure 14: Critical Issues Identified by the Fire Chiefs

As previously noted, none of the districts have capital facilities plans, and each noted this as a critical issue, along with the need to replace aging equipment and apparatus. Not surprisingly, personnel and staffing issues were also noted among all three agencies, including the need to address recruiting, and retaining career and volunteer staff.

## **Internal & External Communications**

In today's "hyper speed" world of communication, the public expects strategic, frequent, responsive, and caring communication from government agencies. Likewise, employees and volunteers expect the same when disseminating internal messages. Without it, public and employee confidence in the organization can be severely damaged, and informal communication channels may be created to spread false and misleading information throughout the community and organization. The following figure summarizes the various methods used by each district in communicating with staff and the public.

| Communication Method               | CRFPD     | DRFPD | MFPD |
|------------------------------------|-----------|-------|------|
| Regularly scheduled staff meetings | Quarterly | Yes   | No   |
| Agency Intranet                    | No        | No    | No   |
| Written memos                      | Yes       | Yes   | Yes  |
| Internal newsletters               | No        | No    | No   |
| All hands meetings                 | Yes       | Yes   | No   |
| Community newsletter               | No        | No    | No   |
| Department website                 | No        | Yes   | Yes  |
| Social Media Accounts              | No        | Yes   | Yes  |
| Community surveys                  | No        | No    | No   |

#### Figure 15: Communications Methods Used by Departments



ESCI noted that DRFPD is the only district that has an assigned Public Information Officer.

Specific to internal communications, ESCI noted each district uses traditional methods to distribute information and receive staff feedback. Staff meetings are held periodically by CRFPD and DRFPD only. All three districts regularly send emails. However, only full-time employees in each district have district assigned email addresses.

Community newsletters, media coverage, and websites are the means most commonly employed by fire departments to communicate with the public. Fire and life safety messages are promulgated in this manner, along with information about current political or fiscal issues.

DRFPD and MFPD have district websites, and the DRFPD website is being redesigned. DRFPD and MFPD have Facebook® and Twitter® accounts, and MFPD also has an Instagram<sup>®</sup> account. MFPD regularly posts safety and department activity information on their Facebook page, while DRFPD occasionally posts to their page. Neither district regularly posts messages or information on their Twitter accounts. As a result, each account has less than 100 followers.

#### **Communications Discussion**

Many emergency response agencies now use interactive social media tools like Twitter, Facebook, Instagram, and more to communicate with internal and external stakeholders. These tools are now engrained in the fabric of our society. Regardless of the outcome of potential consolidation, each district should explore increasing their use of these social media tools, while also looking to incorporate additional platforms like Instagram.

If consolidation of two or more fire districts is undertaken, a strategic analysis and approach to ensuring consistent, accurate, and timely dissemination of information to employees and volunteers will be vital to the success of the new organization. The relative remoteness of an expanded service area, wide-dispersion of volunteer personnel, and the relative distance between fire stations would potentially present significant communication barriers that will need to be overcome.



#### **Recordkeeping & Document Control**

In any organization, documentation of activities is of paramount concern. Sound management decisions cannot be assured without accurate data, and organizational transparency to the public will be impeded if the department cannot explain what it is doing. The documentation of activities must be routine.

All three districts use Firehouse Software® and the Idaho EMS records management systems to document fire and EMS incidents. Each district also maintains adequate document control processes. Hard copy records are secured by lock and key in file cabinets and locked offices, and electronic files are stored on password-protected local and cloudbased servers. These barriers, along with locked offices, result in a three-layer barrier to accessing confidential and sensitive records. These are sound practices in the fire service industry.

## Facility Security, Financial Reporting, & Equipment Testing

Digital keypad or personal identification number (PIN) locks secure fire stations in each of the districts. None of the stations have intruder alarms or camera systems.

Financial and operational reports are provided monthly to each district's Board of Fire Commissioners. DRFPD and MFPD use QuickBooks® financial and accounting software to track revenues and expenses.

All three districts use outside vendors to conduct and document pump, ladder, breathing air, and hose testing. Testing records are archived internally at each district and by the vendors who performed the tests.

Each district appears to have sufficient and timely financial and operational reporting methods in place, along with adequate physical security measures at each station.



# **STAFFING & PERSONNEL MANAGEMENT**

Many emergency services organizations consider employees as their most valuable asset. Managing personnel to achieve maximum efficiency, professionalism, and personal satisfaction is art as much as science. Consistency, fairness, safety, and opportunities for personal and professional growth are key values in a healthy management culture. These values are even more important when the organization relies on the participation and support of a "volunteer" workforce. Volunteer personnel may leave if they do not feel valued or experience personal satisfaction from their participation. The same can be applied to career personnel.

Several national organizations recommend standards to address staffing issues. The Occupational Health & Safety Administration (OSHA) Respiratory Protection Standard and National Fire Protection Association (NFPA) Standard 1710 (or 1720; whichever is applicable) are frequently cited as authoritative documents.<sup>14,15,16</sup> In addition, the Center for Public Safety Excellence (CPSE) publishes benchmarks on the number of personnel recommended on the emergency scene for various levels of risk.

An appropriate balance of administration and support staff, compared to operational resources and service levels, is an important consideration to achieving organizational success. It must be noted that key administrative and logistical support positions are critical in maintaining an efficient and effective emergency response organization. Comparing these positions across the three fire districts in this study may reveal opportunities for sharing and/or combining positions to improve overall efficiencies.

ESCI evaluated the job descriptions, work schedules, compensation packages, and use of personnel to identify areas of excellence, areas for improved efficiency in personnel management, and opportunities to share resources.

# **Personnel Policies & Processes**

Each of the three districts was surveyed to determine the administrative components used in managing its employees. Each has contemporary personnel policy manuals, provides training on these policies to new employees, and archives copies of outdated policies. Each of the districts also maintains and securely archives personnel records—including injury and accident reports and medical/exposure records.



Ensuring the health and safety of employees should be a high priority in any fire agency. In an attempt to prevent illness and injuries, many organizations offer proactive health and wellness programs. Many of these also support mental health, which can be very important for those working in emergency services.

The following figure lists the features of each fire district.

| RFPD             |                        |
|------------------|------------------------|
| KIID             | MFPD                   |
| Yes <sup>a</sup> | Yes <sup>A</sup>       |
| No               | Annual                 |
| No               | Yes                    |
| Yes              | Yes                    |
| Yes              | Yes                    |
| Yes              | Yes                    |
|                  | No<br>No<br>Yes<br>Yes |

#### Figure 16: Health, Safety, & Counseling Services Provided by the Districts

<sup>A</sup>Not NFPA 1582.

## Hiring, Testing, & Safety

Recruiting, selecting, and retaining firefighters takes a considerable investment of time, effort, and money to ensure the organization employs high-quality individuals. Becoming a firefighter is one of the most sought-after careers in the nation, and selecting candidates that fit best within the organization and its culture requires a deliberate and comprehensive evaluation. The following figure summarizes the hiring process components used by the three districts.



| Hiring Process Components   | CRFPD    | DRFPD | MFPD |
|-----------------------------|----------|-------|------|
| Recruitment program         | Yes      | Yes   | No   |
| Qualifications check        | Yes      | Yes   | Yes  |
| Reference check             | Yes      | Yes   | Yes  |
| Background check            | EMS only | Yes   | Yes  |
| Physical Agility Test       | No       | No    | No   |
| Knowledge testing           | No       | No    | Yes  |
| Interview                   | Yes      | Yes   | Yes  |
| Medical exam required       | No       | No    | Yes  |
| Psychological exam required | No       | No    | No   |

#### Figure 17: Hiring Process Components

There is considerable variation between the three districts in how new firefighters and EMS providers are onboarded. MFPD uses *Ergometrics®*—a third-party testing company—to administer written and psychological assessments for the entry-level firefighters. The District discontinued conducting a physical agility assessment. However, incumbent firefighters must successfully complete an annual wildfire "Pack Test" consisting of a three-mile hike that must be completed within 45 minutes while wearing a 45-pound backpack.

CRFPD and DRFPD do not conduct a written assessment, physical agility assessment, or physical examination upon conditional hire. Instead, they rely solely on background and reference checks and an interview to determine candidate suitability and capability to perform fireground and EMS tasks.

## **Hiring Process Discussion**

There appears to have been a significant amount (66%) of turnover at MFPD over the past six years. This turnover is attributed to family issues, desire to work for larger fire departments with greater potential for career advancement, or discipline. While many of the impacts of these transitions cannot be empirically quantified, it is a given that they result in increased expenses in selecting, outfitting, and training replacements—as well as disruptive cultural and operational impacts that likely affect teamwork. ESCI understands that CRFPD has had a similar experience with high turnover. Over the past few years, the hiring practices in fire departments across the country have been challenged by allegations of bias and discrimination. For example, the new-hire testing practices of the New York City Fire Department and Los Angeles Fire Department were questioned, which resulted in the suspension of the hiring process and revocation of some conditional job offers. Outside experts were asked to analyze the historical hiring outcomes and current hiring administrative procedures, and make recommendations for improvement.<sup>17</sup> As a result, significant changes were made, at great expense, to ensure a fair and impartial hiring process.

All three fire districts should be concerned about the testing processes of their new hires. Ensuring new-hire candidates have the physical and medical capability to perform strenuous fireground tasks should be a high priority. Equally as important, these assessments should be based on standards that have been validated and adopted by other public safety agencies. ESCI understands that the Nampa Fire Department (NFD) routinely administers the CPAT, a validated and job-specific firefighter physical agility assessment program used by fire departments across the country. ESCI understands MFPD has approached NFD about sending its new candidates through the CPAT testing process.

A 10-year review (1994–2004) of firefighter line-of-duty death (LODD) statistics revealed 45% were the result of heart disease.<sup>18</sup> In 2010, the National Institute for Occupational Safety & Health (NISOH) conducted a study of the prevalence of cancer in 30,000 Firefighters.<sup>19</sup> The study concluded that firefighters have a 14% greater risk of contracting cancer compared to the general population. Lastly, NFPA Standard 1582 defines the necessary components of an occupational medical program, which is intended to ensure the safety and health of firefighters.<sup>20</sup>

Ensuring employees are medically cleared to perform rigorous fireground tasks, along with identifying any pre-existing medical conditions that may place an employee in jeopardy, is an important screening component in the hiring process and beyond.

# Labor Agreement

MFPD is the only department that has union-affiliated employees. All full-time firefighters, except for the Fire Chief and Deputy Fire Chief, are members of the International Association of Firefighters (IAFF) Local 4564—which is part of the 7<sup>th</sup> District of the IAFF. MFPD's current collective bargaining agreement (CBA) is in effect January 1, 2020, through December 31, 2022.



None of the full-time employees of the other two fire districts are represented by the IAFF or have collective bargaining agreements.

# Administrative Support Staffing

Each of the districts has varying levels of administrative support positions. Unlike city fire departments, which typically rely on other city departments for administrative support services (e.g., information technology, human resources, finance, etc.), fire districts must provide such administrative services internally or through outsourcing. The following figure illustrates the various positions in uniformed and non-uniformed administrative positions.

## Figure 18: Uniformed Administrative & Support Services Staff Positions (2020)

| Staff Positions  | CRFPD | DRFPD | MFPD |
|------------------|-------|-------|------|
| Fire Chief       | 1     | 1     | 1    |
| Deputy Chief     | N/A   | N/A   | 1    |
| Assistant Chief  | N/A   | 1     | N/A  |
| EMS Director     | 1     | N/A   | N/A  |
| Total Positions: | 2     | 2     | 2    |

The following figure shows who provides administrative support functions.

#### Figure 19: Non-Uniformed Support Staff Positions (2020)

| Staff Positions                     | CRFPD | DRFPD | MFPD |
|-------------------------------------|-------|-------|------|
| Executive Assistant/Officer Manager | N/A   | 1     | 1    |
| Administrative Assistants           | N/A   | N/A   | N/A  |
| Board Secretary                     | 1     | 1     | N/A  |
| Information Technology Technician   | N/A   | 1     | N/A  |
| Total Positions:                    | 1     | 3     | 1    |



#### Administrative Staffing Discussion

The ratios between administrative positions and the total staff in each district are not excessive. Analyzing these facilitates an understanding of the relative number of resources committed to this important function. An appropriate balance of administrative to operational personnel is critical to the success of a fire district's mission and responsibilities. Failure to provide adequate staffing in this area can result in a lack of coordination, poor recordkeeping, ineffective communications, and a myriad of other issues indicative of an organization that is struggling to function effectively.

Due to the rural nature and size of the three districts, and the practice of outsourcing certain administrative functions, the level of dedicated administrative support appears appropriate. However, ESCI notes two additional potential negative aspects to the lean number of administrative staff in each district. First, there is a lack of "bench depth." That is, an absence of functional redundancies that can result in the crippling of normal operations if an administrative employee becomes unavailable for an extended period. Second, allowing limited staff to work at maximum capacity may result in focusing on myopic short-term tasks, and ultimately diminish the ability to strategize or perform longterm planning. This can be compounded if administrative staff are also expected to respond to routine emergency incidents while performing their regular administrative duties.

# **Operations Staffing**

ESCI evaluated the type and number of staff positions in operations. The following figure provides a summary of full-time, part-time, and volunteer staff in each district.



| Operations Positions            | CRFPD | DRFPD                 | MFPD       |  |
|---------------------------------|-------|-----------------------|------------|--|
| Captain                         | N/A   | <b>4</b> <sup>B</sup> | 4          |  |
| Firefighter/Paramedic           | 3     | 5                     | 10         |  |
| Part-Time Firefighter/Paramedic | N/A   | 1                     | N/A        |  |
| Firefighter/EMT – 185           | N/A   | 3                     | N/A        |  |
| Firefighter/EMT                 | 9     | 10                    | 13         |  |
| Firefighter/EMR                 | N/A   | 1                     | N/A        |  |
| Firefighter                     | 4     | 3                     | 8          |  |
| Single Role Paramedic           | 2     | 1                     | <b>4</b> ^ |  |
| Single Role EMT                 | 1     | N/A                   | 4          |  |
| Single Role EMR                 | N/A   | 2                     | N/A        |  |
| Total Positions:                | 19    | 30                    | 43         |  |

#### Figure 20: Total Operations Staffing by District (2020)

<sup>A</sup> Includes one retired physician volunteer responder.

<sup>B</sup> Includes three Captain/Paramedics and one Captain/EMT-185.

# **Volunteer Staffing**

Each district has a cadre of volunteer personnel who provide initial and back-up emergency response. The following figure summarizes the various volunteer staff positions.

## Figure 21: Volunteer Staffing by District (2020)

| Volunteer Classification  | CRFPD | DRFPD | MFPD |
|---------------------------|-------|-------|------|
| Captain                   | N/A   | N/A   | 1    |
| Firefighter               | 4     | 3     | 8    |
| Firefighter EMT           | 6     | 5     | 10   |
| Firefighter/EMR           | N/A   | 1     | N/A  |
| Firefighter/EMT 185       | N/A   | 3     | N/A  |
| Firefighter Paramedic     | 0     | 5     | 4    |
| Single Role EMR           | 0     | 2     | 0    |
| Single Role EMT           | 1     | 0     | 4    |
| Single Role Paramedic     | 2     | 1     | 3    |
| Civilian Support Position | 0     | 0     | 1    |
| Total Positions:          | 13    | 20    | 31   |



## Full-Time Operations Staffing

The following figure summarizes the number of full-time employees assigned to operations.

| Operations Positions  | CRFPD | DRFPD | MFPD |
|-----------------------|-------|-------|------|
| Captain               | N/A   | 3^    | 3    |
| Firefighter/Paramedic | 3     | N/A   | 6    |
| Captain /EMT-185      | N/A   | 1     | N/A  |
| Firefighter/EMT       | 3     | 5     | 3    |
| Firefighter           | N/A   | N/A   | N/A  |
| Single Role Paramedic | N/A   | N/A   | N/A  |
| Single Role EMT       | N/A   | N/A   | N/A  |
| Single Role EMR       | N/A   | N/A   | N/A  |
| Total Positions:      | 6     | 9     | 12   |

Figure 22: Operations Positions (FTE) by District (2020)

<sup>A</sup> Three Captain/Paramedics

ESCI calculated the theoretical number of full-time employees required to meet the various average leave hours used over the last three full calendar years and compared the results to the current number of full-time operations employees assigned to 48-hour shifts in each district. This calculation compared the average available schedule weekly work hours per employee, subtracted the average hours of the various types of leave used by employee—based on historical leave usage—and calculated a sick and vacation Staffing Relief Factor (SRF) for each district.

ESCI then multiplied the number of personnel in each district needed to cover a single position 24-hours daily with the relief factor to determine the total number of employees required to meet daily minimum FTE staffing. ESCI noted that minimum daily FTE staffing is three per shift for MFPD, with one additional position per shift that is used for relief coverage.

The following figure summarizes the results of the calculations.



| Relief Factor                     | CRFPD | DRFPD | MFPD |
|-----------------------------------|-------|-------|------|
| Sick Leave                        | 1.02  | 1.08  | 1.15 |
| Vacation Leave                    | 1.10  | 1.17  | 1.21 |
| Total Relief Factor: <sup>A</sup> | 1.08  | 1.18  | 1.22 |

#### Figure 23: Theoretical Relief Factor Calculation (2018)

<sup>A</sup> Includes personal leave, funeral leave, FMLA leave, etc.

The total leave factors were multiplied by the number of personnel needed to cover one 24-hour position in each district. The following figure compares the theoretical number of positions needed with the current number of employees assigned to operations.

| Fire District | No. Positions<br>Required 24/7 | Total No.<br>Operations Staff | Theoretical<br>Staff Required | Shortage or<br>Overage |
|---------------|--------------------------------|-------------------------------|-------------------------------|------------------------|
| CRFPD         | 1                              | 3                             | 4                             | -1                     |
| DRFPD         | 3                              | 9                             | 12                            | -3                     |
| MFPD          | 3                              | 12                            | 12                            | 0                      |

#### Figure 24: Theoretical Required FTE Staffing Levels

All three districts assign career operations personnel to a 48 hours-on, 96 hours-off shift rotation schedule. To reduce the annual average workweek hours in each district, additional 24-hour shifts off (known as "Kelly Days") are scheduled after completing cycles of 48-hour shifts. CRFPD personnel have 14 Kelly Day shifts, DRFPD personnel have 6 Kelly Day shifts, and MFPD personnel have 6.5 Kelly Day shifts. In each fire district, vacations are requested, approved, and scheduled during the current year.

The following figure summarizes the shift schedule, FLSA work period, and average scheduled hours for career staff assigned to operations.



| Schedule Description | CRFPD        | DRFPD        | MFPD         |
|----------------------|--------------|--------------|--------------|
| Shift Rotation       | 48-on/96-off | 48-on/96-off | 48-on/96-off |
| Average Workweek     | 48 hours     | 48 hours     | 53 hours     |
| FLSA Work Period     | 28 days      | 19 days      | 14 days      |
| Total Annual Hours   | 2,496        | 2,544        | 2,756        |
| Shift Start Time     | 0800         | 0700         | 0700         |
| Kelly Days Per Year  | 14           | 6            | 6.5          |

#### Figure 25: Operations FTE Work Schedule

## **Emergency Operations Staffing Discussion**

ESCI noted a significant difference in overall annual work hours between the organizations. While each district deploys a similar operations work schedule—48 hours-on, 96 hours-off— CRFPD and DRFPD personnel work fewer total annual hours per year compared to MFPD. If consolidation of the fire districts is considered, this difference will have to be addressed in a planning effort that potentially involves moving employees from one employer to another, or to a completely new employer.

# Salaries & Benefits

In analyzing the various staffing configurations and deployment methods, ESCI evaluated the wages and benefits paid to full-time, part-time, and volunteer personnel. This was done to identify potential synergies and complications in considering consolidated operations among the three districts.

The next figure shows that the total cost of CRFPD benefits equaled approximately 37.25% of salaries when averaged across all positions.



| Job Classification    | Starting Salary | Top Salary           | Average Salary |  |
|-----------------------|-----------------|----------------------|----------------|--|
| Fire Chief            | \$47,000        | \$65,232             | \$56,116       |  |
| EMS Director          | \$37,584        | \$54,129             | \$45,857       |  |
| Board Secretary       | N/A             | \$3,000              | N/A            |  |
| Firefighter/EMT       | \$30,964        | \$34,750             | \$32,857       |  |
| Firefighter/Paramedic | \$35,394        | \$44,281             | \$39,838       |  |
| Part-time Paramedic   | N/A             | N/A                  | \$19.36/hour   |  |
| Volunteer Paramedic   | \$8.50/hour^    | \$13.74 <sup>₿</sup> | N/A            |  |

### Figure 26: CRFPD Staff Salaries (2019)

<sup>A</sup>Pay rate when filling secondary paramedic position.

<sup>B</sup>Pay rate when filling primary paramedic position.

The next figure summarizes the wages for the various DRFPD positions.

| Job Classification             | Current Annual Salary      |  |  |  |
|--------------------------------|----------------------------|--|--|--|
| Fire Chief                     | \$94,963                   |  |  |  |
| Assistant Chief                | \$89,593                   |  |  |  |
| Deputy Chief                   | \$80,539                   |  |  |  |
| Fire Captain                   | \$69,097 <sup>B</sup>      |  |  |  |
| Firefighter EMT                | \$40,695 <sup>B</sup>      |  |  |  |
| Firefighter Paramedic          | \$44,375 <sup>B</sup>      |  |  |  |
| Part-time Paramedic            | \$32,000                   |  |  |  |
| 9-hour Day Shift               | Same as FTE being replaced |  |  |  |
| 12-hour Night Shift            | \$93                       |  |  |  |
| Holiday 24 Hours On-call       | \$100                      |  |  |  |
| Pay per run                    | \$16                       |  |  |  |
| Stand-In Hours                 | Same as FTE being replaced |  |  |  |
| On-Call Shift 12 Hours         | \$45                       |  |  |  |
| Fourth of July                 | \$120                      |  |  |  |
| Paramedic On-call 12 Hours     | \$95                       |  |  |  |
| Paramedic Night Shift 12 Hours | \$120                      |  |  |  |
| Paramedic Day Shift 12 Hours   | Same as FTE being replaced |  |  |  |

#### Figure 27: DRFPD Staff Salaries (2019<sup>A</sup>)

<sup>A</sup>Only current pay rates were provided by the Districts.

<sup>B</sup>Average pay of incumbents in the position.



The next figure summarizes the wages for the various MFPD positions.

| Job Classification              | Starting Salary | Top Salary | Average Salary |  |  |  |  |  |  |
|---------------------------------|-----------------|------------|----------------|--|--|--|--|--|--|
| Fire Chief                      | N/A             | \$95,000   | \$95,000       |  |  |  |  |  |  |
| Deputy Chief                    | N/A             | \$95,000   | \$95,000       |  |  |  |  |  |  |
| Fire Captain                    | \$70,787        | \$85,536   | \$78,375       |  |  |  |  |  |  |
| Firefighter/EMT                 | \$61,782        | 64,272     | \$62,542       |  |  |  |  |  |  |
| Firefighter/Paramedic           | \$69,196        | \$73,746   | \$71,462       |  |  |  |  |  |  |
| Part-time Fire Captain          | \$15/Hr.        | N/A        | N/A            |  |  |  |  |  |  |
| Part-time Firefighter           | \$12/Hr.        | N/A        | N/A            |  |  |  |  |  |  |
| Part-time Firefighter/EMT       | \$12/Hr.        | N/A        | N/A            |  |  |  |  |  |  |
| Part-time Firefighter/Paramedic | \$18/Hr.        | N/A        | N/A            |  |  |  |  |  |  |
| Part-time EMT                   | \$12/Hr.        | N/A        | N/A            |  |  |  |  |  |  |
| Part-time Paramedic             | \$18/Hr.        | N/A        | N/A            |  |  |  |  |  |  |
| Office Administrator            | \$43,000        | \$60,000   | \$51,500       |  |  |  |  |  |  |

#### Figure 28: MFPD Staff Salaries (2019)

The total cost of benefits for MFPD FTEs is approximately 47% when averaged across all positions. Next, ESCI compared the salaries and benefits of the three districts. The following figure summarizes the lowest and highest wages.

## Figure 29: FTE Wage Comparisons (2019)

| Job Classification    | Lowest Average<br>Salary | Top Average<br>Salary | Percent<br>Difference <sup>A</sup> |
|-----------------------|--------------------------|-----------------------|------------------------------------|
| Fire Chief            | \$56,116                 | \$95,000              | <b>69</b> %                        |
| Fire Captain          | \$69,097                 | \$70,787              | 2.4%                               |
| Firefighter/EMT       | \$32,857                 | \$61,782              | 88%                                |
| Firefighter/Paramedic | \$38,838                 | \$69,196              | 78%                                |

<sup>A</sup> Percent difference between the highest and lowest salaries between the three districts.

| Benefits Description        | CRFPD | DRFPD | MFPD |
|-----------------------------|-------|-------|------|
| Uniform Allowance           | No    | Yes   | No   |
| Educational Incentives      | No    | Yes   | Yes  |
| Social Security             | Yes   | No    | Yes  |
| Workers' Compensation       | Yes   | Yes   | Yes  |
| Pension (PERS)              | Yes   | Yes   | Yes  |
| Deferred Compensation/Match | No    | No    | No   |
| Medical                     | Yes   | Yes   | Yes  |
| Dental                      | Yes   | No    | Yes  |
| Long-term Disability        | No    | No    | No   |
| Vision                      | Yes   | No    | Yes  |
| Life Insurance              | Yes   | No    | Yes  |

#### Figure 30: Benefits Comparison (2019)

## Salary & Benefits Discussion

MFPD has the highest range of salaries among the three districts. Each district uses a different pay schedule for compensating part-time employees and volunteers. The greatest pay disparity regards the Fire Chief, Firefighter/EMT, and Firefighter/Paramedic positions. While there are some slight differences in the benefit components in CRFPD and MFPD, the main components—social security, pension, and medical/vision/dental insurance—are provided to full-time employees at CRFD and MFPD. Full-time DRFPD employees receive medical insurance coverage. The employee pays vision and dental insurance.

If a consolidation or merger occurs that involves changing employers for one or more work groups, the disparity in pay and benefits will need to be equitably addressed—especially if the current MFPD collective bargaining agreement is affected.

# Staff Survey Results

At the beginning of this study, ESCI created a web-based survey to distribute to the employees and volunteers of each of the fire agencies involved in this study, along with any appointed or elected officials and other key stakeholders affiliated with the respective organizations. The survey was designed to be confidential, and neither ESCI nor any of the agencies were aware of the respondents' names.

The survey was comprised of six questions, with the last one asking for comments and suggestions for improvement.

A total of 55 respondents completed the survey. The following figures represent some of the survey results (complete results will be found in Appendix B).

Question #1: "I am currently employed or affiliated with one of the following (if you are affiliated with more than one, select the one in which you spend most of your time):"

| Organization             | Responses | Percent Total <sup>1</sup> |
|--------------------------|-----------|----------------------------|
| Cascade RFPD             | 16        | 29%                        |
| Donnelly RFPD            | 16        | 29%                        |
| McCall FPD               | 21        | 38%                        |
| Valley County Government | 1         | 2%                         |
| Other                    | 1         | 2%                         |

## Figure 31: Fire Agency Affiliations of the Survey Respondents

<sup>1</sup>Rounded to the nearest integer.

As shown in the preceding figure, most of the respondents were affiliated with one of the three fire districts.

The next question involves the role of individuals assigned to emergency operations at one of the three fire districts.



**Question #3:** "My current position with one of the fire districts involved in this study is:"

| Organization   | Responses | Percent Total <sup>1</sup> |
|--|-----------|----------------------------|
| Career firefighter                                     | 13        | 24%                        |
| Volunteer or paid on-call firefighter                  | 21        | 38%                        |
| Career officer (Captain or Lt.)                        | 8         | 15%                        |
| Volunteer or paid on-call officer (Captain or Lt.)     | 2         | 4%                         |
| Career officer (above Captain rank)                    | 3         | 4%                         |
| Volunteer or paid on-call officer (above Captain rank) | 0         | 0%                         |
| Other non-uniformed support position (fleet, etc.)     | 0         | 0%                         |
| Non-uniformed administrative support staff             | 2         | 4%                         |
| Appointed or elected official                          | 4         | 7%                         |
| Other  | 1         | 2%                         |

Figure 32: Respondent's Position with a Fire District

<sup>1</sup>Rounded to the nearest integer.

The preceding figure shows that approximately 43% of the respondents were career firefighters of various ranks, while 42% were volunteer firefighters of various ranks. No volunteers above the rank of Captain answered the survey.

The next figure represents the results of the respondents' opinions concerning whether they were in favor of or against a potential consolidation. The answers to the question included a caveat: "...depending on how it is configured and how it impacts my position." There were 51 responses to this question.

Question #5: "My opinion of a possible 'consolidation' into a single district of two or three of the fire districts involved in this study is:"

#### Figure 33: Respondent Opinions on a Potential Consolidation

| Respondent Opinion                                 | Responses | Percent Total <sup>1</sup> |  |
|--|-----------|----------------------------|--|
| FAVOR (depending on configuration) <sup>2</sup>    | 28        | 55%                        |  |
| AGAINST (regardless of configuration) <sup>2</sup> | 14        | 27%                        |  |
| No opinion   | 9         | 18%                        |  |

<sup>1</sup> Rounded to the nearest integer.

<sup>2</sup> Includes individuals not directly employed or affiliated with any of the fire agencies.



As shown in the preceding figure, most of the respondents (55%) were in support of a potential consolidation, depending upon how it would be configured and affect their positions within the organization.

Question #6: "Please list any suggestions you have on how the EMS System in Valley County can be improved, as well as fire protection, and any other comments you think would be valid as related to this study."

There were 29 responses to this question. The following summarizes the most common issues and suggestions:

- Lack of necessary resources for calls and shift coverage.
- Need additional meetings and collaborative efforts [between the fire districts].
- Inefficient system due to duplication of management and command staff.
- EMS funding should be more equitably allocated to each district, [rather than] evenly distributed.
- Consider some form of system status management countywide.
- Improvement can be accomplished through consolidation.
- The [EMS] system needs more funding.
- Lacking qualified personnel; EMS system has a high turnover rate.
- [EMS] system is fine. No need for consolidation.



# **FINANCIAL ANALYSIS**

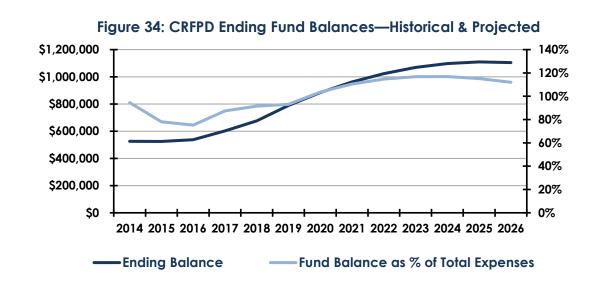
The purpose of this fiscal analysis is to provide a high-level assessment of the financial condition of the three fire districts, and to provide a backdrop against which to consider opportunities for future EMS system improvements. The estimates and analyses presented are dependent on the outlined assumptions and subject to change depending on any factors that may influence revenues and expenses.

The bulk of the analyses in this document were performed using data from audited financial statements to ensure consistency and accuracy. Budgets and year-to-date financial reports were used as supplemental information. Wherever this data disagreed with budget or other data, the audited data was utilized.

A good initial way to gauge a district's health is to review its General Fund balances. While it may be acceptable to see an occasional decline in General Fund balance, a healthy financial situation will usually only show such drops due to one-time issues, such as a major capital expenditure or a temporary funding issue.

# **Cascade Rural Fire Protection District**

CRFPD's fund balance is exceptionally strong. Not only has the fund balance been steadily climbing, but the balance as a percent of expenses has increased as well. Both are projected to continue this trend for several years, with the first negative year in 2026. The standard minimum is to have a balance equal to three months of expenditures (25%). CRFPD's current balance of 108.6% of expenses puts it in a solid position to make major capital purchases and/or weather significant revenue upsets.



CRFPD also has no outstanding bonds or other debt (see additional notes on debt under "Debts/Commitments" following). This leaves the District in a good position to finance major capital purchases when the time comes.

#### **Budgetary Review**

CRFPD fire and EMS are operated together in one general fund department—there are no other funds. The District's FY 2019 expenses of \$727,103 were largely dependent on property tax, which accounted for \$623,386, both directly and via the Valley County EMS District. CRFPD also received \$130,503 in ambulance fees. Property tax revenues tend to be stable and reliable, but tend to grow more slowly than inflationary pressures on expenses. Robust new construction is often necessary to help tax growth keep pace.

Ambulance billing is outsourced to Cammack Medical Billing, Inc, which receives a fee of 7.5% of revenues. The advantages and disadvantages of contracted versus in-house billing is discussed in a separate section. EMS revenues have remained largely flat over the past four years.

Overall, the District's expenses have risen quickly over the past five years, with a 9.1% average annual growth and a 45.4% growth overall. At 67.9% of the total in 2019, personnel costs make up the bulk of the CRFPD's expenses. Many fire departments operating with full-time staff see staff expenses at 85% or higher of total costs. These line items together have averaged 8.4% growth annually, and 42.2% overall from 2014–2019. This growth was driven much more by "Benefits and Taxes" (20.2% annual growth) than by "Salaries" (6.0% growth).

Supply purchases and professional services have increased particularly strong over the 2014–2019 period, with supplies rising, on average, 14.8% annually and services increasing by 12.3% annually. The increase in supplies appears to be due to some extraordinary purchases in 2019. However, the cost of supplies actually decreased by 6.8% from 2014–2018. "Apparatus Fuel and Maintenance" also saw significant growth with 10.6% annual average growth and 17.3% overall.

|                           |           | • |           |           |           |           |  |  |
|---------------------------|-----------|---|-----------|-----------|-----------|-----------|--|--|
| Description               | 2014      | 2015                                    | 2016      | 2017      | 2018      | 2019      |  |  |
| Beginning GF Balance      | 472,901   | 525,360                                 | 524,719   | 537,756   | 602,064   | 676,543   |  |  |
| Recurring Revenue Sources |           |   |           |           |           |           |  |  |
| Taxes                     | 225,170   | 228,514                                 | 224,894   | 225,705   | 230,293   | 329,426   |  |  |
| Intergov't. Revenue       | 12,300    | 89,450                                  | 7,855     | 25,260    | 38,724    | 49,000    |  |  |
| Charges for Services      | 313,133   | 353,366                                 | 397,334   | 423,293   | 439,970   | 438,766   |  |  |
| Miscellaneous/Other       | 2,007     | 922                                     | 80,565    | 5,442     | 23,062    | 23,127    |  |  |
| Total Revenue:            | \$552,610 | \$672,252                               | \$710,648 | \$679,700 | \$732,049 | \$840,319 |  |  |
| Expenses                  |           |   |           |           |           |           |  |  |
| Salaries & Wages          | 286,863   | 311,136                                 | 318,094   | 295,532   | 358,284   | 372,788   |  |  |
| Benefits & taxes          | 59,426    | 68,379                                  | 71,903    | 88,975    | 105,229   | 119,592   |  |  |
| Supplies                  | 37,989    | 46,412                                  | 26,534    | 32,207    | 27,632    | 66,026    |  |  |
| Professional Services     | 60,077    | 80,150                                  | 84,931    | 79,190    | 100,844   | 96,972    |  |  |
| Fuel & Maintenance        | 15,043    | 19,186                                  | 17,660    | 17,296    | 25,449    | 23,026    |  |  |
| Capital                   | 35,436    | 144,141                                 | 177,755   | 100,035   | 38,831    | 48,700    |  |  |
| Other Expenses            | 5,317     | 3,489                                   | 734       | 2,157     | 1,301     | _         |  |  |
| Total Expenses:           | \$500,151 | \$672,893                               | \$697,611 | \$615,392 | \$657,570 | \$727,103 |  |  |
| Net (Deficit):            | 52,459    | (641)                                   | 13,037    | 64,308    | 74,479    | 113,216   |  |  |
| Ending Balance:           | 525,360   | 524,719                                 | 537,756   | 602,064   | 676,543   | 789,759   |  |  |

#### Figure 35: CRFPD Historical Financials

## **Department Forecasts**

The forecasts in the following figure are set conservatively based on past actual data. For tax revenues, a simple 1% growth was applied. Charges for service is projected by applying a linear trend forecast separately to ambulance fees and EMS District revenues.

On the expense side, Salaries & Wages and Benefits & Taxes are both projected by using a linear forecast model. Since Supplies, Services, and Apparatus do not show clear trends, an average of the preceding years was used for 2020 and then increased by 5% annually thereafter. Note that this rate of growth is less than the historical average, but may be a reasonable assumption with good cost-controls. Finally, Capital and Other expenses are held to the average of those line-items from 2014–2019.

These forecast methodologies result in a projected erosion of the annual revenue surpluses enjoyed in the past. By 2025, CRFPD is projected to operate at a small deficit. ESCI believes this can reasonably be avoided with good cost-controls coupled with efforts to increase revenue growth. Unless it is used for major capital purchases, the projected fund balance will help give the District a cushion while it works on financial issues.

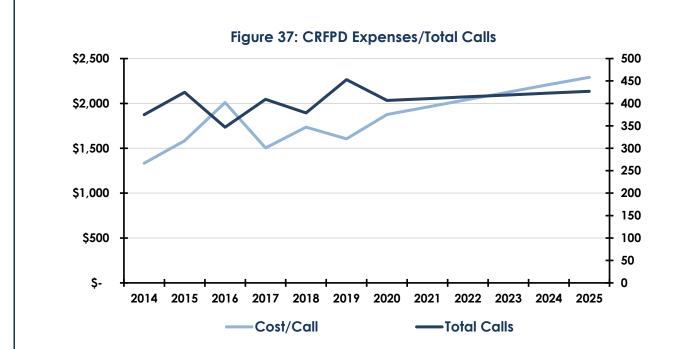
| Description               | 2020      | 2021      | 2022      | 2023      | 2024      | 2025      |  |  |
|---------------------------|-----------|-----------|-----------|-----------|-----------|-----------|--|--|
| Beginning GF Balance      | 789,759   | 884,233   | 957,825   | 1,010,197 | 1,040,993 | 1,049,838 |  |  |
| Recurring Revenue Sources |           |           |           |           |           |           |  |  |
| Taxes                     | 332,720   | 336,048   | 339,408   | 342,802   | 346,230   | 349,692   |  |  |
| Intergov't. Revenue       | 37,098    | 37,098    | 37,098    | 37,098    | 37,098    | 37,098    |  |  |
| Charges for Services      | 464,836   | 482,972   | 501,108   | 519,244   | 537,380   | 555,515   |  |  |
| Miscellaneous/Other       | 22,521    | 22,521    | 22,521    | 22,521    | 22,521    | 22,521    |  |  |
| Total Revenue:            | \$857,176 | \$878,639 | \$900,135 | \$921,665 | \$943,229 | \$964,827 |  |  |
| Expenses                  | ·         |           |           |           |           |           |  |  |
| Salaries & Wages          | 392,883   | 415,566   | 438,249   | 460,932   | 483,616   | 506,299   |  |  |
| Benefits & taxes          | 128,429   | 140,671   | 152,912   | 165,153   | 177,395   | 189,636   |  |  |
| Supplies                  | 39,467    | 41,440    | 43,512    | 45,688    | 47,972    | 50,371    |  |  |
| Professional Services     | 88,417    | 92,838    | 97,480    | 102,354   | 107,472   | 112,846   |  |  |
| Fuel & Maintenance        | 20,523    | 21,550    | 22,627    | 23,758    | 24,946    | 26,194    |  |  |
| Capital                   | 90,816    | 90,816    | 90,816    | 90,816    | 90,816    | 90,816    |  |  |
| Other Expenses            | 2,166     | 2,166     | 2,166     | 2,166     | 2,166     | 2,166     |  |  |
| Total Expenses:           | \$762,702 | \$805,047 | \$847,763 | \$890,869 | \$934,383 | \$978,328 |  |  |
| Net (Deficit):            | 94,474    | 73,592    | 52,372    | 30,796    | 8,845     | (13,501)  |  |  |
| Ending Balance:           | 884,233   | 957,825   | 1,010,197 | 1,040,993 | 1,049,838 | 1,036,337 |  |  |

## **Figure 36: CRFPD Projected Financials**

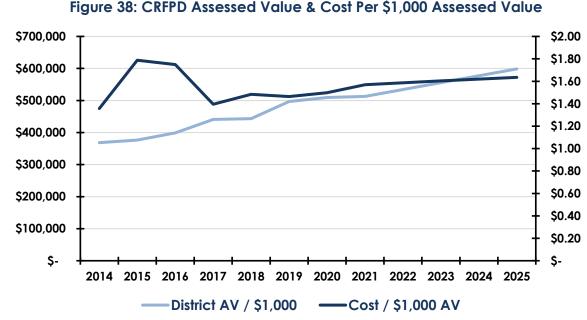
## **Growth Benchmarks**

The number of transports is a strong driver of fire and EMS expenses, so it makes sense to compare this trend with expenses.<sup>21</sup> As can be seen in the next figure, both the cost-percall and number of calls are projected to continue their recent trends of slowly increasing. With various inflationary pressures, it is difficult to keep the cost-per-call at an even level. It should be recognized that this is only one imperfect measure of how well costs are being controlled.





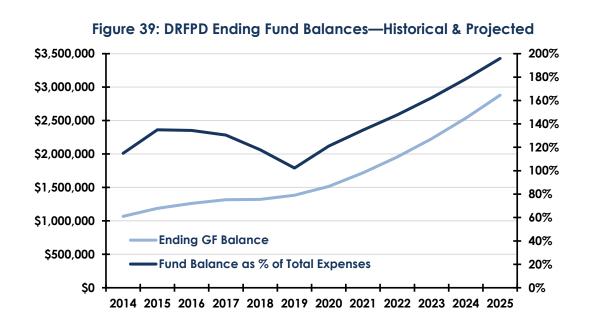
Another way to look at the growth of expenses is to compare them with growth in assessed value (AV), which can act as a proxy for many types of growth (population, buildings, etc.) and is readily available. Much like the cost-per-call shown previously, the next figure illustrates a continuing trend of increasing assessed value and relative costs. In this case, however, the projected costs increase more slowly than projected AV, which indicates a level of cost-containment and future flexibility to seek additional tax funding if needed.



#### Figure 38: CRFPD Assessed Value & Cost Per \$1,000 Assessed Value

# **Donnelly Rural Fire Protection District**

DRFPD's fund balance is strong, but the future projections show a note of caution. While the fund balance climbed during 2014–2019, it is projected to decline in 2020 and continue doing so for the foreseeable future. Nevertheless, the fund balance currently exceeds total annual expenditures, and is projected to equal 82.7% of expenditures in 2025. The standard minimum is to have a balance equal to three months of expenditures (25%). This leaves DRFPD in a solid position to make major capital purchases and/or weather significant revenue upsets, and provides the District time to adjust its budget if necessary.



DRFPD also has no outstanding bonds, and only small long-term lease commitments (see additional notes on debt under "Debts/Commitments"). This leaves the District in a good position to finance major capital purchases when the time comes.

# **Budgetary Review**

DRFPD uses accrual accounting and a fiscal year ending in September. Fire and EMS are operated separately in a General Fund (Fire) and Ambulance Fund (EMS)—there are no other funds. For the purposes of this analysis, the two funds are treated as one. The District's FY 2019 expenses of \$1,097,973 were largely dependent on property tax, which accounted for \$733,972, both directly and via the Valley County EMS District. The District also received about \$81,000 in ambulance fees.<sup>22</sup> Property tax revenues tend to be stable and reliable, but tend to grow more slowly than inflationary pressures on expenses. Robust new construction is often necessary to help tax-growth keep pace.



Ambulance billing is performed in-house. The advantages and disadvantages of contracted versus in-house billing are discussed in a separate section later in this report. EMS revenues appear to have remained largely flat from 2016–2019.

Overall, the District's expenses have risen steadily over the 2016–2019 time period, with a 5.1% average annual growth and a 20.5% growth overall. At 69.3% of the total in 2019, personnel costs make up the bulk of the District's expenses. Many fire departments operating with full-time staff see staff expenses at 85% or higher of total costs. Salaries and Benefits have averaged 3.7% growth annually, and 14.9% overall from 2014–2019.

To provide a consistent review of data between the fire protection and EMS sides, Supplies, Services, and Maintenance costs were combined into one line-item—Operations and Maintenance. As a group, Operations and Maintenance has been a much stronger driver of costs than Salaries and Benefits, with a 10.8% average annual growth and 43.2% overall. Much of this growth appears to stem from some large expenditures in 2019 for professional services and apparatus maintenance.

| Description               | 2014      | 2015      | 2016        | 2017        | 2018                 | 2019        |  |  |
|---------------------------|-----------|-----------|-------------|-------------|----------------------|-------------|--|--|
| Beginning GF Balance      | 1,038,193 | 1,067,868 | 1,186,031   | 1,261,030   | 1,317,578            | 1,321,352   |  |  |
| Recurring Revenue Sources |           |           |             |             |                      |             |  |  |
| Taxes                     | 629,732   | 630,477   | 661,882     | 712,787     | 709,732              | 775,349     |  |  |
| Intergov't. Revenue       | 253,535   | 295,855   | 269,175     | 270,400     | 302,457              | 471,818     |  |  |
| Charges for Services      | 48,068    | 71,698    | 72,764      | 63,786      | 84,839               | 139,804     |  |  |
| Miscellaneous/Other       | 13,355    | (1,894)   | 7,135       | 19,528      | 27,255               | 25,593      |  |  |
| Total Revenue:            | \$944,690 | \$996,136 | \$1,010,956 | \$1,066,501 | \$1,12 <b>4</b> ,283 | \$1,412,564 |  |  |
| Expenses                  |           |           |             |             |                      |             |  |  |
| Salaries & Benefits       | 675,927   | 659,807   | 728,105     | 729,706     | 776,669              | 808,610     |  |  |
| Operations & Maint.       | 183,956   | 166,369   | 163,472     | 199,341     | 263,467              | 244,055     |  |  |
| Capital & Depreciation    | 64,378    | 49,217    | 40,983      | 80,847      | 40,854               | 244,732     |  |  |
| Transfers/Other           | 5,311     | 3,783     | 5,939       | 59          | 39,520               | 54,049      |  |  |
| Total Expenses:           | \$929,572 | \$879,176 | \$938,499   | \$1,009,953 | \$1,120,510          | \$1,351,446 |  |  |
| Net:                      | 15,118    | 116,960   | 72,457      | 56,548      | 3,773                | 61,118      |  |  |
| Ending Balance:           | 1,067,867 | 1,186,031 | 1,261,030   | 1,317,578   | 1,321,352            | 1,382,470   |  |  |

## **Figure 40: DRFPD Historical Financials**



## **Department Forecasts**

The forecasts in the following figure are set conservatively based on past actual data. For tax revenues and charges for service, a linear-trend forecast was used. For Intergovernmental Revenue/Grants, and Miscellaneous/Other revenues, a simple average of historical figures was applied.

On the expense side, a linear-forecast model was used on Salaries, Wages and Benefits, Ambulance Operations and Maintenance, and Depreciation. For Supplies, Services, and Apparatus Maintenance (included in Operations and Maintenance), an average of the previous year's expenses was taken; then a 2% growth factor was applied. Finally, Capital was projected as an average of the past years' actual expenses.

These forecast methodologies result in growing projected deficits starting in 2021. By 2025, DRFPD is projected to operate at a relatively modest deficit of \$53,251 (3.9% of total expenses). ESCI believes this can reasonably be avoided with good cost controls coupled with efforts to increase revenue growth. Unless it is used for major capital purchases, the projected fund balance will help give the District a cushion while it works on financial issues.

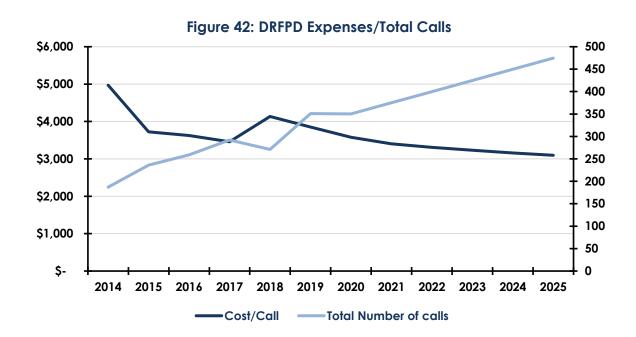
| Description               | 2020        | 2021        | 2022        | 2023        | 2024        | 2025        | 2026        |  |  |
|---------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|--|--|
| Beginning GF Balance      | 1,382,470   | 1,515,399   | 1,717,751   | 1,955,376   | 2,228,228   | 2,536,263   | 2,879,437   |  |  |
| Recurring Revenue Sources |             |             |             |             |             |             |             |  |  |
| Taxes                     | 1,241,166   | 1,076,146   | 1,153,714   | 1,231,282   | 1,308,849   | 1,386,417   | 1,463,985   |  |  |
| Intergov't Revenue        | 50,000      | 278,284     | 278,284     | 278,284     | 278,284     | 278,284     | 278,284     |  |  |
| Charges for Services      | 70,417      | 105,462     | 111,626     | 117,791     | 123,956     | 130,121     | 136,286     |  |  |
| Miscellaneous/Other       | 23,610      | 17,973      | 17,973      | 17,973      | 17,973      | 17,973      | 17,973      |  |  |
| Total Revenue:            | \$1,385,193 | \$1,477,865 | \$1,561,597 | \$1,645,330 | \$1,729,062 | \$1,812,795 | \$1,896,527 |  |  |
| Expenses                  |             |             |             |             |             |             |             |  |  |
| Salaries and Benefits     | 929,550     | 916,487     | 956,025     | 995,562     | 1,035,099   | 1,074,636   | 1,114,173   |  |  |
| Operations & Maint.       | 203,488     | 231,563     | 241,444     | 251,368     | 261,337     | 271,351     | 281,412     |  |  |
| Capital & Depreciation    | 107,882     | 116,121     | 115,164     | 114,208     | 113,251     | 112,294     | 111,337     |  |  |
| Transfers/Other           | 11,340      | 11,340      | 11,340      | 11,340      | 11,340      | 11,340      | 11,340      |  |  |
| Total Expenses:           | \$1,252,260 | \$1,275,512 | \$1,323,973 | \$1,372,478 | \$1,421,027 | \$1,469,622 | \$1,518,263 |  |  |
| Net:                      | 132,933     | 202,352     | 237,624     | 272,852     | 308,036     | 343,173     | 378,265     |  |  |
| Ending Balance:           | 1,515,403   | 1,717,751   | 1,955,376   | 2,228,228   | 2,536,263   | 2,879,437   | 3,257,701   |  |  |

## **Figure 41: DRFPD Projected Financials**

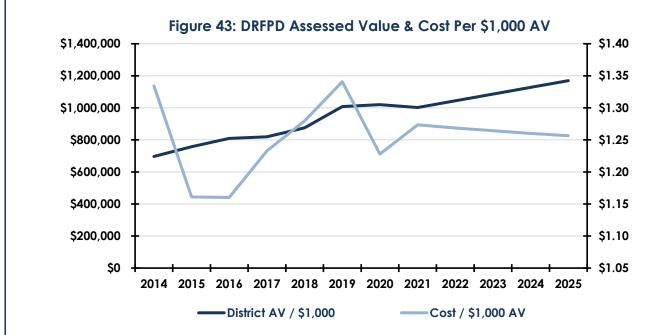


#### **Growth Benchmarks**

The number of transports is a strong driver of fire and EMS expenses, so it makes sense to compare this trend with expenses (population is another good comparator).<sup>23</sup> As can be seen in the next figure, the cost-per-call has been decreasing and is projected to continue doing so while the number of total calls is projected to continue increasing. This is unusual—with various inflationary pressures, it is normally difficult to keep the cost-per-call at an even level (much less to keep it decreasing). It may be an indication that too few resources are being brought to bear on the increasing needs of the District. Still, it is important to recognize that this is only one imperfect measure.



Another way to look at the growth of expenses is to compare them with growth in assessed value, which can act as a proxy for many types of growth (population, buildings, etc.) and is readily available. Similar to the cost-per-call analysis, the next figure shows a continuing trend of increasing assessed value against a mild decrease in cost per AV. This indicates cost containment and future flexibility to seek additional tax funding, if needed.

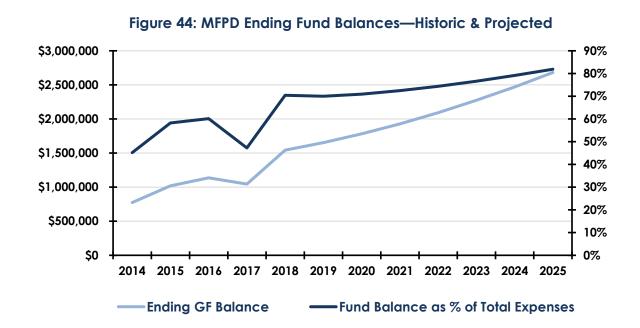




# **McCall Fire Protection District**

A good initial way to gauge a district's health is to review its General Fund balances. While it may be acceptable to see an occasional decline in fund balance, a healthy financial situation will usually only show such drops due to one-time issues, such as a major capital expenditure or a temporary funding issue. At 70.0% of total operating expenses at the end of 2019, MFPD's fund balance is strong and projected trends show continued surpluses that will strengthen MFPD's position.

By 2025, the fund balance is projected to be 81.9% of operating expenses. The standard minimum is to have a balance equal to three months of expenditures (25%). This indicates that MFPD may be in a solid position to make large capital purchases and/or weather unforeseen downturns. It is important to note that the forecasts are very simple and could vary significantly from actual financial data.



Having paid off its 2003 Building Bond in 2018, MFPD also has no outstanding bonds, and only small long-term lease commitments (see additional notes on debt under "Debts/Commitments"). This leaves the District in a good position to finance major capital purchases when the time comes.

#### **Budgetary Review**

MFPD uses accrual accounting and a fiscal year ending in September. Fire and EMS are operated together in one fund. With the close of the debt service fund in 2018, there are no other funds. The District's projected FY 2019 expenses of \$2,528,468 were largely dependent on property tax, which accounted for \$1,859,071 in 2019, both directly and via the Valley County EMS District. The District also received \$353,596 in ambulance fees. Property tax revenues tend to be stable and reliable, but tend to grow more slowly than inflationary pressures on expenses. Robust new construction is often necessary to help tax growth keep pace.

Ambulance billing is contracted out. The advantages and disadvantages of contracted versus in-house billing are discussed in a separate section of this report. EMS revenue appears to have remained largely flat from 2016-2019.

Overall, the District's expenses have seen a significant and steady rise from 2016–2019, with a 7.2% average annual growth and a 35.9% growth overall. At 79.4% of total expenses in 2019, personnel costs make up the bulk of the District's expenses. Many fire departments operating with full-time staff see staff expenses at 85% or higher of total costs. Salaries have averaged 8.3% growth annually, and 41.3% overall from 2014–2019. Benefits have averaged 14.9% annual growth, and 74.3% overall. This growth is driven by the Collective Bargaining Agreement (CBA), which requires salary increases that average 9.5% plus a longevity pay of 0.5% per year worked.

Operations and Maintenance has actually decreased over the study period by an average of -3.2% per year, and -15.8% overall. Equipment purchases and maintenance have conversely increased significantly, with a 9.0 % average annual growth and a 45.0% growth overall. Finally, growth in capital expenditures is sporadic—which is normal. Overall, the trend is toward increasing capital expenses at 2.7% per year on average.



| Description               | 2014        | 2015        | 2016        | 2017        | 2018        | 2019        |  |  |
|---------------------------|-------------|-------------|-------------|-------------|-------------|-------------|--|--|
| Beginning GF Balance      | 749,598     | 773,663     | 1,019,966   | 1,137,436   | 1,044,652   | 1,541,888   |  |  |
| Recurring Revenue Sources |             |             |             |             |             |             |  |  |
| Taxes                     | 1,235,327   | 1,262,949   | 1,347,445   | 1,426,088   | 1,533,708   | 1,589,074   |  |  |
| Intergov't. Revenue       | _           | 18,478      | 157,543     | 25,882      | 105,285     | _           |  |  |
| Charges for Services      | 528,213     | 621,557     | 677,850     | 792,251     | 909,226     | 985,635     |  |  |
| Debt/Capital Sales        | 28,780      | 48,000      | 21,990      | —           | 70,466      | _           |  |  |
| Miscellaneous/Other       | 92,243      | 130,365     | 34,444      | 10,546      | 307,800     | 64,000      |  |  |
| Total Revenue:            | \$1,884,563 | \$2,081,349 | \$2,239,272 | \$2,254,767 | \$2,926,485 | \$2,638,709 |  |  |
| Expenses                  |             |             |             |             |             |             |  |  |
| Salaries & Wages          | 1,078,334   | 1,140,806   | 1,200,079   | 1,400,404   | 1,410,620   | 1,523,300   |  |  |
| Benefits/Taxes            | 278,218     | 293,552     | 324,090     | 418,278     | 439,558     | 484,961     |  |  |
| Operations & Maint.       | 269,506     | 246,838     | 251,764     | 263,889     | 222,347     | 226,794     |  |  |
| Equipment                 | 86,518      | 70,597      | 115,292     | 126,304     | 117,221     | 125,426     |  |  |
| Capital/Debt              | 147,923     | 83,253      | 230,579     | 138,675     | 239,503     | 167,987     |  |  |
| Total Expenses:           | \$1,860,499 | \$1,835,046 | \$2,121,804 | \$2,347,550 | \$2,429,249 | \$2,528,468 |  |  |
| Net (Deficit):            | 24,064      | 246,303     | 117,468     | (92,783)    | 497,236     | 110,241     |  |  |
| Ending Balance:           | 773,663     | 1,019,966   | 1,137,436   | 1,044,652   | 1,541,888   | 1,652,129   |  |  |

#### **Figure 45: MFPD Historical Financials**

## **District Forecasts**

The forecasts in the next figure are set conservatively based on past actual data. For tax revenues and charges for service, a linear-trend forecast was used. For Intergovernmental Revenue/Grants and Miscellaneous/Other revenues, a simple average of historical figures was applied.

On the expense side, a linear-forecast model was used on Salaries, Wages and Benefits, Ambulance Operations and Maintenance, and Depreciation. For Supplies, Services, and Apparatus Maintenance (included in Operations and Maintenance), an average of the previous year's expenses was taken, then a 2% growth factor was applied. Finally, Capital was projected as an average of past years' actual expenses.



These forecast methodologies result in growing projected deficits starting in 2021. By 2025, MFPD is projected to operate at a relatively modest deficit of \$53,251 (3.9% of total expenses). ESCI believes this can reasonably be avoided with good cost controls coupled with efforts to increase revenue growth. Unless it is used for major capital purchases, the projected fund balance will help give the District a cushion while it works on financial issues.

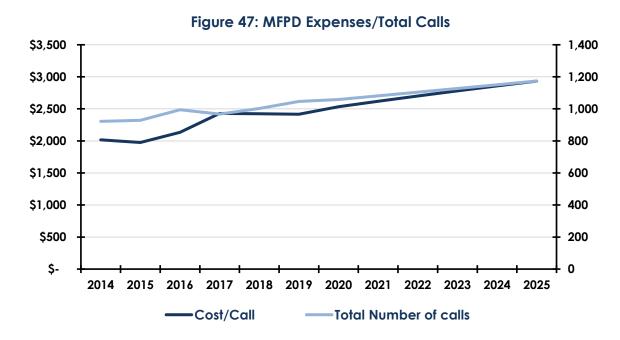
| Description               | 2020        | 2021        | 2022        | 2023        | 2024        | 2025        |  |  |
|---------------------------|-------------|-------------|-------------|-------------|-------------|-------------|--|--|
| Beginning GF Balance      | 1,652,129   | 1,781,160   | 1,928,273   | 2,092,721   | 2,273,703   | 2,470,371   |  |  |
| Recurring Revenue Sources |             |             |             |             |             |             |  |  |
| Taxes                     | 1,665,064   | 1,741,054   | 1,817,044   | 1,893,034   | 1,969,024   | 2,045,014   |  |  |
| Intergov't. Revenue       | _           | _           | _           | _           | _           | —           |  |  |
| Charges for Services      | 1,078,907   | 1,172,179   | 1,265,451   | 1,358,723   | 1,451,995   | 1,545,267   |  |  |
| Debt/Capital Sales        |             |             | _           | _           | _           | _           |  |  |
| Miscellaneous/Other       | 64,000      | 64,000      | 64,000      | 64,000      | 64,000      | 64,000      |  |  |
| Total Revenue:            | \$2,807,971 | \$2,977,233 | \$3,146,495 | \$3,315,758 | \$3,485,020 | \$3,654,282 |  |  |
| Expenses                  |             |             |             |             |             |             |  |  |
| Salaries & Wages          | 1,615,717   | 1,708,134   | 1,800,551   | 1,892,968   | 1,985,385   | 2,077,802   |  |  |
| Benefits/Taxes            | 529,702     | 574,442     | 619,183     | 663,923     | 708,664     | 753,405     |  |  |
| Operations & Maint.       | 231,330     | 235,956     | 240,676     | 245,489     | 250,399     | 255,407     |  |  |
| Equipment                 | 134,206     | 143,601     | 153,653     | 164,409     | 175,917     | 188,231     |  |  |
| Capital/Debt              | 167,987     | 167,987     | 167,987     | 167,987     | 167,987     | 167,987     |  |  |
| Total Expenses:           | \$2,678,941 | \$2,830,120 | \$2,982,048 | \$3,134,775 | \$3,288,351 | \$3,442,831 |  |  |
| Net:                      | 129,030     | 147,114     | 164,447     | 180,982     | 196,668     | 211,451     |  |  |
| Ending Balance:           | 1,781,160   | 1,928,273   | 2,092,721   | 2,273,703   | 2,470,371   | 2,681,822   |  |  |

## Figure 46: MFPD Projected Financials

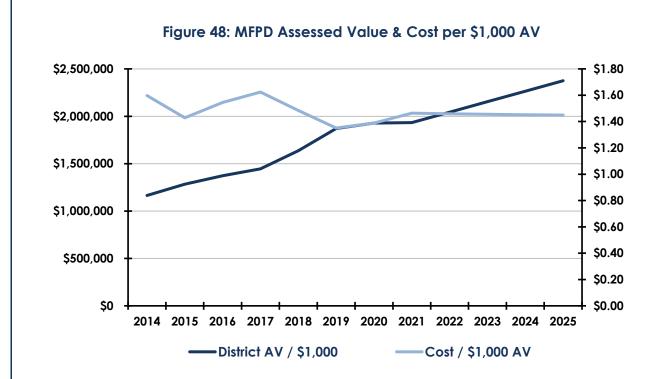


### **Growth Benchmarks**

The number of transports is a strong driver of fire protection and EMS expenses, so it makes sense to compare this trend with expenses (population is another good comparator).<sup>24</sup> As can be seen in the following figure, the number of calls and cost-per-call have been tracking each other fairly closely and are projected to continue doing so with both experiencing modest annual increases. While the goal is always to keep the cost-per-call line as flat as possible, inflationary pressures normally make this very difficult. A modest rate of increase such as that projected in this analysis is normal, and is an indication of reasonable cost-containment. Still, it is also important to recognize that this is only one imperfect measure.



Another way to look at the growth of expenses is to compare them with growth in assessed value (AV), which can act as a proxy for many types of growth (population, buildings, etc.) and is readily available. Similar to the cost per call analysis, Figure 48 shows a continuing trend of increasing assessed value against a basically flat cost per AV. This indicates cost containment and future flexibility to seek additional tax funding if needed.





# **Collective Financial Summary of the Districts**

## **Comparative Statistics**

A variety of comparative statistics are presented in the next figure. Like other comparators within this study, no individual data point should be given significant weight—each has limitations and biases. Rather, this data should be viewed as a starting point for comparisons, or perhaps as giving a general "flavor" of how the fire districts compare with each other. For example, by looking at the totality of the following data, it seems obvious that MFPD is the largest of the three fire districts, but that it is not necessarily the most expensive to operate on a "per-unit" basis. Similarly, CRFPD is the smallest department, but not necessarily the least expensive to operate on a "per-unit" basis.

| Description             | Combined        | CRFPD         | DRFPD           | MFPD            |  |  |  |  |
|-------------------------|-----------------|---------------|-----------------|-----------------|--|--|--|--|
| Comparison Data         |                 |               |                 |                 |  |  |  |  |
| Assessed Value          | \$3,376,304,427 | \$496,856,218 | \$1,007,978,553 | \$1,871,469,656 |  |  |  |  |
| Levy                    | \$2,899,034     | \$318,733     | \$873,865       | \$1,706,436     |  |  |  |  |
| Levy Rate               | 0.0008586       | 0.0006415     | 0.0008669       | 0.0009118       |  |  |  |  |
| Ambulance Fee Rev.      | \$623,902       | \$130,503     | \$139,804       | \$353,596       |  |  |  |  |
| Fire/EMS Expense        | \$4,607,017     | \$727,103     | \$1,351,446     | \$2,528,468     |  |  |  |  |
| Fund Balance            | \$3,824,353     | \$789,759     | \$1,382,465     | \$1,652,129     |  |  |  |  |
| Population              | 7,451           | 981           | 3,000           | 3,470           |  |  |  |  |
| Service Area            | 366             | 110           | 156             | 100             |  |  |  |  |
| Total Calls             | 1,850           | 453           | 351             | 1,046           |  |  |  |  |
| Comparative Results     |                 |               |                 |                 |  |  |  |  |
| AV Per Capita           | \$453,134       | \$506,479     | \$335,993       | \$539,328       |  |  |  |  |
| Transport Fees per Call | \$337           | \$288         | \$398           | \$338           |  |  |  |  |
| Cost Per Call           | \$2,490         | \$1,605       | \$3,850         | \$2,417         |  |  |  |  |
| Cost Per Capita         | \$618           | \$741         | \$450           | \$729           |  |  |  |  |
| Cost/Acre               | \$12,587        | \$6,610       | \$8,663         | \$25,285        |  |  |  |  |
| Cost/\$1,000 AV         | \$1.36          | \$1.46        | \$1.34          | \$1.35          |  |  |  |  |

#### Figure 49: Collective Comparative Information (2019)



# Valley County EMS District Funding

The three districts provide emergency medical transport services under contract with the Valley County EMS District. Per their contract with VCEMS, they are eligible for reimbursements of up to one-third of the tax revenue, not to exceed \$350,000. In 2019, the fire districts received about \$295,000 from this revenue source, but a linear-trend forecast indicates they may be constrained by the not-to-exceed limit in 2024 or 2025. The \$350,000 limitation could put additional pressure on each fire district's budget.

Additionally, ESCI notes that the distribution of funds equally among the districts fails to account for the varying service demands of the fire districts. Were the districts to work together to develop a more equitable funding distribution method, it may stave off the need for additional funding for a period of time (though not permanently).

## Debts/Commitments

In addition to other financial information herein, it is important to note that each fire district has a number of debts and financial commitments that will need to be resolved during the negotiation and planning processes of any potential consolidation or creation of a new organization. Any bond-supported debt would normally continue in its presented form, though a new jurisdiction may administer it. Pension liabilities and other post-employment benefits (PEB) would likely transfer, and negotiations would be required to transfer assets to support those benefits. Compensated Leave could be handled a number of ways, and would require negotiation. The following figure attempts to summarize these issues.

| Fire Districts | Compensated<br>Leave | Post-Employment<br>Benefits (OPEB) | Pension<br>Fund<br>Liability | Bonded<br>Debt | Other<br>Debt |
|----------------|----------------------|------------------------------------|------------------------------|----------------|---------------|
| Cascade RFPD   | \$19,746             | N/A                                | \$129,030                    | N/A            | N/A           |
| Donnelly RFPD  | \$13,881             | N/A                                | \$255,063                    | N/A            | \$32,055      |
| McCall FPD     | \$76,066             | N/A                                | \$580,925                    | N/A            | \$24,298      |
| TOTALS:        | \$109,693            | N/A                                | \$965,018                    | N/A            | \$56,353      |

#### Figure 50: Other Commitments Among the Fire Districts (2018)



# Ground Emergency Medical Transport Program (GEMT)

The Ground Emergency Medical Transport (GEMT) program is a voluntary program that allows publicly owned or operated emergency ground ambulance transportation providers to receive supplemental payments that cover the difference between a provider's actual costs per GEMT transport and the Medicaid base payment, mileage, and other sources of reimbursement. Providers receive cost-based supplemental payments for emergency ground ambulance transportation of Medicaid fee-for-service clients. Idaho has not yet elected to participate in this program, but the Idaho Department of Health and Welfare may recommend it to the legislature in 2020. It has proven to be a lucrative program in other states and ESCI recommends that Valley County fire districts support any efforts to bring it to Idaho.

## Impact Fees

Many fire districts levy impact fees on new development. Developers pay the fees to mitigate the capital costs brought on by new development, such as the need for new apparatus or fire stations. While the impact and associated fees from a new house or two may be insignificant, having such fees in place can help protect against the potential impacts of major new housing or business developments. One way to ease the political implications of instituting impact fees may be for the three districts to request countywide fees from the Valley County Board of Commissioners.

# Ambulance Billing & Collection Services

One of the most important issues for fire agencies providing EMS transport (ambulance service) is whether their billing operations are efficiently and effectively maximizing revenue, while also ensuring compliance with state and federal standards. Fire districts providing fee-for-service patient transports must have accurate billing and collection data readily available.

Both Cascade RFPD and McCall FPD outsource their ambulance billing and collection services to separate vendors, while Donnelly RFPD utilizes in-house staff.

## Advantages & Disadvantages of In-House Billing

There are both advantages and disadvantages for fire districts conducting their own inhouse billing and collection services.



## **Advantages**

- In-house billing staff are typically positioned to think primarily about the bottom line and are focused on prioritizing the collection of revenue.
- Billing staff may often develop relationships with the fire district's regular customers.
- In-house staff may have more insight and knowledge of local rules affecting ambulance billing.
- Billing staff may be more likely to address complex unpaid claims.

## **Disadvantages**

- State and federal regulations tend to be ever-changing, and it may be difficult for agencies with limited staff to keep up with these changes.
  - Failure to maintain compliance with regulations could potentially expose the fire district to liability.
  - In addition, there can be associated costs with keeping in-house billing staff updated on regulations through attending conferences and other activities.
- Particularly in rural areas, it is often difficult to find qualified personnel to employ for ambulance billing services.
- Due to costs, in-house billing staff often do not have access to sophisticated billing software that can provide a clear overview of how claims are being processed and which transports are not being paid.
  - Without sophisticated billing software, claims must be processed "manually." Outsourcing to a qualified vendor can allow billing automation by interfacing with the fire district's EMS records management system.
- Fire districts with limited administrative support staff must assign personnel to process ambulance billing claims, and may be unavailable to provide other administrative functions for the organization.
- Using in-house billing staff reduces flexibility. When billing and collection services are outsourced to a vendor that does not perform satisfactorily, the fire district can simply switch billing companies.

Regardless of whether billing is outsourced or continued internally, it will be important to ensure billing practices comply with the OIG's program by reviewing current billing and claims processing policies and procedures. Additionally, the emergency medical transport providers in Valley County will need to structure their organizations to ensure accountability and enable measurement of quality and value.



#### **Billing Compliance with Federal Regulations**

There have been, and continue to be, many changes in healthcare rules regarding reimbursement for patient transport. Keeping up with such changes is difficult for a small inhouse billing staff. In September 2015, the Office of the Inspector General (OIG) at the U.S. Department of Health and Human Services (HHS) released a report describing the problems of inappropriate payments and questionable ambulance billing practices.<sup>25</sup>

The problems identified in the OIG's report did not necessarily mean all were intentional or criminal, but also included inadvertent errors. As a result of this report, the Centers for Medicare & Medicaid Services (CMS) has increased its scrutiny of the billing practices of ambulance service providers. The OIG has developed compliance program guidance for ambulance providers to assist them in preventing the submission of erroneous claims and eliminate fraudulent and abusive conduct.<sup>26</sup>

In 2015, the Secretary of the U.S. Department of Health & Human Services (HHS) announced a major policy statement. She announced that by 2018, 90% of all Medicare fee-for-service payments would be linked to quality or value. The Medicare Access & CHIP Reauthorization Act of 2015 (P.L. 114-10) was signed into law in April 2015. It is likely that existing payment programs will be combined into a new merit-based incentive payment system that would tie reimbursement to quality, value, and accountability, and processed through Accountable Care Organizations (ACO). However, given the current national political climate concerning health insurance, this may or may not occur.



# **CAPITAL FACILITIES & EQUIPMENT**

Three basic resources are required to successfully carry out the mission of a fire district: trained personnel, firefighting equipment, and fire stations. No matter how competent or numerous the firefighters, if appropriate capital equipment is not available for use by responders, it would be impossible for any of the fire districts in this study to deliver services effectively. The most essential capital assets for use in emergency operations are facilities and apparatus (response vehicles). Of course, each fire district's financing ability will determine the level of capital equipment it can acquire and make available for use by emergency personnel. This section of the report is an assessment of the respective capital facilities, vehicles, and apparatus of CRFPD, DRFPD, and MFPD.

## Fire Stations & Other Facilities

Fire stations play an integral role in the delivery of emergency services for several reasons. To a large degree, a station's location will dictate response times to emergencies. A poorly located station can mean the difference between confining a fire to a single room and losing the structure. Fire stations need to be designed to adequately house equipment and apparatus, as well as meet the needs of the organization and its career and volunteer personnel—including administrative support staff where applicable. It is important to research needs based on service demand, response times, types of emergencies, and projected growth prior to making a station placement commitment.

Consideration should be given to a fire station's ability to support the fire district's mission as it exists today and into the future. The activities that take place within a fire station should be closely examined to ensure the structure is adequate in both size and function. Examples of these functions may include the following:

- The housing and cleaning of apparatus and equipment; including decontamination and disposal of biohazards
- Residential living space and sleeping quarters for on-duty personnel (all genders)
- Kitchen facilities, appliances, and storage
- Bathrooms and showers (all genders)
- Administrative and management offices; computer stations and office facilities for personnel
- Training, classroom, and library areas
- Firefighter fitness area
- Public meeting space



In gathering information from the three fire districts in Valley County, ESCI asked each to rate the condition of each of its fire stations using the criteria in the following figure.

|           | Figure 51: Criteria Utilized to Determine Fire Station Condition  |
|-----------|---|
| Excellent | Like new condition. No visible structural defects. The facility is clean and<br>well maintained. Interior layout is conducive to function with no<br>unnecessary impediments to the apparatus bays or offices. No<br>significant defect history. Design and construction match the building's<br>purposes. Age is typically less than 10 years.   |
| Good      | The exterior has a good appearance with minor or no defects. Clean<br>lines, good workflow design, and only minor wear of the building interior.<br>Roof and apparatus apron are in good working order, absent any<br>significant full-thickness cracks or crumbling of apron surface or visible<br>roof patches or leaks. Design and construction match the building's<br>purposes. Age is typically less than 20 years.   |
| Fair      | The building appears structurally sound with weathered appearance<br>and minor to moderate non-structural defects. The interior condition<br>shows normal wear and tear, but flows effectively to the apparatus bay<br>or offices. Mechanical systems are in working order. Building design and<br>construction may not match the building's purposes well. Showing<br>increasing age-related maintenance, but with no critical defects. Age is<br>typically 30 years or more.  |
| Poor      | The building appears to be cosmetically weathered and worn,<br>potentially with structural defects, although not imminently dangerous or<br>unsafe. Large, multiple full-thickness cracks and crumbling of concrete<br>on apron may exist. The roof has evidence of leaking and/or multiple<br>repairs. The interior is poorly maintained or showing signs of advanced<br>deterioration, with moderate to significant non-structural defects.<br>Problematic age-related maintenance and/or major defects are<br>evident. Age is typically greater than 40 years. |

ESCI toured each of the stations operated by the three fire districts participating in this study, and combined with the information provided by each, produced the observations listed in the following figures.



#### **Cascade RFPD Facilities**

The following figures list the features of the current Cascade RFPD fire stations.

| Figure 52: Cascade RFPD Station #1   |  |  |  |  |  |
|--|--|--|--|--|--|
| Address/Physical Location: 109 E. Pine Street, Cascade, ID 83611   |  |  |  |  |  |
| General Description: Two-story station with administrative offices, a large training room, and living quarters on the second floor. Ambulances housed in the old section of the station. Fire and rescue apparatus stored in the newer large section of the station. |  |  |  |  |  |
| Structure  |  |  |  |  |  |
| Construction Type  | Cinder Block   |  |  |  |  |
| Date of Construction   | Original ambulance bays 1984; large addition in 2003 |  |  |  |  |
| Seismic Protection   | Not reported   |  |  |  |  |
| Auxiliary Power  | No   |  |  |  |  |
| General Condition  | Good   |  |  |  |  |
| Number of Apparatus Bays   | 0 Drive-through bays 5 Back-in bays                  |  |  |  |  |
| Special Considerations (ADA, etc.)   | Not reported   |  |  |  |  |
| Square Footage   | 10,940   |  |  |  |  |
| Facilities Available   |  |  |  |  |  |
| Separate Rooms/Dormitory   | 2 Bedrooms 2 Beds 0 Dormitory Beds                   |  |  |  |  |
| Maximum Staffing Capability  | 2  |  |  |  |  |
| Exercise/Workout Facilities  | No   |  |  |  |  |
| Kitchen Facilities   | Yes  |  |  |  |  |
| Individual Lockers/Storage Assigne   | d Yes  |  |  |  |  |
| Shower Facilities  | Yes  |  |  |  |  |
| Training/Meeting Rooms   | Yes  |  |  |  |  |
| Washer/Dryer   | No   |  |  |  |  |
| Safety & Security  |  |  |  |  |  |
| Sprinklers   | No   |  |  |  |  |
| Smoke Detection  | Yes  |  |  |  |  |
| Decon. & Biohazard Disposal  | No   |  |  |  |  |
| Security   | Key-pad doors  |  |  |  |  |
| Apparatus Exhaust System   | Yes  |  |  |  |  |



| Figure 53: Cascade RFPD Station #2                                |   |  |  |  |  |  |
|---|---|--|--|--|--|--|
| Address/Physical Location: 41 Clear Creek Road, Cascade, ID 83611 |   |  |  |  |  |  |
|   | General Description:<br>Unstaffed station. Basic equipment/apparatus<br>storage only. |  |  |  |  |  |
| Structure   |   |  |  |  |  |  |
| Construction Type   | Wood Framed   |  |  |  |  |  |
| Date of Construction  | 1993  |  |  |  |  |  |
| Seismic Protection  | No  |  |  |  |  |  |
| Auxiliary Power   | No  |  |  |  |  |  |
| General Condition   | Fair  |  |  |  |  |  |
| Number of Apparatus Bays  | 0 Drive-through bays 3 Back-in bays   |  |  |  |  |  |
| Special Considerations (ADA, etc                                  | c.) No  |  |  |  |  |  |
| Square Footage  | 2,376   |  |  |  |  |  |
| Facilities Available  |   |  |  |  |  |  |
| Separate Rooms/Dormitory  | 0 Bedrooms 0 Beds 0 Dormitory Beds  |  |  |  |  |  |
| Maximum Staffing Capability                                       | No offices or sleeping quarters   |  |  |  |  |  |
| Exercise/Workout Facilities                                       | No  |  |  |  |  |  |
| Kitchen Facilities  | No  |  |  |  |  |  |
| Individual Lockers Assigned                                       | No  |  |  |  |  |  |
| Shower Facilities   | No  |  |  |  |  |  |
| Training/Meeting Rooms  | No  |  |  |  |  |  |
| Washer/Dryer  | No  |  |  |  |  |  |
| Safety & Security   |   |  |  |  |  |  |
| Sprinklers  | No  |  |  |  |  |  |
| Smoke Detection   | No  |  |  |  |  |  |
| Decon. & Biohazard Disposal                                       | No  |  |  |  |  |  |
| Security  | Key-pad doors   |  |  |  |  |  |
| Apparatus Exhaust System  | No  |  |  |  |  |  |



| Figure 54: Cascade RFPD Station #3                                   |   |  |  |  |  |
|--|---|--|--|--|--|
| Address/Physical Location: 671 West Mountain Road, Cascade, ID 83611 |   |  |  |  |  |
|  | General Description:<br>Unstaffed station. Basic equipment/apparatus<br>storage only. |  |  |  |  |
| Structure  |   |  |  |  |  |
| Construction Type  | Wood Framed   |  |  |  |  |
| Date of Construction   | 1987  |  |  |  |  |
| Seismic Protection   | No  |  |  |  |  |
| Auxiliary Power  | No  |  |  |  |  |
| General Condition  | Fair  |  |  |  |  |
| Number of Apparatus Bays   | 0 Drive-through bays 2 Back-in bays   |  |  |  |  |
| Special Considerations (ADA, etc.)                                   | No  |  |  |  |  |
| Square Footage   | 1,200   |  |  |  |  |
| Facilities Available   |   |  |  |  |  |
| Separate Rooms/Dormitory   | 0 Bedrooms 0 Beds 0 Dormitory Beds  |  |  |  |  |
| Maximum Staffing Capability  | No offices or sleeping quarters   |  |  |  |  |
| Exercise/Workout Facilities  | No  |  |  |  |  |
| Kitchen Facilities   | No  |  |  |  |  |
| Individual Lockers Assigned  | No  |  |  |  |  |
| Shower Facilities  | No  |  |  |  |  |
| Training/Meeting Rooms   | No  |  |  |  |  |
| Washer/Dryer   | No  |  |  |  |  |
| Safety & Security  |   |  |  |  |  |
| Sprinklers   | No  |  |  |  |  |
| Smoke Detection  | No  |  |  |  |  |
| Decon. & Biohazard Disposal  | No  |  |  |  |  |
| Security   | Key-pad doors   |  |  |  |  |
| Apparatus Exhaust System   | No  |  |  |  |  |

#### Figure 51: Cascade REPD Station #3

#### **Yellow Pine Station**

An ALS ambulance (Medic 4) is stored at the Yellow Pine Fire Station, which is staffed May through October each year because of the increase in recreational activities during the summer months. Yellow Pine Fire Department owns this station.



#### **Donnelly RFPD Facilities**

The following figure lists the features of the current single Donnelly RFPD fire station.

| Figure 55: Donnelly RFPD Fire Station   |  |  |  |  |  |  |
|---|--|--|--|--|--|--|
| Address/Physical Location:  | Address/Physical Location: 244 West Roseberry Road, Donnelly, ID 83615 |  |  |  |  |  |
| General Description:<br>11,800-square-foot two-story station. Large<br>training room, with adjacent living quarters on<br>the second floor. Prefabricated two-story fire<br>training building and props located adjacent to<br>the station. |  |  |  |  |  |  |
| Structure   |  |  |  |  |  |  |
| Construction Type   |  | Type 2 (wood & concrete block)             |  |  |  |  |
| Date of Construction  |  | 1987                                       |  |  |  |  |
| Seismic Protection  |  | Unknown                                    |  |  |  |  |
| Auxiliary Power   |  | Diesel generator                           |  |  |  |  |
| General Condition   |  | Good                                       |  |  |  |  |
| Number of Apparatus Bays  |  | 0 Drive-through bays 7 Back-in bays        |  |  |  |  |
| Special Considerations (ADA   | , etc.)  | Yes  |  |  |  |  |
| Square Footage  |  | 11,780                                     |  |  |  |  |
| Facilities Available  |  |  |  |  |  |  |
| Separate Rooms/Dormitory  |  | 3 Bedrooms 4 Beds 4 Dormitory              |  |  |  |  |
| Maximum Staffing Capability   | /  | 8 personnel with beds & two more with cots |  |  |  |  |
| Exercise/Workout Facilities   |  | Yes  |  |  |  |  |
| Kitchen Facilities  |  | Yes  |  |  |  |  |
| Individual Lockers/Storage A  | ssigned  | Yes  |  |  |  |  |
| Shower Facilities   |  | One  |  |  |  |  |
| Training/Meeting Rooms  |  | Yes  |  |  |  |  |
| Washer/Dryer  | Yes  |  |  |  |  |  |
| Safety & Security   |  |  |  |  |  |  |
| Sprinklers  |  | No   |  |  |  |  |
| Smoke Detection   |  | No   |  |  |  |  |
| Decon. & Biohazard Disposa  |  | Done at the local hospital                 |  |  |  |  |
| Security  |  | Key-pad doors                              |  |  |  |  |
| Apparatus Exhaust System  |  | Yes  |  |  |  |  |



### **McCall FPD Facilities**

The following figure lists the features of the current McCall FPD fire station.

| Figure 56: McCall FPD Fire Station  |                                     |  |  |  |  |
|---|-------------------------------------|--|--|--|--|
| Address/Physical Location: 201 Deinhard Lane, McCall, ID 83638  |                                     |  |  |  |  |
| General Description:<br>Large 13,300-square-foot station that includes the<br>District administrative offices and a large training<br>room. |                                     |  |  |  |  |
| Structure   | -                                   |  |  |  |  |
| Construction Type   | Not reported                        |  |  |  |  |
| Date of Construction  | 2004                                |  |  |  |  |
| Seismic Protection  | Unknown                             |  |  |  |  |
| Auxiliary Power   | Yes, LPG Generator                  |  |  |  |  |
| General Condition   | Good                                |  |  |  |  |
| Number of Apparatus Bays  | 0 Drive-through bays 9 Back-in bays |  |  |  |  |
| Special Considerations (ADA, etc.)  | ADA                                 |  |  |  |  |
| Square Footage  | 13,328                              |  |  |  |  |
| Facilities Available  |                                     |  |  |  |  |
| Separate Rooms/Dormitory  | 3 Bedrooms 2 Beds 3 Dormitory Beds  |  |  |  |  |
| Maximum Station Staffing  | 8                                   |  |  |  |  |
| Exercise/Workout Facilities   | Yes                                 |  |  |  |  |
| Kitchen Facilities  | Yes (needs updating)                |  |  |  |  |
| Individual Lockers/Storage  | Yes                                 |  |  |  |  |
| Shower Facilities   | Yes                                 |  |  |  |  |
| Training/Meeting Rooms  | Yes                                 |  |  |  |  |
| Washer/Dryer  | Yes                                 |  |  |  |  |
| Safety & Security   |                                     |  |  |  |  |
| Sprinklers  | Yes                                 |  |  |  |  |
| Smoke Detection   | Yes                                 |  |  |  |  |
| Decon. & Biohazard Disposal   | No (done at the local hospital)     |  |  |  |  |
| Security  | Key-pad entry on all doors          |  |  |  |  |
| Apparatus Exhaust System  | Yes                                 |  |  |  |  |

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The MFPD fire station was originally constructed for volunteers and did not include sleeping guarters and other facilities necessary for full-time staff. The station has since been upgraded to include separate female (three beds) and male (four beds) bunkrooms. Two other beds are available in an office room and one more in the Captain's room. Both the female and male locker rooms have a single shower.

## **Collective Summary of Fire District Facilities**

The following figure is a collective summary of the fire stations owned and operated by each of the fire districts participating in this study. It is intended to show the combined facilities' capacity of the three agencies.

| Fire District             | No. of<br>Stations | Staffing<br>Capacity | Apparatus<br>Bays | Total Square<br>Footage |
|---------------------------|--------------------|----------------------|-------------------|-------------------------|
| Cascade RFPD              | 3                  | 2                    | 10                | 14,516                  |
| Donnelly RFPD             | 1                  | 10                   | 7                 | 11,780                  |
| McCall FPD                | 1                  | 8                    | 9                 | 13,328                  |
| Subtotals:                | 5                  | 20                   | 26                | 39,624                  |
| CRFPD Yellow Pine Station | 1                  | 2                    | 1                 | N/A                     |
| Totals:                   | 6                  | 22                   | 27                | 39,624                  |

#### Figure 57: Collective Summary of Fire Stations in the Study Area

In the preceding figure, the CRFPD Yellow Pine Station has been separated from the other stations, since it is staffed only during May through October.

## **Apparatus & Ambulance Fleets**

Fire apparatus and medic units (ambulances) are unique and expensive pieces of equipment customized to operate for a specific community and defined mission. Other than its firefighters, officers, and support staff, the next most important resources in a fire district are likely the fire apparatus, ambulances, and special operations vehicles.

Apparatus must be sufficiently reliable to transport firefighters and equipment rapidly and safely to an incident scene. Such vehicles must be equipped properly and function appropriately to ensure that the delivery of emergency services is not compromised. For this reason, they are very expensive and offer little flexibility in use and reassignment to other missions.



Modern ambulances are complex and sophisticated vehicles which not only must be sufficiently maintained to ensure firefighters and EMS providers arrive promptly, but also must be in a condition to ensure patients are transported safely to the hospital or clinical facility.

#### **Cascade RFPD Apparatus**

The following figure lists the Cascade Rural Fire Protection District's frontline fire apparatus and ambulance fleet.

| -            |                  |             |      |           |             |
|--------------|------------------|-------------|------|-----------|-------------|
| Apparatus    | Туре             | Make        | Year | Condition | Location    |
| Engines      |                  |             |      |           |             |
| Engine 1     | Pumper           | E-One       | 1996 | Good      | Station 1   |
| Engine 4     | Pumper           | KME         | 1992 | Average   | Station 1   |
| Tenders/Wild | Tenders/Wildland |             |      |           |             |
| Tender 4     | Water Tender     | White Volvo | 1986 | Average   | Station 1   |
| Brush Truck  | Type VI          | Ford F-350  | 2001 | Good      | Station 1   |
| Ambulances   |                  |             |      |           |             |
| Medic 1      | Ambulance        | Ram 3500    | 2016 | Good      | Station 1   |
| Medic 3      | Ambulance        | Ford F-350  | 2007 | Good      | Station 1   |
| Medic 4      | Ambulance        | Ford E-350  | 1992 | Average   | Yellow Pine |

#### Figure 58: CRFPD Frontline Fire Apparatus & Ambulance Fleet Inventory (2020)

As shown in the preceding figure, frontline apparatus and ambulances were rated as either "Good" or "Average." The District also maintains three reserve engines and two reserve water tenders.

The next figure lists the District's frontline inventory of special operations and command vehicles.

#### Figure 59: CRFPD Frontline Special Operations & Command Vehicles Inventory (2020)

| Apparatus         | Туре               | Make       | Year | Condition | Location  |  |  |
|-------------------|--------------------|------------|------|-----------|-----------|--|--|
| Rescues           | Rescues            |            |      |           |           |  |  |
| Rescue 1          | Rescue unit        | Ford F-450 | 2014 | Good      | Station 1 |  |  |
| Rescue 2          | Crash/Rescue       | Amertek    | 1988 | Good      | Station 1 |  |  |
| Special Operation | Special Operations |            |      |           |           |  |  |
| Rescue 3          | UTV                | Polaris    | 2010 | Good      | Station 1 |  |  |
| Snowmobile 2      | Snowmobile         | Polaris    | 2004 | Good      | Station 1 |  |  |
| Snowmobile 3      | Snowmobile         | Polaris    | 2010 | Good      | Station 1 |  |  |
| Command Units     | Command Units      |            |      |           |           |  |  |
| Command 1         | Command            | Dodge      | 2002 | Average   | Station 1 |  |  |
| Command 2         | Command            | Ford       | 2014 | Good      | Station 1 |  |  |

As shown, nearly all vehicles in the preceding figure were rated as "Good," with one Command unit rated as "Average."

#### **Donnelly RFPD Apparatus**

The following figure lists the DRFPD's frontline fire apparatus.

#### Figure 60: DRFPD Frontline Fire Apparatus Inventory (2020)

| Apparatus    | Туре         | Make         | Year | Condition | Location  |  |  |
|--------------|--------------|--------------|------|-----------|-----------|--|--|
| Engines      | Engines      |              |      |           |           |  |  |
| Engine 1     | Pumper       | Boise Mobile | 1998 | Good      | Station 1 |  |  |
| Engine 2     | Pumper       | Pierce       | 2005 | Excellent | Station 1 |  |  |
| Tenders/Wild | land         |              |      |           |           |  |  |
| Engine 3     | Brush Truck  | GMC          | 2006 | Good      | Station 1 |  |  |
| Tender 1     | Water Tender | Boise Mobile | 2006 | Excellent | Station 1 |  |  |
| Tender 2     | Water Tender | Pierce Arrow | 1986 | Good      | Station 1 |  |  |

DRFPD also maintains a 1986 GMC Brush Truck (Engine 4) in its reserve inventory.



The next figure shows DRFPD's current inventory of ambulances and other vehicles.

| <b>3</b>        |                 |              |      |           |           |  |  |
|-----------------|-----------------|--------------|------|-----------|-----------|--|--|
| Apparatus       | Туре            | Make         | Year | Condition | Location  |  |  |
| Ambulances      | Ambulances      |              |      |           |           |  |  |
| Ambulance 1     | Ambulance       | Braun        | 2019 | New       | Station 1 |  |  |
| Ambulance 3     | Ambulance       | Braun        | 2012 | Excellent | Station 1 |  |  |
| Rescues & Speci | alty Vehicles   |              |      |           |           |  |  |
| Rescue 1        | Rescue          | Boise Mobile | 2007 | Excellent | Station 1 |  |  |
| Snowmobile      | Rescue Sled (2) | Arctic Cat   | 2007 |           | Station 1 |  |  |
| Command Vehic   | cle             |              |      |           |           |  |  |
| Command 1       | Chief           | Dodge        | 2012 | Good      | Station 1 |  |  |
| Command 2       | Staff           | Dodge        | 2010 | Good      | Station 1 |  |  |

#### Figure 61: DRFPD Frontline Ambulance & Other Vehicles Inventory (2020)

DRFPD maintains a 1999 Wheeled Coach ambulance in reserve (Ambulance 2), which is considered to be in "Good" condition.

#### **McCall FPD Apparatus**

The following figure lists the MFPD's frontline fire apparatus and ambulance fleet.

#### Figure 62: MFPD Frontline Fire Apparatus & Ambulance Fleet Inventory (2020)

| Apparatus    | Туре              | Make         | Year | Condition | Location  |  |
|--------------|-------------------|--------------|------|-----------|-----------|--|
| Engines/Aeri | Engines/Aerials   |              |      |           |           |  |
| Engine 11    | Pumper            | Pierce       | 1994 | Average   | Station 1 |  |
| Truck 11     | Aerial/TeleSquirt | Pierce       | 1992 | Average   | Station 1 |  |
| Tenders/Wild | Tenders/Wildland  |              |      |           |           |  |
| Tender 1     | Pumper/Tender     | Boise Mobile | 2008 | Good      | Station 1 |  |
| Squad 11     | Wildland          | Dodge        | 2013 | Good      | Station 1 |  |
| Ambulances   | i                 |              |      |           |           |  |
| Medic 53     | Ambulance         | Braun        | 2018 | Excellent | Station 1 |  |
| Medic 54     | Ambulance         | Braun        | 2013 | Good      | Station 1 |  |



MFPD's aerial apparatus is 65 feet in length. In 2020, Engine 11 will be placed in reserve and replaced with a new engine due for delivery in October. The next figure lists the District's frontline inventory of special operations and command vehicles.

Figure 63: MFPD Frontline Special Operations & Command Vehicles Inventory (2020)

| Туре           | Make   | Year  | Condition   | Location   |
|----------------|--|---|---|--|
| ons            |  |   |   |  |
| Watercraft     | Oceanid  | 1998  | Fair  | Station 1  |
| Trail type     | Yamaha   | 2010  | Excellent   | Station 1  |
| Mountain type  | Ski-Doo  | 2018  | Excellent   | Station 1  |
| Mountain type  | Ski-Doo  | 2017  | Excellent   | Station 1  |
| Off-road (6x6) | Polaris  | 2007  | Fair  | Station 1  |
|                |  |   |   |  |
| Command        | Dodge  | 2019  | Excellent   | Station 1  |
| Command        | Ford   | 2018  | Excellent   | Station 1  |
| Command        | Ford   | 2005  | Average   | Station 1  |
|                | Watercraft<br>Trail type<br>Mountain type<br>Mountain type<br>Off-road (6x6)<br>Command<br>Command | WatercraftOceanidTrail typeYamahaMountain typeSki-DooMountain typeSki-DooOff-road (6x6)PolarisCommandDodgeCommandFord | WatercraftOceanid1998Trail typeYamaha2010Mountain typeSki-Doo2018Mountain typeSki-Doo2017Off-road (6x6)Polaris2007CommandDodge2019CommandFord2018 | WatercraftOceanid1998FairTrail typeYamaha2010ExcellentMountain typeSki-Doo2018ExcellentMountain typeSki-Doo2017ExcellentOff-road (6x6)Polaris2007FairCommandDodge2019ExcellentCommandFord2018Excellent |

MFPD also maintains trailers for transporting its snowmobiles, boat, and UTV.

## **Collective Apparatus Inventory**

The next figure lists the collective fleet inventories of the three study participants.

| Fire District | Engines | Aerials | Medics | Tenders | Wildland | Others |
|---------------|---------|---------|--------|---------|----------|--------|
| Cascade RFPD  | 2       | 0       | 3      | 3       | 1        | 7      |
| Donnelly RFPD | 2       | 0       | 2      | 2       | 1        | 4      |
| McCall FPD    | 1       | ] A     | 2      | 1       | 1        | 8      |
| Totals:       | 5       | 1       | 7      | 6       | 3        | 19     |

#### Figure 64: Collective Frontline Inventories of the Fire Districts (2020)

<sup>A</sup> Configured as a 65-foot "TeleSquirt."



As shown in the preceding figure, the three fire districts collectively operate five engines, one aerial, seven medic units (ambulances), six tenders (which includes MFPD's pumper/tender), and three wildland (Brush Trucks) apparatus throughout Valley County. In addition, CRFPD and DRFPD maintain a combination of three Rescue units.

Minimum **Fire Station** Wildland Engines Medics Tenders Staffing<sup>A</sup> Cascade RFPD 2 Fire Station 1 3 (C, R, V) 1 1 1 Fire Station 2 1 0 1 V 0 0<sup>B</sup> V Fire Station 3 0 1 0 1C V **Yellow Pine** 0 0 0 **Donnelly RFPD** Fire Station 2 2 2 1 3 McCall FPD Fire Station 2 3 1 1 1 5 7 9 Totals: 6 3

| Figure 45: Collective Frontline | Apparatus 8 Minimu    | m Staffing by Fire Station (2020) |
|---------------------------------|-----------------------|-----------------------------------|
|                                 | Appulatus & Millinitu | m Staffing by Fire Station (2020) |

<sup>A</sup> R=Resident, V=Volunteer, CS=Cross-Staffed, C=Career. <sup>B</sup> Reserve engine is at St. 3. <sup>C</sup> Staffed seasonally.

The preceding figure does not include any aerial apparatus, although the McCall FPD owns and operates a single "TeleSquirt" cross-staffed when indicated. MFPD will replace Engine 11 in October 2020.

#### **Current Ages of Frontline Apparatus & Ambulances**

In the following figure, ESCI calculated the average age of frontline apparatus, to offer a point of reference when considering future vehicle replacement costs that may be incurred. The figure includes the quantity and average age of each type of apparatus.

| Fire District    | No. of<br>Engines | Average<br>Engine Age | No. of<br>Medics | Average<br>Medic Age |
|------------------|-------------------|-----------------------|------------------|----------------------|
| Cascade RFPD     | 2                 | 26 years              | 2 <sup>A</sup>   | 8.5 years            |
| Donnelly RFPD    | 2                 | 18.5 years            | 2                | 4.5 years            |
| McCall FPD       | 2 <sup>B</sup>    | 26 years              | 2                | 4.5 years            |
| Totals/Averages: | 6                 | 23.5 years            | 6                | 5.8 years            |

#### Figure 66: Average Age of the Combined Primary Frontline Apparatus (2020)

<sup>A</sup> Excludes ambulance usually assigned to Yellow Pine.

<sup>B</sup> Includes one pumper/tender utilized by MFPD.

The preceding figure shows that the combined average age of the engines is nearly 24 years, although MFPD will be replacing a frontline engine with a new one in 2020. The medic units (ambulances) are much newer, with a combined average age of 5.8 years.

#### Future Apparatus Serviceability

An important consideration when evaluating the feasibility of consolidating fire departments into a combined organization is the cost associated with the future replacement of major equipment. Apparatus service-lives can be readily predicted based on factors including vehicle type, call volume, age, and maintenance considerations.

NFPA 1901: Standard for Automotive Fire Apparatus recommends that fire apparatus 15 years of age or older be placed into reserve status, and apparatus 25 years or older should be replaced.<sup>27</sup> This is a general guideline, and the standard recommends using the following objective criteria in evaluating fire apparatus lifespan:

- Vehicle road mileage.
- Engine operating hours.
- The quality of the preventative maintenance program.
- The quality of the driver-training program.
- Whether the fire apparatus was used within its design parameters.
- Whether the fire apparatus was manufactured on a custom or commercial chassis.
- The quality of workmanship by the original manufacturer.
- The quality of the components used in the manufacturing process.
- The availability of replacement parts.



Cascade RFPD outsources its fleet maintenance to three local businesses (Cascade Auto, Bob Bate Ford, and H & H Towing). Donnelly RFPD utilizes in-house maintenance, Boise Mobile, and the Star Fire Department's Maintenance Department. McCall FPD outsources its fleet maintenance to Hughes Fire, Star Fire District, and Gold Fork Automotive.

It is important to note that age is not the only factor for evaluating serviceability and replacement. Vehicle mileage and pump hours on engines must also be considered. A two-year-old engine with 250,000 miles may need replacement sooner than a 10-year-old one with 2,500 miles. The following figure represents a relatively simple example that the districts can use for determining the condition of fire apparatus and vehicles.

| <b>Evaluation Components</b> | Points Assignment Criteria                                      |   |  |  |  |
|------------------------------|---|---|--|--|--|
| Age:                         |   | ear of chronological age, based on in-    |  |  |  |
|                              | service date.   |   |  |  |  |
| Miles/Hours:                 | One point for each 1  | 0,000 miles or 1,000 hours.               |  |  |  |
|                              | 1, 3, or 5 points are as  | ssigned based on service-type received    |  |  |  |
| Service:                     | (e.g., a pumper woul  | d be given a 5 since it is classified as  |  |  |  |
|                              | severe duty service).   |   |  |  |  |
|                              | This category takes into consideration body condition, rust     |   |  |  |  |
| Condition:                   | interior condition, accident history, anticipated repairs, etc. |   |  |  |  |
|                              | The better the condition, the lower the assignment of points.   |   |  |  |  |
|                              | Points are assigned as 1, 3, or 5, depending on the frequency   |   |  |  |  |
|                              | a vehicle is in for repo  | air (e.g., a 5 would be assigned to a     |  |  |  |
| Reliability:                 | vehicle in the shop tw  | vo or more times per month on average;    |  |  |  |
|                              | while a 1 would be a  | ssigned to a vehicle in the shop on       |  |  |  |
|                              | average of once eve   | ery 3 months or less.                     |  |  |  |
| Point Ranges                 | Condition Rating  | Condition Description                     |  |  |  |
| Under 18 points              | Condition I   | Excellent                                 |  |  |  |
| 18–22 points                 | Condition II  | Good                                      |  |  |  |
| 23–27 points                 | Condition III   | Condition III Fair (consider replacement) |  |  |  |
| 28 points or higher          | Condition IV  | Poor (immediate replacement)              |  |  |  |

#### Figure 67: Example Criteria & Method for Determining Apparatus Replacement



## Collective Medical & Rescue Equipment Inventory

Most fire departments maintain an inventory of capital equipment for fire suppression, rescue, special operations, and EMS. The following section lists the capital medical and rescue equipment inventories of the fire districts. Although the three districts may have other capital items used for EMS and rescue, the primary items described here include cardiac monitor/defibrillators, Automated External Defibrillators (AED), ambulance stretchers, rescue/extrication equipment, and any items related to special operations.

#### Cardiac Monitor/Defibrillators

Cardiac monitors represent a major investment for fire districts that provide prehospital care at the advanced life support level. When evaluating an EMS system, it is important to look at the various models being utilized by the EMS providers to determine compatibility among the agencies.

|                        |                 |      | -       |                  |                   | •   |     |      |
|------------------------|-----------------|------|---------|------------------|-------------------|-----|-----|------|
| Model                  | Manufacturer    | Qty. | 12-Lead | SpO <sub>2</sub> | etCO <sub>2</sub> | со  | BP  | Temp |
| Cascade RFPD           |                 |      |         |                  |                   |     |     |      |
| X-Series               | ZOLL®           | 2    | Yes     | Yes              | Yes               | No  | Yes | No   |
| E-Series               | ZOLL®           | 1    | Yes     | Yes              | Yes               | No  | Yes | No   |
| AutoPulse <sup>A</sup> | ZOLL®           | 1    | N/A     | N/A              | N/A               | N/A | N/A | N/A  |
| Donnelly RF            | PD              |      |         |                  |                   |     |     |      |
| X-Series               | ZOLL®           | 3    | Yes     | Yes              | Yes               | Yes | Yes | Yes  |
| AutoPulse <sup>A</sup> | ZOLL®           | 2    | N/A     | N/A              | N/A               | N/A | N/A | N/A  |
| McCall FPD             |                 |      | ·       |                  |                   |     |     |      |
| X-Series               | ZOLL®           | 3    | Yes     | Yes              | Yes               | Yes | Yes | No   |
| M-Series               | ZOLL®           | 2    | Yes     | No               | No                | No  | Yes | No   |
| LUCAS 3ª               | Physio-Control® | 1    | N/A     | N/A              | N/A               | N/A | N/A | N/A  |

#### Figure 68: Collective Inventory of Cardiac Monitor/Defibrillators (2020)

<sup>A</sup> These are not cardiac monitors but are included here since they are chest-compression devices.

In the event of consolidation, it will be important that the cardiac monitor/defibrillators deployed to frontline medic units and apparatus be standardized among the three fire districts, including standard features and capabilities of each device. Among the three districts, the predominant manufacturer is ZOLL® Medical Corporation and the X Series® models.



Cascade RFPD also has an Automated External Defibrillator assigned to Rescue 1. Both Donnelly RFPD and McCall FPD maintain chest compression systems (AutoPulse® and LUCAS 3®) that provide automated high-quality chest compressions for cardiac arrest patients. These devices eliminate the need for EMS personnel to perform chest compressions and enables them to execute other treatment modalities.

#### **Ambulance Stretchers & Patient-Movement Equipment**

Another significant capital expense for fire districts providing patient-transport, regardless of the level of service provided, are ambulance stretchers (also referred to as "cots"). The following figure lists the ambulance cots and stair chairs utilized by each fire district.

| Model         | Manufacturer Qty.    |   | Description      |
|---------------|----------------------|---|------------------|
| Cascade RFPD  |                      |   |                  |
| PowerPro XT   | Stryker <sup>®</sup> | 2 | Ambulance cot    |
| Stair-PRO     | Stryker <sup>®</sup> | 2 | Stair chair      |
| Power-LOAD    | Stryker <sup>®</sup> | 2 | Power-loader     |
| Donnelly RFPD |                      |   |                  |
| POWERFlexx    | Ferno®               | 2 | Ambulance cot    |
| Power-LOAD    | Stryker <sup>®</sup> | 1 | Power-loader     |
| Model 40      | Ferno®               | 3 | Stair chair      |
| McCall FPD    |                      |   |                  |
| PowerPro XT   | Stryker <sup>®</sup> | 2 | Ambulance cot    |
| Stair-PRO     | Stryker <sup>®</sup> | 2 | Stair chair      |
| MX-PRO        | Stryker <sup>®</sup> | 2 | Manual stretcher |
| Power-LOAD    | Stryker®             | 2 | Power-loader     |

#### Figure 69: Combined Inventories of Ambulance Cots & Patient-Movement Equipment

As shown, Stryker powered stretchers and stair chairs represent the equipment used most frequently among the three jurisdictions. It is important for the fire districts to standardize the ambulance cots utilized in each of its medic units. This is necessary not only for patient safety but also for the safety of the firefighters assigned to those units.

#### Rescue, Extrication, & Special Operations Equipment

Heavy extrication tools, rescue equipment, and special operations equipment can also require a substantial capital investment.

#### Cascade RFPD

CRFPD maintains a variety of extrication equipment, including a TNT Rescue® hydraulic pump with a cutter and spreader, and two Res-Q-Jack<sup>®</sup> lifting struts. For water rescue incidents, the District maintains a 14-foot whitewater raft, six drysuits, and other associated equipment.

#### **Donnelly RFPD**

DRFPD maintains Holmatro<sup>®</sup> extrication tools with cutters, spreaders, and two hydraulic pumps. In addition, one portable Honda® generator and one fixed on Rescue 1 are utilized to support rescue and extrication operations.

#### McCall FPD

MFPD maintains a significant inventory of extrication equipment that includes:

- Four Res-Q-Jack<sup>®</sup> lifting struts.
- Hurst<sup>®</sup> spreader, cutter, and ram with a Centaur hydraulic pump.
- Homatro<sup>®</sup> spreader and cutter with a hydraulic pump.

#### Medical Equipment & Supplies Inventory Management

Each of the fire districts has some type of medical equipment and supplies inventory management system in place. CRFPD conducts a full inventory weekly. MFPD uses the TargetSolutions Check It™ operations management software for managing its inventory. In accordance with the Drug Enforcement Administration (DEA) regulations, all three fire districts have methods and policies in place for security and management of their controlled substances. MFPD is the only district that has a medication exchange agreement with the hospital.

#### **Capital Equipment Discussion**

There are three separate fire districts providing emergency medical services throughout Valley County. To be most effective, they must function as a "system." In major events or multi-casualty incidents, the fire districts must rely on each other to assemble the necessary personnel and resources to mitigate these types of calls. Ambulance styles and configurations and medical equipment and supplies vary among the fire districts, and there does not appear to be a Countywide EMS standard.



Regardless of whether the fire districts consolidate or not, standardizing certain types of equipment would likely have significant value by enabling compatibility when personnel from each jurisdiction are working together on an incident scene. Additionally, standardizing equipment—such as cardiac monitor/defibrillators—could enable group purchasing at a lower cost per item.



## **SERVICE DELIVERY & OPERATIONAL PERFORMANCE**

The following section reviews the service delivery and performance for the three Valley County fire districts participating in this study. ESCI analyzed current and historical service demand by incident type and temporal variation for the entire study area. GIS software was used to provide a geographic display of demand, performance, and projected response time performance.

The operational components of service delivery and performance have been analyzed from multiple perspectives, which include service demand, distribution, resource concentration, reliability, and response performance. To provide the highest level of service to the citizens and visitors of Valley County, the collective of these components must be effective and efficient. This is achieved with efficient notifications of incidents and rapid responses from strategically located facilities—and through appropriate apparatus staffed with an adequate number of properly trained personnel. This section will provide a current analysis of service delivery and response performance of the three fire districts.

## **Records Management Systems & Data Sources**

The following figure lists the electronic Records Management Systems (RMS) utilized by the fire districts for emergency medical and non-EMS incident reporting—which typically involves collecting data consistent with the National Fire Incident Reporting System (NFIRS).

| Fire District | EMS Records Management   | Non-EMS (NFIRS) RMS |
|---------------|--------------------------|---------------------|
| Cascade RFPD  | Idaho PERCS <sup>A</sup> | Firehouse Software® |
| Donnelly RFPD | Idaho PERCS              | Firehouse Software® |
| McCall FPD    | Idaho PERCS              | Firehouse Software® |

<sup>A</sup>Idaho Prehospital Electronic Record Collection System.

As shown, each of the districts uses the State of Idaho's PERCS for electronically recording ePCRs. The districts use Firehouse Software® (FH) to document fire-related and other non-EMS incidents. None of the fire districts' records management systems interface with the dispatch center's CAD system. Therefore, incident addresses, timestamps, and other data collected in the CAD records are not automatically downloaded.

#### Data Sources

For these sections of the study, ESCI utilized FH datasets provided by each fire district for the 48-month period beginning January 1, 2016, through December 31, 2019.

#### **NFIRS Type Codes**

As mentioned, each of the fire districts utilizes the NFIRS incident type-codes used in the FH system. NFIRS provides a type-code for a long list of specific incident types in nine major categories. In this study, unless otherwise noted, ESCI utilized the following categories:

- 100 Series: Fires (includes fires out on arrival and gas vapor explosions).
- 300 Series: Rescue & Emergency Medical Service Incidents. н.
- 200, 400–900 Series: All other types (e.g., hazardous conditions, service calls, good intent calls, false alarms, severe weather, etc.).

The Idaho State Fire Marshal's Office (ISFMO) collects incident data from each of the fire departments based on the NFIRS standards. In a January 31, 2020 e-mail to all of the fire departments in Idaho, the ISFMO's NFIRS Program Information Coordinator wrote:

"NFIRS is for capturing emergency and some non-emergency fire department responses. Other functions your department performs like training, public education, plan reviews, inspections are NOT NFIRS reportable. This is coming from the USFA. Please remove those."

This is important to note, as ESCI found in at least one of the datasets provided by the fire districts that non-incident records were included as incident records.

## Service Demand Study

The following section entails various analyses of the historical service demand for the previous four calendar years (2016–2019) of each of the fire districts. This will include a breakdown by NFIRS incident-type category along with incident density maps generated through GIS analysis. Unless specifically noted, calls canceled while en route and those in which no incident was found on arrival, were excluded from the service demand analyses.



#### Cascade RFPD

The following figure illustrates the call volume of CRFPD for each year during the 48-month study period. Using the NFIRS type codes, ESCI categorized calls into either EMS, fire-related, or other call types. The dataset provided to ESCI contained a total of 1,674 incident records—of which 95 calls (6%) were excluded.

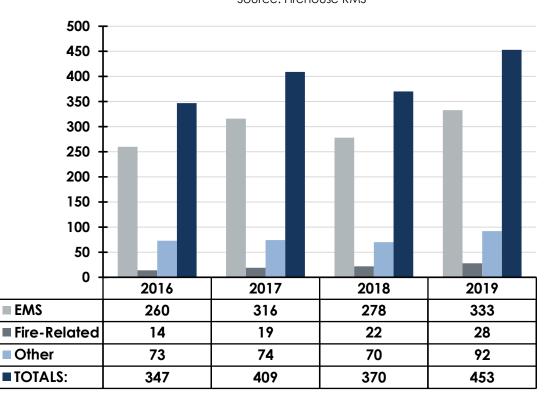


Figure 71: CRFPD Service Demand—All Incident Types (2016–2019) Source: Firehouse RMS

As expected, EMS incidents have increased by approximately 28% since 2016, with an unexplained decrease in 2018. Fire-related incidents have doubled over the study period, with a small increase in other incident types. Total service demand for CRFPD increased by nearly 31% from 2016 through 2019.

#### **Donnelly RFPD**

The following figure illustrates the call volume of DRFPD for each year during the 48-month study period. Using the NFIRS type codes, ESCI categorized calls into either EMS, firerelated, or other call types. The dataset provided to ESCI contained a total of 1,367 incident records—of which 103 calls (8%) were excluded from the analysis. Another 91 (7%) records were also excluded, as they represented activities other than actual incident responses (e.g., blood pressure checks, public education presentations, etc.).

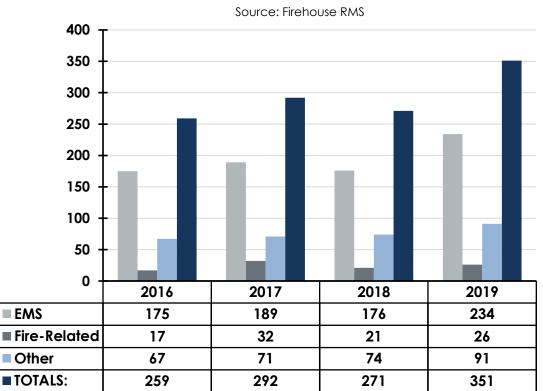


Figure 72: DRFPD Service Demand—All Incident Types (2016–2019)

DRFPD had a pattern of service demand increases nearly the same as Cascade RFPD, with EMS incidents increasing by approximately 34% over the preceding 48-month study period. Total service demand for DRFPD increased by nearly 36% from 2016 through 2019.

#### McCall FPD

The following figure illustrates the call volume of MFPD for each year during the 48-month study period. Using the NFIRS type codes, ESCI categorized calls into either EMS, fire-related, or other call types. The dataset provided to ESCI contained a total of 4,220 incident records—of which 211 calls (7%) were excluded from the analysis.

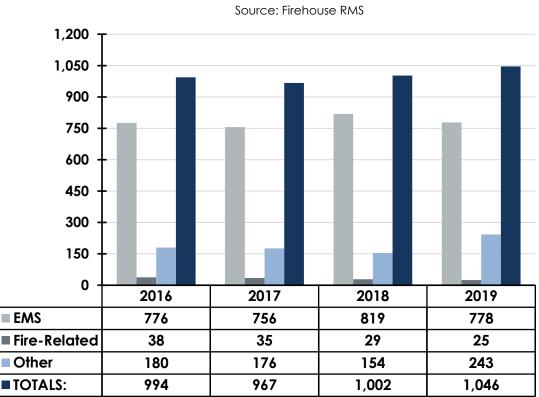


Figure 73: MFPD Service Demand—All Incident Types (2016–2019)

During the study period, MFPD had a service demand pattern dissimilar to the other two fire districts. EMS incidents remained relatively flat over the study period with a spike in call volumes in 2018. Total service demand for MFPD increased by about 5% from 2016 through 2019.

#### **Combined Service Demand Study Results**

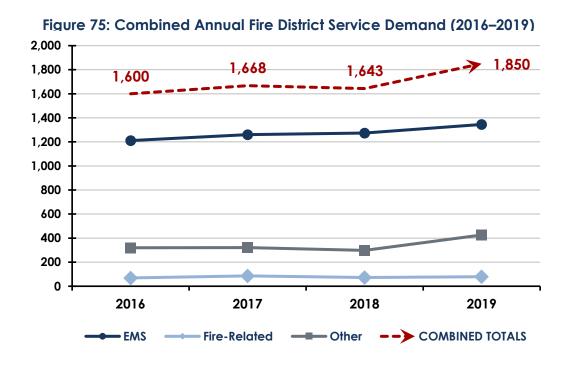
Excluding canceled calls and those in which there was no incident on arrival, the following figure lists the combined service demand of the three fire districts during the 48-month study period.

| Fire District   | EMS   | Fire | Other | District Totals |
|-----------------|-------|------|-------|-----------------|
| Cascade RFPD    | 1,187 | 83   | 309   | 1,579           |
| Donnelly RFPD   | 774   | 96   | 303   | 1,173           |
| McCall FPD      | 3,129 | 127  | 753   | 4,009           |
| Totals by Type: | 5,090 | 306  | 1,365 | 6,761           |

#### Figure 74: Service Demand of the Fire Districts Combined (2016–2019)

Throughout the study period, the combined fire districts' service demand of all incidenttypes averaged 1,690 calls annually, or a daily average of just over 4.6 incidents. During 2019, the combined call volumes totaled 1,850 incidents or an average of nearly 5.1 incidents per day.

The next figure is a graphic illustration showing the combined annual totals of service demand by the categories of EMS, Fire-Related, and Other.



The preceding figure shows that there was a nearly 16% increase in combined total service demand in Valley County between 2016 and the end of 2019. As would be expected, EMS calls tended to increase, while fire-related incidents remained relatively flat. Other call types increased by approximately 33% during this period.

#### Service Demand Records from CAD

The following figure lists all call types in which the fire districts were dispatched through the Valley County Emergency 911 Center.

| Agency  | 2014  | 2015  | 2016  | 2017  | 2018  | 2019  | % Total      |
|---------|-------|-------|-------|-------|-------|-------|--------------|
| CRFPD   | 375   | 425   | 385   | 432   | 379   | 424   | 23%          |
| DRFPD   | 187   | 236   | 244   | 289   | 260   | 341   | 1 <b>9</b> % |
| MFPD    | 922   | 929   | 1,037 | 959   | 1,010 | 1,050 | 56%          |
| Totals: | 1,484 | 1,590 | 1,666 | 1,680 | 1,649 | 1,815 |              |

#### Figure 76: Incidents Dispatched by CAD Records (2014–2019)<sup>28</sup>

#### **Comparison of RMS Records to CAD Records**

The following figure compares the service demand records as provided through each fire district's records management system to the records provided by Valley County 911.

Figure 77: Comparison of District RMS Records to CAD Records (2016–2019)

| -             |       |      |       |       |  |  |  |
|---------------|-------|------|-------|-------|--|--|--|
| Data Source   | 2016  | 2017 | 2018  | 2019  |  |  |  |
| Cascade RFPD  |       |      |       |       |  |  |  |
| RMS           | 347   | 409  | 370   | 453   |  |  |  |
| CAD           | 385   | 432  | 379   | 424   |  |  |  |
| Donnelly RFPD |       |      |       |       |  |  |  |
| RMS           | 259   | 292  | 271   | 351   |  |  |  |
| CAD           | 244   | 289  | 260   | 341   |  |  |  |
| McCall FPD    |       |      |       |       |  |  |  |
| RMS           | 994   | 967  | 1,002 | 1,046 |  |  |  |
| CAD           | 1,037 | 959  | 1,010 | 1,050 |  |  |  |

As shown, there is a disparity in the call volumes from the CAD records and the incidents recorded in each district's RMS. This can likely be attributed to ESCI excluding both canceled calls and no-call-on-arrival incidents from the RMS data documented earlier in this report.



#### **Geographic Service Demand Analysis**

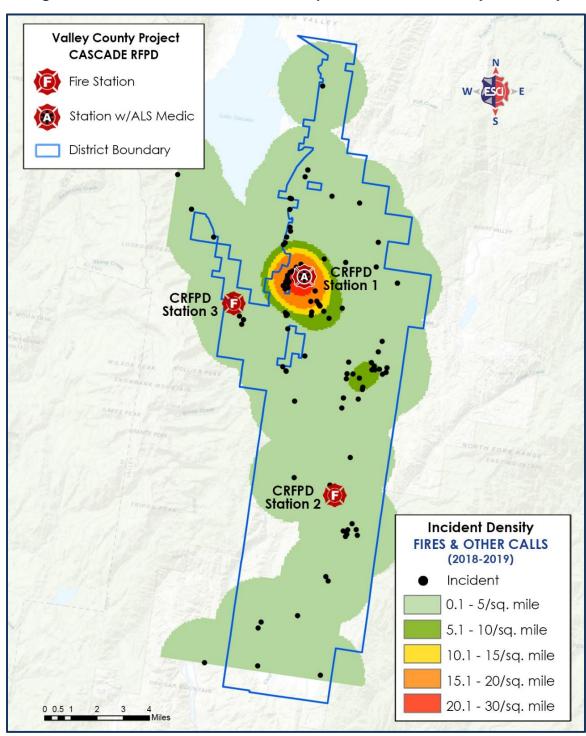
In addition to the service demand analyses, it is useful to examine the geographic distribution of calls. Utilizing the data provided by each of the fire districts and Geographic Information Systems (GIS) software, ESCI plotted historical incident locations to illustrate the distribution of calls for service by location from January 1, 2018, through December 31, 2019.

The following figures show the incident density analyses which determine "Hot Spots," or areas experiencing the highest levels of service demand.

#### **Cascade RFPD Geographic Service Demand**

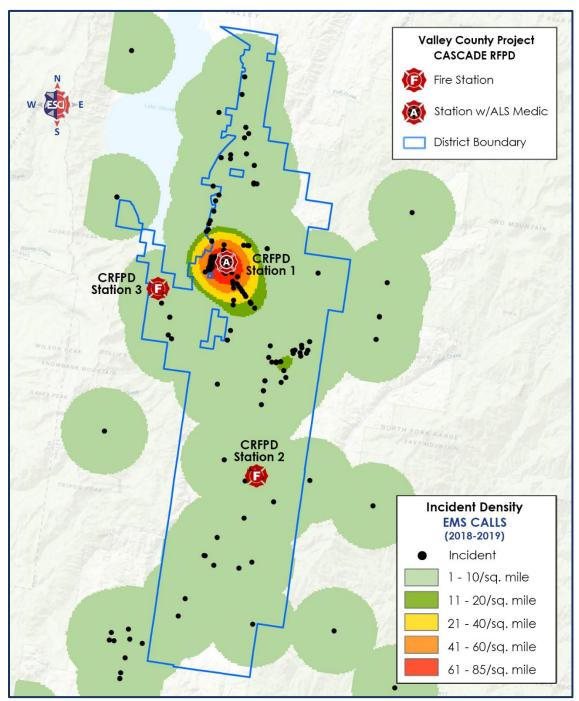
The following figure illustrates CRFPD's incident density of fires and other call types (excluding EMS) during the 24-month period of 2018–2019. As shown, the highest calldensity occurred near Fire Station 1.







The next figure illustrates CRFPD's EMS-only incident density for 2018–2019. Note that calls originating at Cascade Medical Center were excluded from the figure, which only included 911 scene responses.







#### **Donnelly RFPD Geographic Service Demand**

The following figure illustrates DRFPD's incident density of fires and other call types (excluding EMS) during the 24-month period of 2018–2019. As expected, the highest demand occurred to the south and in the vicinity of the Donnelly fire station.

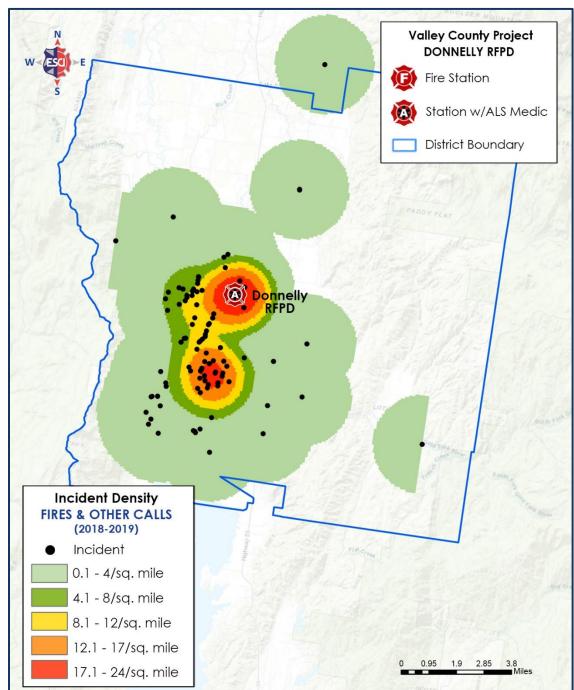


Figure 80: Donnelly RFPD Incident Density of Fires & Other Calls (2018–2019)



The following figure illustrates DRFPD's EMS-only incident density for 2018–2019.

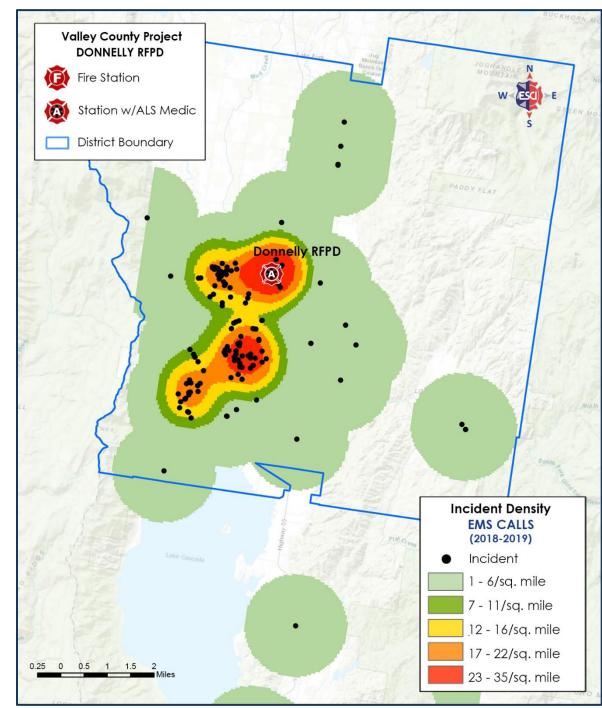


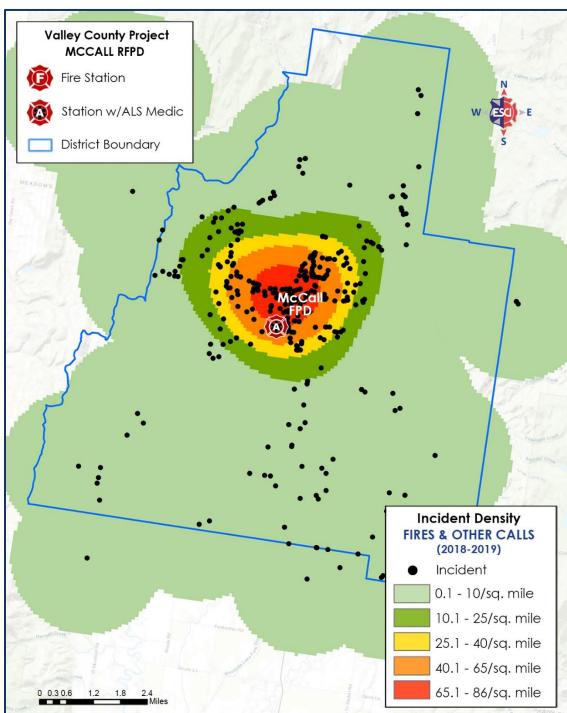
Figure 81: Donnelly RFPD Incident Density of EMS Calls (2018–2019)

As expected with all of the EMS density maps, a similar pattern will be found in the all call types incident density maps, since EMS represents the majority of service demand.



#### **McCall FPD Geographic Service Demand**

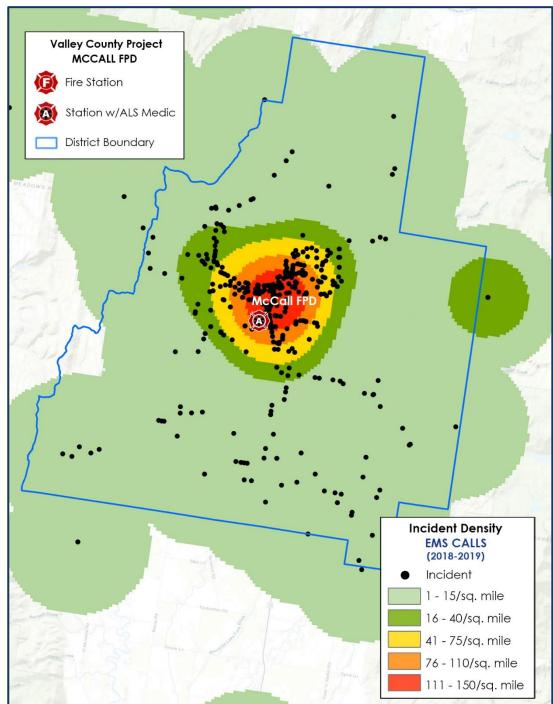
The following figure illustrates MFPD's incident density of fires and other call types (excluding EMS) during the 24-month period of 2018–2019.



#### Figure 82: McCall FPD Incident Density of Fires & Other Calls (2018–2019)



The highest demand for fires and other call types occurred in the vicinity of the McCall fire station. The next figure illustrates MFPD's EMS-only incident density for 2018–2019. Note that calls originating at St. Luke's McCall were excluded from the figure, which only included 911 scene responses.



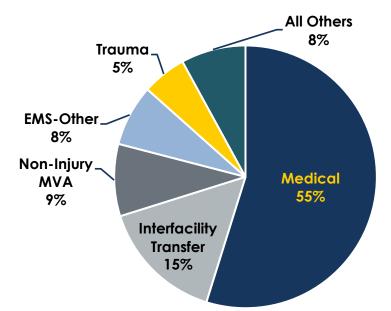




#### **Detailed EMS Incident Types**

As mentioned previously, each of the fire districts utilizes the Firehouse Software® application to document all incidents (while EMS calls are documented in IGEMS-PCR system). Incidents are recorded primarily using the NFIRS type codes. However, the FH system allows organizations to add custom "Plus-One" type codes, which enables more specific documentation of the incident type. The fire districts have elected to use these but are not consistent.

The next figure illustrates the five most frequent EMS-related incident types documented by Cascade RFPD, along with the combined total of all others.

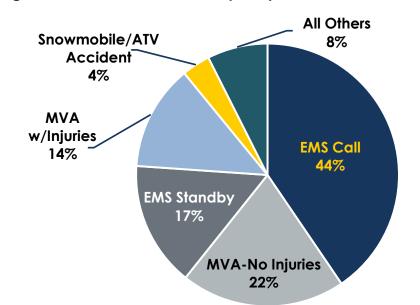


#### Figure 84: CRFPD's Five Most Frequently Documented EMS Calls (2016–2019)

As shown in the preceding figure, the majority (55%) of EMS incidents were documented by CRFPD personnel as "Medical." This was followed by Interfacility Transfers (IFT) calls at 15% of the total EMS incidents.



The next figure illustrates the five most frequent EMS-related incident types documented by Donnelly RFPD, along with the combined total of all others.

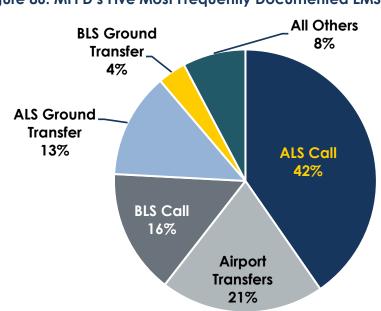


#### Figure 85: DRFPD's Five Most Frequently Documented EMS Calls (2016–2019)

The preceding figure illustrates that "EMS Calls" represented the majority (44%) of EMS incident types documented by DRFPD personnel. Interestingly, non-injury motor vehicle accidents (MVA) accounted for the next most frequently documented incidents. This was subsequently followed by the third most frequently documented EMS incident being "EMS Standbys" at 17% of the calls during the 48-month study period.

The next figure illustrates the five most frequent EMS-related incident types documented by McCall FPD, along with the combined total of all others.





#### Figure 86: MFPD's Five Most Frequently Documented EMS Calls (2016–2019)

The preceding figure illustrates that "ALS Calls" represented the majority (42%) of EMS incident types documented by MFPD personnel. Interestingly, "Airport Transfers" accounted for the next most frequently documented incidents. This was subsequently followed by the third most frequently documented EMS incident being "BLS Calls" at 16% of the calls during the 48-month study period.

## Service Demand Discussion

It is important to note that the call volumes analyzed in this report represent the majority of emergency medical incidents in Valley County. However, these do not necessarily account for EMS incidents in which no fire district unit was dispatched in which a patient may have been transported to a facility outside of the County by other means, such as rotary-wing or fixed-wing aircraft.



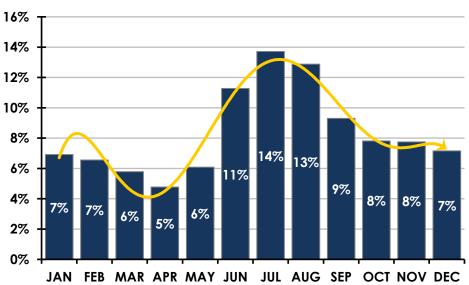
## **Temporal Variation**

Demand for services can often occur in cyclical patterns. A temporal variation analysis is helpful to determine if specific trends exist during various time measurements where staffing can be modified to fit the demand better. To determine if these patterns exist, the next section presents the results of the various analyses.

The following figures display historical CRFPD, DRFPD, and MFPD service demand for the 2016–2019 study period, categorized by month, day-of-week, and hour-of-the-day.

## **Monthly Service Demand**

The next three figures illustrate the monthly service demand by each of the fire districts for the combined 48-month study period.



## Figure 87: Cascade RFPD Service Demand by Month (2016–2019)

The historical data in the preceding figure indicates that July, August, and September had the highest call volumes respectively, while April, March, and May had the lowest service demand.



Figure 88: Donnelly RFPD Service Demand by Month (2016–2019)

Not unexpectedly, Donnelly RFPD had nearly the same monthly service demand pattern during the 48-month study period as Cascade RFPD.

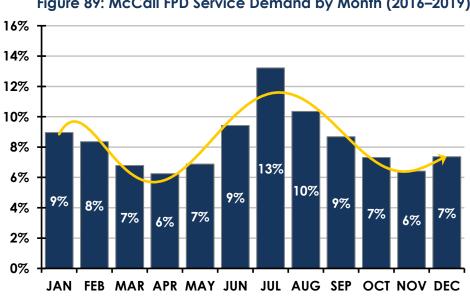
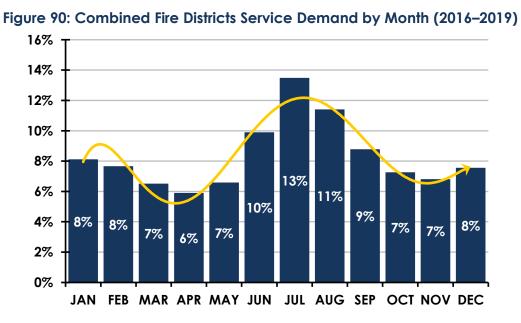


Figure 89: McCall FPD Service Demand by Month (2016–2019)

As with the other two fire districts, July and August represented the highest service demand for MFPD, while June and September had an approximately equal share of calls.

## **Combined Monthly Service Demand**

The next figure shows the combined monthly service demand of the three fire districts.



The preceding figure likely provides a more accurate perspective of monthly service demand in Valley County. Somewhat consistent with the three fire districts individually, the figure shows that July, August, and June were the busiest months during 2016–2019. April was the slowest month, while the remaining months maintained similar call volumes.



### Service Demand by Weekday

The next figures continue the temporal analysis with an examination of service demand by day-of-the-week for all incident types during the 48-month study period of 2016–2019.

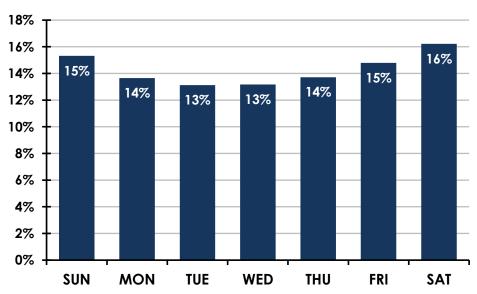


Figure 91: Cascade RFPD Service Demand by Weekday (2016–2019)

During the study period, there was not a significant difference in service demand among the days of the week, although Saturdays, Sundays, and Fridays tended to have slightly higher call volumes than the other days of the week.

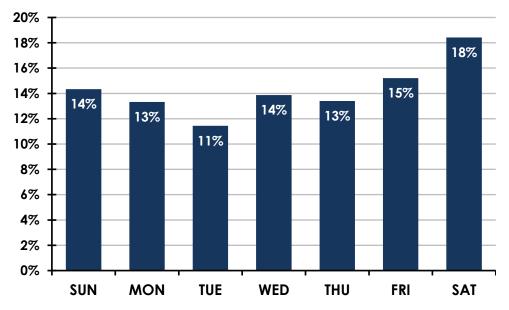


Figure 92: Donnelly RFPD Service Demand by Weekday (2016–2019)

As the preceding figure illustrates, the majority of DRFPD's service demand occurred on Saturdays, followed by Fridays. Sundays and Wednesdays represented the next highest days for service demand at 14% of the total calls for the study period.

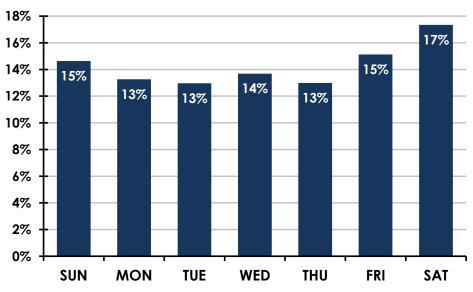


Figure 93: McCall FPD Service Demand by Weekday (2016–2019)

MFPD follows a similar trend, with the highest levels of service demand falling on Saturday, Friday, and Sunday.



## Combined Service Demand by Weekday

The next figure shows the combined service demand by weekday of the three fire districts.

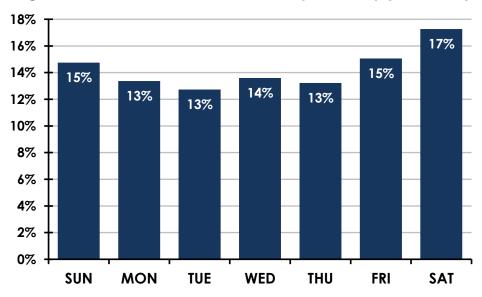


Figure 94: Combined Service Demand by Weekday (2016–2019)

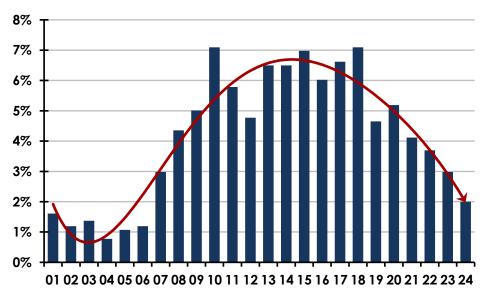
The preceding figure may also demonstrate a more accurate perspective of the historical service demand by weekday in Valley County. The results show that Saturdays, Sundays, and Fridays had the highest service demand by weekday during the 2016–2019 study period. There was no significant statistical difference in call volumes among the remaining weekdays.

## Service Demand by Hour-of-Day

The final temporal analysis of service demand examines call volumes summarized by hourof-day for all incidents and is illustrated in the next figures. Analysis of service demand regarding specific times of the day revolves largely around the activities of the general population, with workload typically increasing during the daytime hours, and decreasing during late evening and early morning hours.

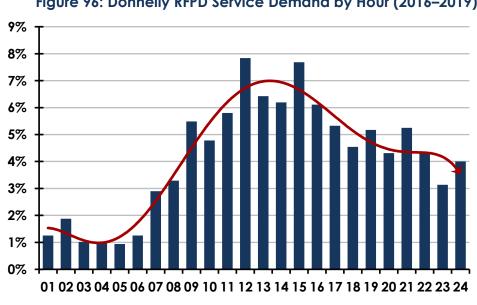
Hourly service demand analysis is one of the most important metrics for agencies providing fire protection, EMS, and other emergency and non-emergency services. Information from the results of these analyses can be used to determine daily staffing requirements as well as the best time-intervals in which to schedule peak-demand units.





### Figure 95: Cascade RFPD Service Demand by Hour (2016–2019)

Following a similar pattern found in most communities, incident activity in CRFPD began to increase at 0700 hours and peaked in the late afternoon. The busiest 12-hour period occurred between 0700 and 2100 hours (7 a.m. and 9 p.m.). During the study period, approximately 71% of CRFPD's calls for service occurred between these hours.



#### Figure 96: Donnelly RFPD Service Demand by Hour (2016–2019)



As shown in the preceding figure, DRFPD followed a similar pattern to CRFPD, where service demand began to increase at 0700 hours, and peaked around noon and later in the afternoon. The busiest 12-hour period occurred between 0700 and 2100 hours (7 a.m. and 9 p.m.). During the study period, approximately 81% of DRFPD's calls for service occurred between these hours.

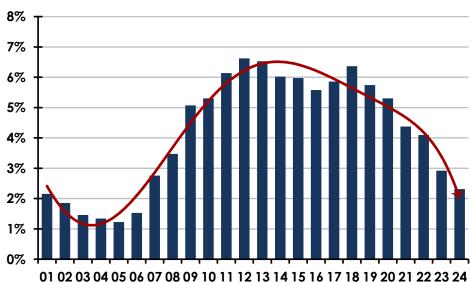
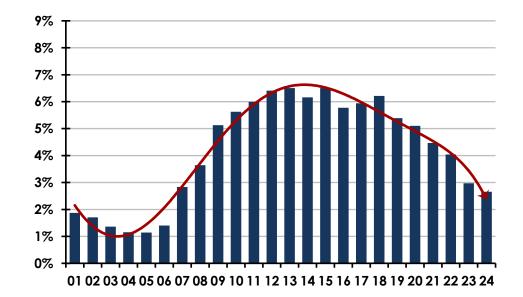


Figure 97: McCall FPD Service Demand by Hour (2016–2019)

Not unexpectedly, hourly service demand in MFPD followed a similar pattern as found with the other two fire districts. Calls for service began to increase at 0700 hours, but tended to peak during the late morning early afternoon, and then in the late evening. The busiest 12hour period occurred between 0700 and 2100 hours (7 a.m. and 9 p.m.). During the study period, approximately 81% of MFPD's calls for service occurred between these hours.

## Combined Service Demand by Hour-of-Day

The next figure shows the service demand by hour-of-day of the three fire districts combined during the 48-month study period of 2016–2019. As illustrated in the figure, the combined hourly service demand represented a similar pattern found among the fire districts during the study period.



#### Figure 98: Combined Fire Districts Service Demand by Hour (2016–2019)

Consistent with the individual fire districts and countywide, service demand began to increase at 0700 hours during the 48-month study period. Call volumes tended to peak during the early afternoon through 1900 hours, when service demand began to decrease. The following lists the busiest consecutive periods during 2016–2019:

- Busiest 12-hour period—0900–2059 hours (9 a.m.–8 p.m.): 71% of total calls
- Busiest 10-hour period—1000–1859 hours (10 a.m.-7 p.m.): 60% of total calls
- Busiest 8-hour period—1100–1859 hours (11 a.m.–6 p.m.): 50% of total calls

As mentioned previously, this information can be useful when evaluating whether adequate personnel are scheduled during the highest periods of service demand. In addition, the historical data can provide insight into the best times to schedule a potential peak-demand unit, if indicated.

### Workloads by Day & Night Periods

Peak workload periods occur daily. The next figure illustrates the workload by each fire district and by time-of-day during the study period. Workload was based on the total calls dispatched for all call types and apparatus during the 2016–2019 study period. Day incidents are based on the combined busiest 12-hour time-intervals that began at 0900 hours, while night incidents are those that occurred after 2100 hours.

| Fire District | Day Incidents<br>0900–2059 | Night Incidents<br>2100–0859 | Incidents/Hour<br>0900–2059 | Incidents/Hour<br>2100–0859 |
|---------------|----------------------------|------------------------------|-----------------------------|-----------------------------|
| Cascade RFPD  | 1,115                      | 444                          | 0.06                        | 0.03                        |
| Donnelly RFPD | 889                        | 387                          | 0.05                        | 0.02                        |
| McCall FPD    | 3,045                      | 1,274                        | 0.17                        | 0.07                        |
| Aggregate:    | 5,049                      | 2,105                        | 1.15                        | 0.48                        |

#### Figure 99: Incidents by Fire District & Period of Day (2016–2019)



# **Distribution Study**

Several organizations have established standards used to analyze the distribution of fire department resources. These include the Idaho Surveying & Rating Bureau (ISRB), the National Fire Protection Association (NFPA), the Center for Public Safety Excellence (CPSE), and the Insurance Services Office (ISO). ISO uses the Fire Suppression Rating Schedule (FSRS). CPSE is an accrediting organization whose standards are published in its Fire & Emergency Services Self-Assessment Manual (FESSAM). The manual defines response time performance criteria. To determine the effectiveness of station locations for the travel time component of the response time standard, a GIS analysis has been utilized.

## Idaho Surveying & Rating Bureau Criteria

The Insurance Services Office (ISO) is a national insurance industry organization that evaluates fire protection for communities across the country. ISO assesses all areas of fire protection as broken down into four major categories, including emergency communications, the fire department, water supply, and community risk reduction. Idaho communities typically do not use ISO, but instead rely on the Idaho Surveying & Rating Bureau (ISRB). Following an evaluation of a community and fire department, a rating is assigned to the community, ranging from 1 (best protection) to 10 (no protection). This provides insurance companies information in establishing fair premiums for fire insurance typically offering lower premiums in communities with better protection.

ISRB criteria is an important factor when considering fire station locations and apparatus distribution and deployment, due to its effect on the cost of fire insurance for the residents and business owners. The ability of a fire department to arrive on the scene of an incident equipped with personnel, equipment, and water adequate to mitigate a fire effectively is a significant element of the rating. For a structure to be eligible to receive an ISRB rating better than 10, the structure must be within five road miles from a fire station. Typically, areas outside of five road miles but less than 10 miles receive a rating of 8–9, unless the fire department can demonstrate adequate fire-flow is available, which then allows some credit for the water supply. In addition, to receive maximum credit for station and apparatus distribution, ISRB evaluates the percentage of the community (contiguously built upon area) that is within specific distances of both engine (pumper) companies (1.5 miles) and aerial (ladder truck) apparatus (2.5 miles).

The next three figures illustrate CRFPD, DRFPD, and MFPD projected 1.5-mile travel distances from each of the fire stations.



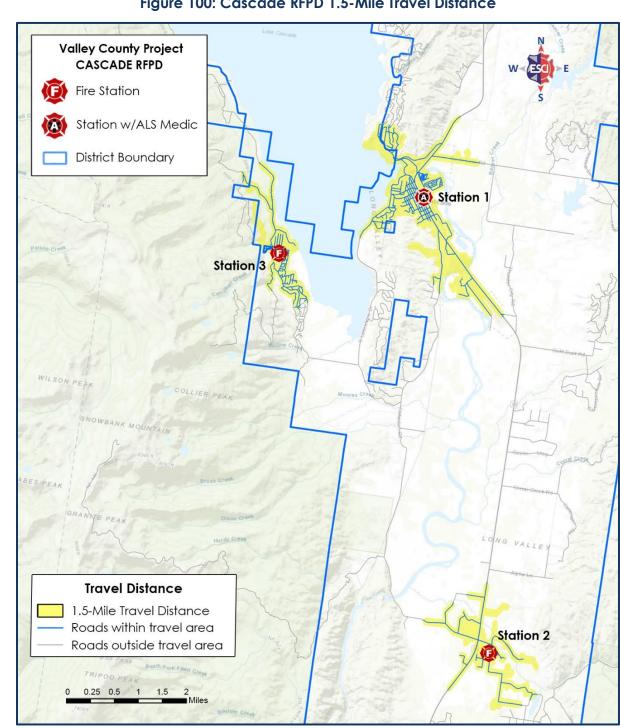


Figure 100: Cascade RFPD 1.5-Mile Travel Distance

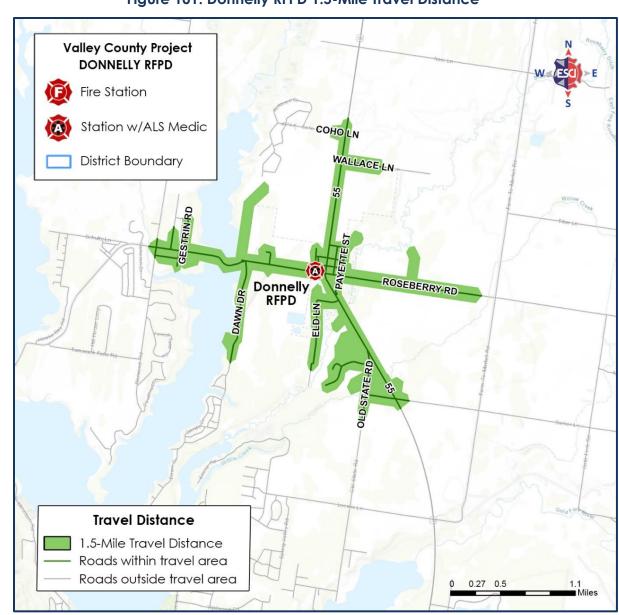


Figure 101: Donnelly RFPD 1.5-Mile Travel Distance



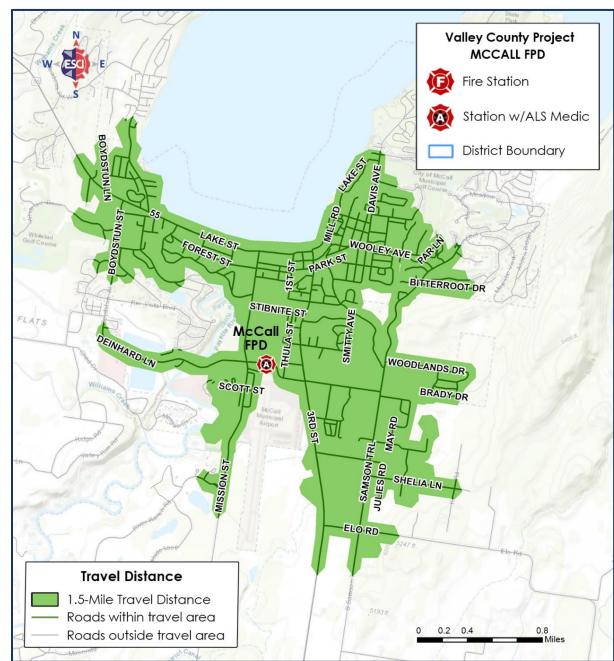


Figure 102: McCall FPD 1.5-Mile Travel Distance

As shown in the preceding figures, there is a considerable portion of the three response areas that are well outside the 1.5-mile tra.vel distance radius recommended for engine companies. However, the majority of properties and dwellings are within a 1.5-mile range of a fire station, maintaining the ISRB requirements for a rating less than 8.



# **Concentration Study**

Accepted firefighting procedures call for the arrival of the entire initial assignment (sufficient apparatus and personnel to effectively deal with an emergency based on its level of risk) within a reasonable amount of time.<sup>29</sup> This procedure ensures enough people and equipment arrive promptly to safely control a fire or mitigate any emergency before there is substantial damage or injury. The following figures show personnel capacity requirements.

#### Figure 103: Initial Full-Alarm Assignment—2,000 SF Residential Structure Fire

| Description                          | Quantity |
|--------------------------------------|----------|
| Incident Commander                   | 1        |
| Water Supply Operator                | 1        |
| Application of Hose Lines (2)        | 4        |
| Support Member (1 per line)          | 2        |
| Victim Search and Rescue Team        | 2        |
| Ground Ladder Deployment             | 2        |
| Aerial Device Operator               | 1        |
| Incident Rapid Intervention Crew (2) | 2        |
| Total:                               | 15       |

#### Figure 104: Initial Full-Alarm Assignment— Strip Shopping Center (13,000–196,000 SF)

| Description                   | Quantity |
|-------------------------------|----------|
| Incident Commander            | 1        |
| Water Supply Operators        | 2        |
| Application of Hose Lines (3) | 6        |
| Support Member (1 per line)   | 3        |
| Victim Search and Rescue team | 4        |
| Ground Ladder Deployment      | 4        |
| Aerial Device Operator        | 1        |
| Rapid Intervention Crew (4)   | 4        |
| EMS Care                      | 2        |
| Total:                        | 27       |



| Description                   | Quantity |
|-------------------------------|----------|
| Incident Commander            | 2        |
| Water Supply Operators        | 2        |
| Application of Hose Lines (3) | 6        |
| Support Member (1 per line)   | 3        |
| Victim Search and Rescue Team | 4        |
| Ground Ladder Deployment      | 4        |
| Aerial Device Operator        | 1        |
| Rapid Intervention Crew (4)   | 4        |
| EMS Care (1crew)              | 2        |
| Total:                        | 28       |

#### Figure 105: Initial Full-Alarm Assignment—1,200 SF Apartment (3-story)

The following figure represents the projected Effective Response Force (ERF) within the three Valley County fire districts. The figure illustrates a geographic representation of the number of firefighters that can assemble at the scene of an incident within an 8-minute projected travel time.

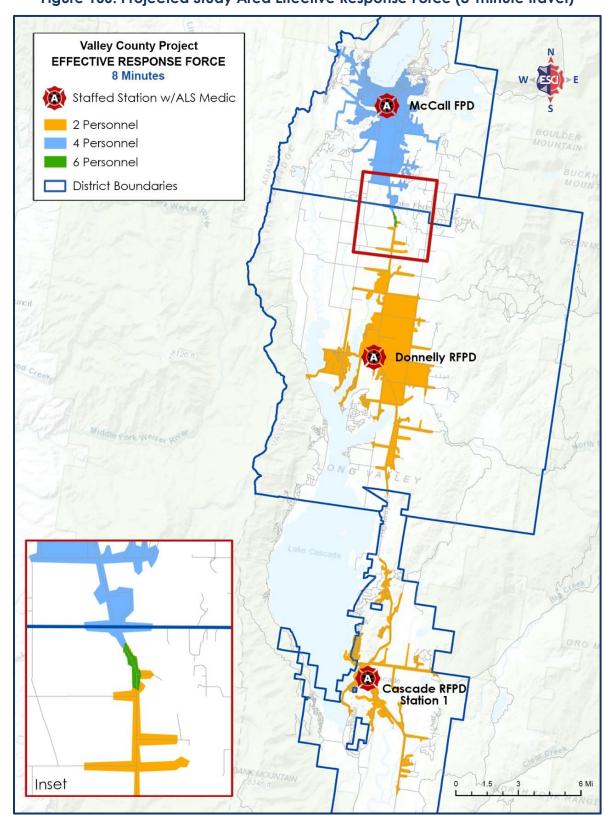


Figure 106: Projected Study Area Effective Response Force (8-minute travel)



### **Combined Concentration Study Results**

The mutual and auto aid agreements between the fire districts have shown to be successful. The data from the previous figure supports the necessity of outside resources to meet service demand or assemble an effective response force on structure fires. The delay in overall response times supports the need for additional resources—particularly staffina within each district. Additionally, the mutual dependence of the three districts to accomplish an ERF supports discussion on future consolidation.

## **Response Reliability Study**

The ability of a department to provide reliable service to the community is impacted by workload and call concurrency. Workload refers to the amount of work a particular unit incurs and may be measured in the volume of calls or time spent on calls. Call concurrency refers to the number of incidents occurring simultaneously within a jurisdiction.

## **Unit Hour Utilization**

While the number of calls presents a view of workload, the greater value is provided by analyzing the amount of time spent on calls by individual unit. This measure is referred to as unit hour utilization (UHU) and represents the amount of time a unit is assigned to incident activities. However, it is important to note that UHU only represents incident workload and does not account for other activities to which an engine company, medic unit, or other apparatus may be assigned (e.g., training, public education, maintenance, etc.)

Currently, there are no national industry standards that define acceptable UHU rates for fire-based EMS transport providers. In a 2016 study, the Henrico County (Virginia) Division of Fire developed a general commitment factor scale for its department. The following figure is a summary of the findings as it relates to these factors.



#### Figure 107: Commitment Factors as Developed by Henrico County Division of Fire<sup>30</sup>

| Factor           | Indication         | Description  |  |
|------------------|--------------------|--|--|
| 1 <b>6%–24</b> % | Ideal Range        | Personnel can maintain training requirements and<br>physical fitness and can consistently achieve<br>response time benchmarks. Units are available to<br>the community more than 75% of the day.   |  |
| 25%              | System Stress      | Community availability and unit sustainability are<br>not questioned. First-due units are responding to<br>their assigned community 75% of the time, and<br>response benchmarks are rarely missed.   |  |
| 26%-29%          | Evaluation Range   | The community served will experience delayed<br>incident responses. Just under 30% of the day, first-<br>due ambulances are unavailable; thus, neighboring<br>responders will likely exceed goals.   |  |
| 30%              | "Line in the Sand" | Not Sustainable: Commitment Threshold. The<br>community has less than a 70% chance of timely<br>emergency service, and immediate relief is vital.<br>Personnel assigned to units at or exceeding 30%<br>may show signs of fatigue and burnout and may be<br>at increased risk of errors. Required training and<br>physical fitness sessions are not consistently<br>completed. |  |

The following figures illustrate the UHU rates for each district apparatus and medic units during 2019. These are expressed as a percentage of the total hours in the year. The number of responses and average time committed to incidents is displayed as well.

As will be shown, when considering the standards described in the preceding figure, the UHU analyses indicate that the workload for the various fire district units does not appear excessive. As expected, UHU tended to be higher among the medic units (ambulances).

| Apparatus/Unit | Unit Responses | Average Time<br>Committed | UHU   |
|----------------|----------------|---------------------------|-------|
| Medic 1        | 286            | 1:11:48                   | 0.16% |
| Medic 3        | 54             | 4:09:24                   | 0.11% |
| Medic 4        | 4              | 3:46:15                   | 0.01% |
| Engine 1       | 47             | 0:52:11                   | 0.12% |

### Figure 108: CRFPD Unit Hour Utilization (2019)

# Figure 109: DRFPD Unit Hour Utilization (2019)

| Apparatus/Unit | Unit Responses | Average Time<br>Committed | UHU   |
|----------------|----------------|---------------------------|-------|
| Ambulance 1    | 98             | 1:05:25                   | 0.05% |
| Ambulance 2    | 71             | 1:28:31                   | 0.05% |
| Ambulance 3    | 133            | 1:42:32                   | 0.11% |
| Engine 1       | 15             | 0:19:48                   | 0.00% |
| Engine 2       | 23             | 1:30:16                   | 0.02% |
| Engine 3       | 28             | 0:36:28                   | 0.01% |
| Truck 1        | 15             | 1:22:24                   | 0.01% |
| Truck 2        | 2              | 1:00:00                   | 0.00% |

# Figure 110: MFPD Unit Hour Utilization (2019)

| Apparatus/Unit | Unit Responses | Average Time<br>Committed | UHU   |
|----------------|----------------|---------------------------|-------|
| Ambulance 1    | 21             | 1:19:11                   | 0.01% |
| Ambulance 2    | 4              | 0:47:14                   | 0.00% |
| Ambulance 3    | 415            | 1:23:54                   | 0.28% |
| Ambulance 4    | 421            | 0:43:37                   | 0.15% |
| Engine 11      | 224            | 0:48:38                   | 0.09% |
| Squad          | 9              | 0:54:43                   | 0.00% |
| Truck 11       | 8              | 0:34:43                   | 0.00% |
| Truck 1        | 5              | 0:38:07                   | 0.00% |



## Call Concurrency

It is also useful to examine response reliability by analyzing the number of units required to handle incidents. While there is no specific standard to which this analysis can be compared, the information provides insight as to the ability of the districts to have sufficient resources for incidents before requesting mutual aid or automatic aid resources.

As the number of concurrent incidents increases, the ability to meet response time standards may decrease. Analysis of incident data for 2019 is shown in the following figures.

| -                    |                        |                               |
|----------------------|------------------------|-------------------------------|
| Concurrent Incidents | Number of<br>Incidents | Percent of<br>Total Incidents |
| Single Incident      | 422                    | 90.4%                         |
| Two Incidents        | 39                     | 8.4%                          |
| Three Incidents      | 6                      | 1.3%                          |

# Figure 111: CRFPD Call Concurrency (2019)

## Figure 112: DRFPD Call Concurrency (2019)

| Concurrent Incidents | Number of<br>Incidents | Percent of<br>Total Incidents |
|----------------------|------------------------|-------------------------------|
| Single Incident      | 385                    | 92.5%                         |
| Two Incidents        | 30                     | 7.2%                          |
| Three Incidents      | 1                      | 0.2%                          |

## Figure 113: MFPD Call Concurrency (2019)

| Concurrent Incidents | Number of<br>Incidents | Percent of<br>Total Incidents |
|----------------------|------------------------|-------------------------------|
| Single Incident      | 972                    | 84.7%                         |
| Two Incidents        | 155                    | 13.5%                         |
| Three Incidents      | 20                     | 1.7%                          |

MFPD demonstrated the highest level of concurrent incidents at 15%. MFPD is reaching capacity and may warrant consideration for additional resources. Additionally, this only accounts for the first arriving apparatus and does not account for adequate personnel on any specific incident.



# **Performance Study**

Perhaps the most publicly visible component of an emergency services delivery system is response performance. Policymakers and citizens want to know how quickly they can expect to receive emergency services.

For policymakers and citizens to make informed decisions concerning response performance, jurisdictions must record and report the various components of the jurisdiction's current performance.

In analyzing response performance, ESCI generates percentile measurements of response time performance. The use of percentile measurements using the components of response time follows the recommendations of industry best practices. The best practices are derived from the Center for Public Safety Excellence (CPSE) Standards of Cover document and the National Fire Protection Association (NFPA) 1710: Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Career Fire Departments.

The "average" measure is a commonly used descriptive statistic, also called the mean of a data set. The most important reason for not using the average for performance standards is that it may not accurately reflect the performance for the entire data set and may be skewed by outliers, especially in small data sets. One extremely good or bad value can skew the average for the entire data set.

The "median" measure is another acceptable method of analyzing performance. This method identifies the value in the middle of a data set and thus tends not to be as strongly influenced by data outliers.

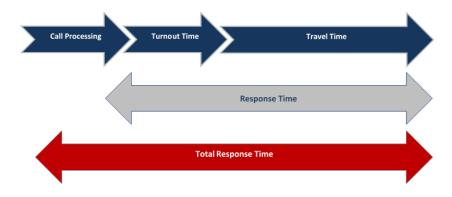
Percentile measurements are a better measure of performance because they show that most of the data set has achieved a particular level of performance. The 90<sup>th</sup> percentile means that 10% of the values are greater than the value stated, and all other data are at or below this level. This can be compared to the desired performance objective to determine the degree of success in achieving the goal.

As this report progresses through the performance analysis, it is important to keep in mind that each component of response performance is not cumulative. Each is analyzed as an individual component, and the point at which the percentile is calculated exists in a set of data unto itself.



The response time continuum—the time between when the caller dials 911 and when assistance arrives—is comprised of several components:

- Call Processing Time: The time between a dispatcher getting the call and the resources being dispatched.
- Turnout Time: The time between unit notification of the incident and when they are responding.
- Travel Time: The time the responding unit spends on the road traveling to the incident.
- Response Time: A combination of turnout time and travel time, the most commonly used measure of fire department response performance.
- Total Response Time: The time from when the 911 call is answered until the dispatched unit arrives on the scene.



### Figure 114: Response-Time Components

Total Response Time is the interval between the time a caller contacts 911 and when the resources arrive at the scene of an incident. Response Time represents the interval between when the fire apparatus is dispatched until it arrives on the incident scene. For fire departments that do not have direct control over the 911/communication center, ESCI may exclude the call processing time. However, alarm-handling time ultimately impacts the time emergency units arrive at the scene. In addition, on EMS calls, some progressive fire agencies track the interval between the time of arrival on the scene until arrival at the patient's side.

The standard for alarm handling and call processing is derived from NFPA 1221: Standard for the Installation, Maintenance, and Use of Emergency Services Communications Systems and provides for communication centers to have an alarm handling time of not more than 15 seconds or less at 90% of the time, and not more than 20 seconds or less at 95% of the time. Additionally, NFPA 1221 requires the processing of the call to occur within 64 seconds or less at 90% of the time for high-priority incidents. Similarly, NFPA 1710 requires the call processing time to be 60 seconds or less at 90%.

| Response Interval | NFPA/CFAI Recommendations                 |
|-------------------|---|
| Call Processing   | 60 seconds or less at 90%                 |
| Turne and Time a  | 60 seconds or less at 90% (EMS)           |
| Turnout Time      | 80 seconds or less at 90% (Fire, Special) |
| Travel Time       | 240 seconds or less at 90%                |

## Figure 115: NFPA 1710 Standards for Fire/EMS Responses

Tracking the individual components of response time enables jurisdictions to identify deficiencies and areas for improvement. In addition, knowledge of current response time elements is an essential part of developing performance goals and standards that are relevant and achievable. Fire service best practice documents recommend that fire jurisdictions monitor and report the components of total response time.<sup>31</sup>

The following data analysis was limited to 2018–2019, since this was the only period with consistent documentation of response priority and travel time of the first-arriving unit. For each incident where at least one unit had a response-priority of "lights and sirens," then all units were included in determining the best time measure for each component of the response continuum. ESCI recommends that the fire districts continue to ensure that all pertinent data fields for each unit responding to an incident are completed consistently in the records management systems.

## **Call Processing Performance**

The Valley County Sheriff's Office (VCSO) handles call processing. At the time of this report, data was not available from VCSO to determine call processing performance. ESCI recommends establishing a system for pushing the time stamp for the initial 911 call into the established reporting program.



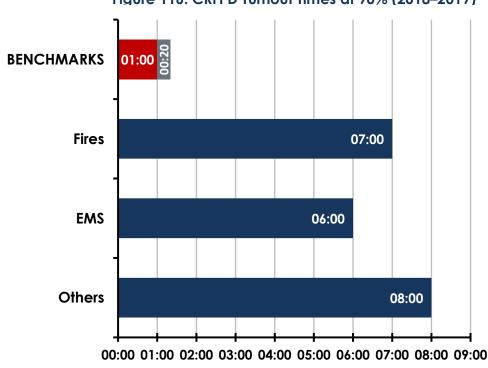
## Turnout Time

Turnout time is one of the components of total response time. The measurement begins when the first unit is dispatched until the unit goes en route. When measuring this component (and others) ESCI excludes non-emergent incidents, and only utilizes emergency calls.

Turnout time is one of the elements that can be controlled by the fire department. Numerous factors can contribute to the time it takes to get an apparatus en route. Fire station design and other constraints, such as the proximity of sleeping quarters, can contribute to longer turnout times.

There were issues with the data provided by DRFPD. For the majority of calls, the DRFPD notification timestamp was the same as the en route time stamp. Therefore, ESCI was unable to analyze turnout times for the Donnelly Rural Fire Protection District.

The following figure shows the calculated turnout times for Cascade RFPD by incident type during 2018–2019. CRFPD demonstrated a 7-minute turnout time at the 90<sup>th</sup> percentile for the three incident categories. Wherever possible, interfacility transports, wilderness responses, and non-emergent calls were excluded. However, data limitations prevented a more accurate analysis of historical turnout times.



#### Figure 116: CRFPD Turnout Times at 90% (2018–2019)



As shown in the preceding figure, CRFPD turnout times substantially exceeded those standards as defined in NFPA 1710. ESCI believes that these are probably inaccurate, and that CRFPD's turnout times are likely much shorter than what is shown in this analysis.

Data provided by MFPD enabled accurate analysis of turnout times. The District had an overall turnout time of 2 minutes, 25 seconds at the 90<sup>th</sup> percentile during 2018–2019.

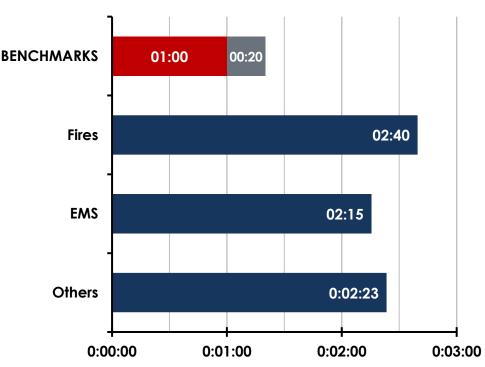


Figure 117: MFPD Turnout Times at 90% (2018–2019)

Although the lack of data prevented an accurate analysis of turnout times among two of the fire districts, there may be opportunities for improvement during the late-night and early morning periods. Focused training can produce improvements in a firefighter's ability to don appropriate equipment and be safely secured in the apparatus prior to responding.

## Travel Time Performance

Travel time is potentially the longest component of total response time. The distance between the fire station and the location of the emergency influences total response time the most. The following figure demonstrates the challenges of travel time performance for each district due to remote access.

|               | <b>`</b>                      |  |
|---------------|-------------------------------|--|
| Department    | 4-Minute Travel-Time Response |  |
| Cascade RFPD  | 52% of Service Area           |  |
| Donnelly RFPD | 12% of Service Area           |  |
| McCall FPD    | 15% of Service Area           |  |

## Figure 118: Travel-Time Performance (2018–2019)

The following figure shows the travel time performance at the 90<sup>th</sup> percentile and the average response time for each district. The prolonged response times at the 90<sup>th</sup> percentile may be attributed to the high number of interfacility transfers, prolonged transport to definitive care, and responses to the remote areas of each district.

## Figure 119: Average & 90th Percentile for Travel Time (2018–2019)

| District      | rict Average Travel Time Travel Time at 90% |                        |  |
|---------------|---|------------------------|--|
| Cascade RFPD  | 11 minutes, 48 seconds                      | 14 minutes, 30 seconds |  |
| Donnelly RFPD | 10 minutes, 7 seconds                       | 25 minutes             |  |
| McCall FPD    | all FPD 9 minutes, 51 seconds 20 minutes    |                        |  |

Some fire departments, including career-staffed or combination departments serving rural areas, find it unreasonable to adopt the 1710 travel time standard throughout their jurisdictions. Instead, many will adopt a 4-minute travel time standard in response zones with urban and suburban population densities, and the 1720 response time criteria for rural areas. The following figure describes the NFPA 1720 response time performance recommendations.

| Zone <sup>A</sup> | Demographics<br>(persons/square mile) | Minimum<br>Staff <sup>₿</sup> | Response Time<br>(minutes) <sup>c</sup> | Meets<br>Objective (%) |  |
|-------------------|---------------------------------------|-------------------------------|---|------------------------|--|
| Urban             | > 1,000/sq. mile                      | 15                            | 9                                       | 90%                    |  |
| Suburban          | 500–1,000/sq. mile                    | 10                            | 10                                      | 80%                    |  |
| Rural             | < 500/sq. mile                        | 6                             | 14                                      | 80%                    |  |
| Remote            | Distance ≥ 8 miles                    | 4                             | Distance                                | 90%                    |  |
| Special Risks     | Determined by AHJ                     | Based on risk                 | Determined by AHJ                       | 90%                    |  |

#### Figure 120: NFPA 1720 Response-Time Performance Recommendations

<sup>A</sup>A jurisdiction can have more than one demand zone.

<sup>B</sup>Minimum staffing includes members responding from AHJ's department and automatic aid.

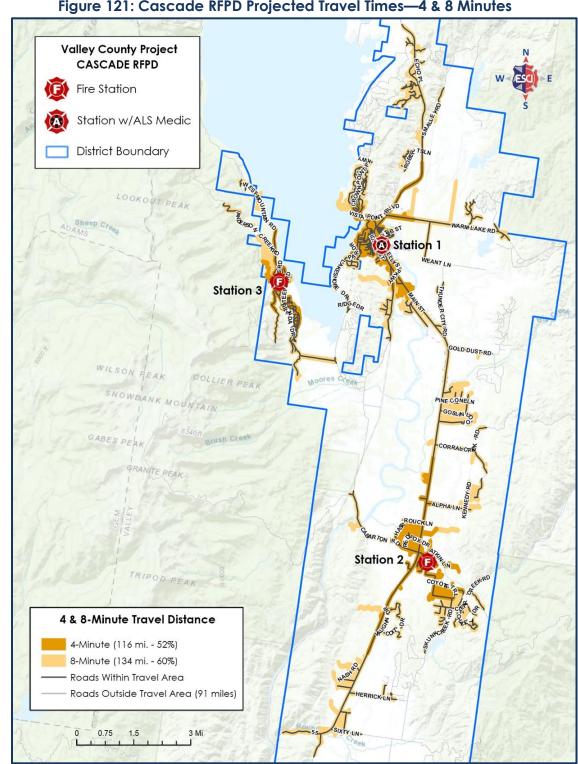
<sup>C</sup>Response time begins upon completion of dispatch notification, ending at time interval shown.

Both standards recommend a call processing time of 60 seconds, and a turnout time for staffed stations at 60 seconds for EMS calls and 80 seconds for fire or special operations. Call processing time is not reflected in the 1720 standard, so deducting only the turnout time (1 minute, 20 seconds) from a 14-minute response time is 12 minutes, 40 seconds.

The following figures reflect projected 4-minute, 8-minute, and 10-minute travel time distances from each district's fire stations utilizing a GIS analysis.

The next figure indicates that 60% of CRFPD's district can be accessed within an 8-minute or less travel time from each fire station.

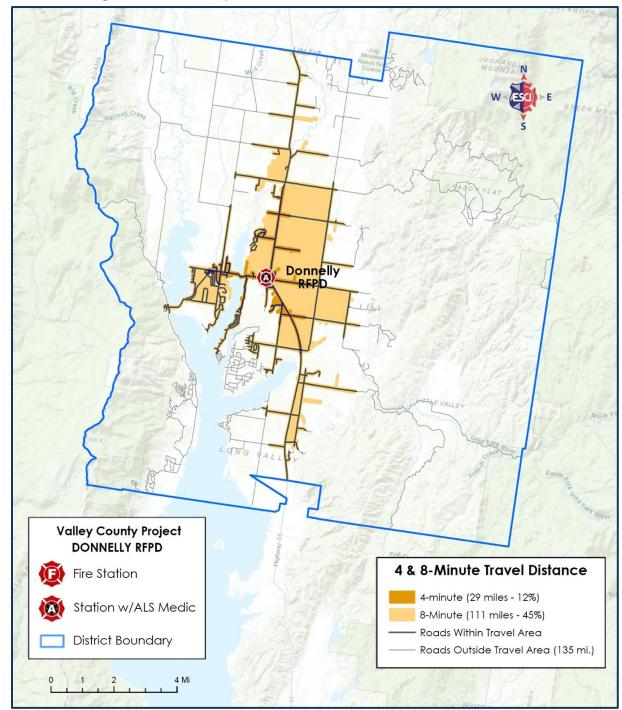




### Figure 121: Cascade RFPD Projected Travel Times—4 & 8 Minutes



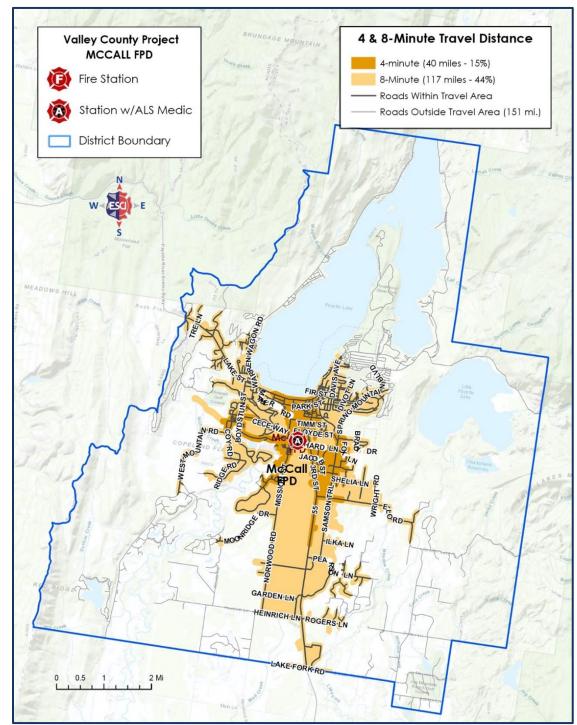
The next figure indicates that 45% of DRFPD's district can be accessed within an 8-minute or less travel time from its fire station.







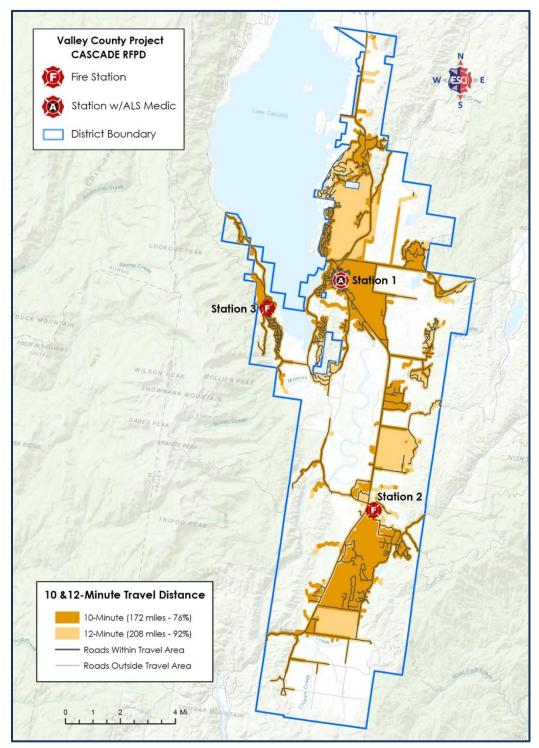
The next figure indicates that 44% of MFPD's district can be accessed within an 8-minute or less travel time from its fire station.



#### Figure 123: McCall FPD Predicted Travel-Times—4 & 8 Minutes



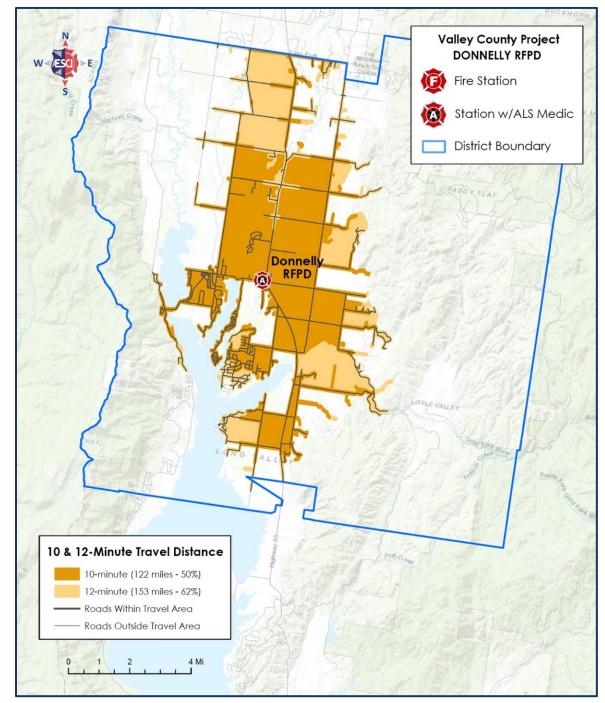
The next figure indicates that 92% of CRFPD's district can be accessed within a 12-minute or less travel time from each of its fire stations.







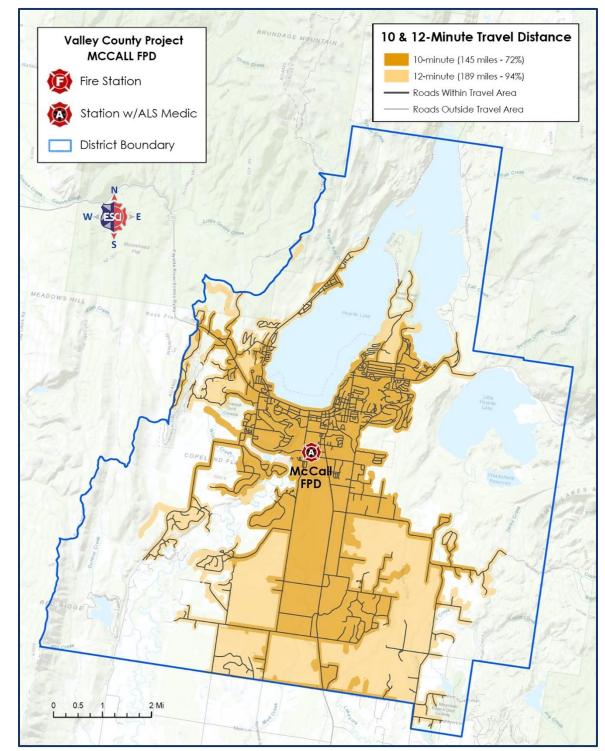
The next figure indicates that 62% of DRFPD's district can be accessed within a 12-minute or less travel time from its fire station.







The next figure indicates that 94% of MFPD's district can be accessed within a 12-minute or less travel time from its fire station.







| Apparatus     | Average Response Time |
|---------------|-----------------------|
| McCall FPD    |                       |
| Ambulance 1   | 0:11:46               |
| Ambulance 2   | 0:13:55               |
| Ambulance 3   | 0:06:32               |
| Ambulance 4   | 0:08:27               |
| Engine 11     | 0:07:03               |
| Engine 12     | 0:00:45               |
| Engine 15     | 0:10:00               |
| Truck 11      | 0:16:45               |
| Truck 1       | 0:13:23               |
| Donnelly RFPD |                       |
| Ambulance 1   | 0:10:52               |
| Ambulance 2   | 0:18:40               |
| Ambulance 3   | 0:10:37               |
| Engine 1      | 0:09:18               |
| Engine 2      | 0:07:38               |
| Engine 3      | 0:09:28               |
| Truck 1       | 0:18:15               |
| Truck 2       | 0:03:54               |
| Cascade RFPD  |                       |
| Engine 1      | 0:08:02               |
| Engine 3      | 0:09:00               |
| Engine 4      | 0:12:00               |
| Medic 1       | 0:11:56               |
| Medic 1B      | 0:07:01               |
| Medic 3       | 0:12:19               |
| Medic 4       | 0:06:30               |
|               |                       |

### Figure 127: Comparison of Fire District Response Times (2018–2019)

The previous figure shows that the three fire districts had consistent travel times among the medic units (ambulances) and engines.

#### **Combined Fire Districts Performance Study Results**

The previous analysis focused on response performance for each fire district. The following figure summarizes the overall combined results of the three fire districts during 2018.

#### Figure 128: Combined Response Time Components Performance at 90% (2018)

| Response Time Component | 90 <sup>th</sup> Percentile |
|-------------------------|-----------------------------|
| Call Processing Time    | Unavailable                 |
| Turnout Time            | 3 minutes, 5 seconds        |
| Travel Time             | 19 minutes, 0 seconds       |
| Total Response Time:    | 20 minutes, 0 seconds       |

As mentioned previously, data was unavailable from the dispatch center to analyze historical call processing times. Therefore, while the overall 2018 response time performance was 20 minutes at the 90<sup>th</sup> percentile, it could be safely assumed that at least another minute or more could be added to that result. The analysis of the combined response time performance elements suggests that overall turnout times could potentially be improved.

During this study, ESCI did not identify any written performance goals formally adopted by the Valley County Emergency 911 Center or any of the fire districts.



# **DETAILED EMS & AMBULANCE PERFORMANCE STUDY**

The following section comprises more detailed analyses of the EMS system and operational performance, with a particular emphasis on ambulance operations, patient transports, and specific information on the types of illness and injuries and acuity of patients.

## **Historical Ambulance Service Demand**

The following figures illustrate the historical service demand of each of the ambulances (medic units) operated by the three fire districts. It is important to note that the call volumes include all incidents dispatched, including those that were canceled or in which no incident was found on arrival.

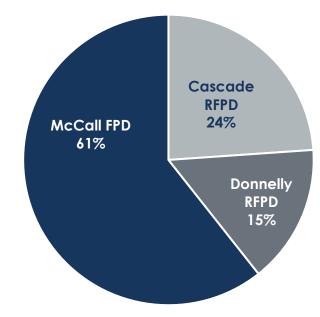
| Ambulance Unit         | No. of Calls<br>Dispatched | % of<br>District Total | Annual<br>Average Calls |
|------------------------|----------------------------|------------------------|-------------------------|
| Cascade RFPD           |                            |                        |                         |
| Medic 1                | 1,104                      | 73%                    | 276                     |
| Medic 1-B              | 62                         | 4%                     | 16                      |
| Medic 2                | 2                          | 0%                     | 0.5                     |
| Medic 3                | 321                        | 21%                    | 80                      |
| Medic 4                | 31                         | 2%                     | 8                       |
| Donnelly RFPD          |                            |                        |                         |
| Ambulance 1            | 352                        | 36%                    | 88                      |
| Ambulance 2            | 275                        | 28%                    | 69                      |
| Ambulance 3            | 356                        | 36%                    | 89                      |
| McCall FPD             |                            |                        |                         |
| Ambulance 1            | 561                        | 15%                    | 140                     |
| Ambulance 2            | 441                        | 11%                    | 110                     |
| Ambulance 3            | 541                        | 14%                    | 135                     |
| Ambulance 4            | 2,314                      | 60%                    | 579                     |
| <b>Combined Totals</b> |                            |                        |                         |
| Cascade RFPD           | 1,520                      | 24%                    | 380                     |
| Donnelly RFPD          | 983                        | 15%                    | 246                     |
| McCall FPD             | 3,857                      | 61%                    | 964                     |
| Grand Totals:          | 6,360                      | 100%                   | 1,590                   |

#### Figure 129: Service Demand by Individual Ambulances (2016–2019)



The preceding figure showed that the combined ambulances operated by Cascade RFPD averaged slightly over one call daily during the preceding 48-month study period. Donnelly RFPD's ambulances averaged less than one call (0.7) per day, while McCall RFPD had a daily average of 2.6 ambulance dispatches.

When combining the results of all ambulances operated by the three fire departments, ambulances were dispatched countywide on an average of nearly 4.4 calls daily. The next figure is an illustration of each fire district's share of the total ambulance calls dispatched during 2016–2019.



#### Figure 130: Distribution of Ambulance Calls among the Fire Districts (2016–2019)

At 61%, the preceding figure clearly shows that McCall FPD provides the largest share of ambulance transports in Valley County, followed by Cascade RFPD at 24% of the ambulance call volume.

## **Patient Transports**

Concerning EMS calls, service demand differs from actual patient transports. EMS calls without a resultant transport produces *no* revenue from the incident-response. The following figure shows the historical volume of billable transports reported by each of the fire districts.



| •                  |      |      | ,    | •    |      |
|--------------------|------|------|------|------|------|
| Transport Provider | 2015 | 2016 | 2017 | 2018 | 2019 |
| Cascade RFPD       | 190  | 185  | 208  | 178  | 138  |
| Donnelly RFPD      | 119  | 101  | 115  | 150  | 253  |
| McCall FPD         | 517  | 643  | 603  | 645  | 553  |
| Annual Totals:     | 826  | 929  | 926  | 973  | 944  |

#### Figure 131: Volume of Patients Transported by Fire District (2015–2019)

The next figure shows the fire districts' combined total EMS calls—excluding those canceled or in which no incident was found on arrival—to the total patients transported.

#### Figure 132: Combined EMS Calls versus Total Patients Transported (2016–2019)

| Description              | 2016        | 2017        | 2018        | 2019        | TOTALS |
|--------------------------|-------------|-------------|-------------|-------------|--------|
| EMS Calls Dispatched     | 951         | 945         | 995         | 1,012       | 3,903  |
| Patients Transported     | 929         | 926         | 973         | 944         | 3,772  |
| Percent (%) Transported: | <b>98</b> % | <b>98</b> % | <b>98</b> % | <b>93</b> % | 97%    |

As shown, during 2016–2019, the majority of EMS calls (97%) resulted in a patient being transported by fire district ambulance. In ESCI's experience, this is an unusually high transport percentage. This may be an indicator that most residents and visitors of Valley County only call 911 for valid medical reasons.

#### **Patient Transport Destinations**

The following figure shows the destinations to which patients were transported. Records that were documented as "Unknown," "Not Applicable," or left blank were excluded. In addition, transports to the airport or "landing zone" were excluded, as they represented a small number of records.



| Description                             | CRFPD | DRFPD | MFPD | Total<br>Cumulative<br>% |
|---|-------|-------|------|--------------------------|
| Aircraft LZ                             | 1%    | 2%    | 0%   | 1.3%                     |
| Airport – Idaho                         | 2%    | 24%   | 0%   | 16.3%                    |
| Cascade Medical Center                  | 59%   | 0%    | 4%   | 10.9%                    |
| McCall Rehabilitation and Care Center   | 1%    | 1%    | 0%   | 1.0%                     |
| No Transport                            | 0%    | 1%    | 11%  | 2.6%                     |
| Not Applicable                          | 6%    | 2%    | 9%   | 4.1%                     |
| Patient's Residence                     | 0%    | 1%    | 0%   | 0.6%                     |
| Saint Alphonsus Regional Medical Center | 13%   | 2%    | 2%   | 4.2%                     |
| St Luke's – McCall                      | 6%    | 53%   | 66%  | 47.1%                    |
| St Luke's Meridian Medical Center       | 2%    | 1%    | 0%   | 1.0%                     |
| St Luke's Regional Medical Center       | 8%    | 11%   | 5%   | 9.5%                     |
| Veterans Admin Medical Center – Boise   | 0%    | 1%    | 0%   | 0.5%                     |
| Other Facilities                        | 1%    | 1%    | 2%   | 0.9%                     |

Figure 133: Patient Transport Destinations by Fire District (2015–2019)

## Interfacility & Out-of-County Transports

Interfacility Transports (IFT) typically constitute patient transports between hospitals or other clinical facilities, transports from a hospital or clinical facility to home, transports from a hospital to a skilled nursing or assisted living facility, or other non-scene transports.

IFTs may be categorized as local transports (calls within the district's service area) or "longdistance" out-of-county (OOC) transports. During the study period, local IFTs represented a relatively small number of transports. Most IFTs involved transports to cities outside of Valley County. IFTs are typically either scheduled in advance or non-scheduled when the need for transport is more urgent.

The following figure shows the volume of OOC transports by each fire district for the 36month period of 2017–2019, along with the average time committed for each transport.



| Fire District | OOC<br>Transports | OOC Transport<br>Percentage |
|---------------|-------------------|-----------------------------|
| Cascade RFPD  | 160               | 24%                         |
| Donnelly RFPD | 50                | 8%                          |
| McCall FPD    | 385               | 15%                         |
| Aggregate:    | 595               | 17%                         |

#### Figure 134: Out-of-County Transports & Average Time Commitment (2017–2019)

The preceding figure shows that 17% of transports are to out-of-county destinations. Combined with an overall multi-call concurrence of 9.7% or greater, the system will need to evaluate the necessity to add additional transport units in the future.

#### **Comparison of Ground Transports to Air Medical Transports**

The following figure provides a comparison of patient transports by the fire districts, compared to those transported by air ambulance. The figure shows the percentage of total patient transports in Valley County that were completed through an air medical service.

| •                               |      |       |       |       |             |
|---------------------------------|------|-------|-------|-------|-------------|
| Transport Provider <sup>A</sup> | 2015 | 2016  | 2017  | 2018  | 2019        |
| Cascade RFPD                    | 190  | 185   | 208   | 178   | 138         |
| Donnelly RFPD                   | 119  | 101   | 115   | 150   | 253         |
| McCall FPD                      | 517  | 643   | 603   | 645   | 553         |
| Subtotals:                      | 826  | 929   | 926   | 973   | 944         |
| Air Medical                     | 167  | 167   | 176   | 205   | Unavailable |
| Annual Totals:                  | 993  | 1,096 | 1,102 | 1,178 | Unavailable |

#### Figure 135: Historical Patient Transports by Fire District & Air Ambulance (2015–2019)

<sup>A</sup> Data source from the districts obtained from billing records; Air medical data source from CAD.

#### **Discussion on Ground Versus Air Transport**

The data showed that during 2015–2019, a significant percentage of patients in Valley County suffering sudden illness and injury were transported by an air-medical service. ESCI did not have access to data describing the acuity levels of those patients that were flown, or the reasons air transport was selected over ground transport.



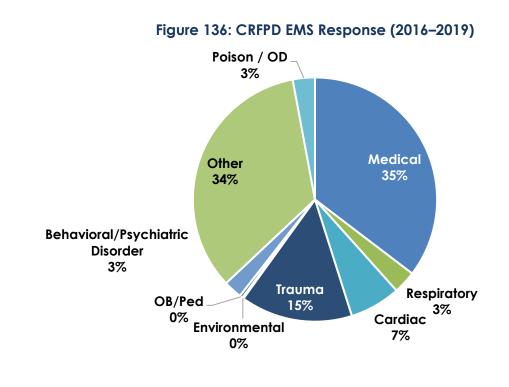
During this study, there were anecdotal indications that some patients were flown to alternate destinations due to a lack of available local ground transport resources. It is likely that a certain subset of patients required transport by air to a distant tertiary care facility due to their condition, need for rapid transport, or the necessity of interfacility specialty care beyond the capabilities of the fire district's ground transport resources. ESCI does not suggest that patients are being flown out of Valley County inappropriately.

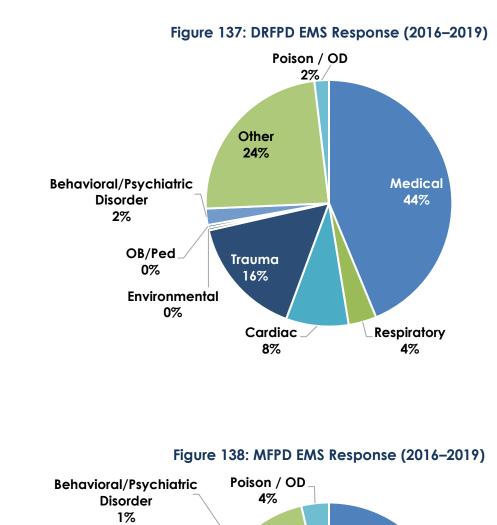
Air transport is typically more costly to the patient than ground transport. In addition, longdistance interfacility transports can be a significant source of revenue for ambulance service providers. However, as mentioned previously, long-distance IFTs by the fire districts may be a contributing factor to high personnel turnover rates.

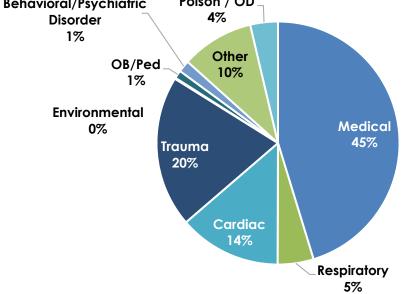
ESCI understands that one of the air medical services is considering or planning to establish a ground-transport unit in Valley County. This seems to suggest that there are a substantial number of potential air medical transports (and out-of-county ground IFTs) and associated revenue to justify placing a ground transport unit in the County.

## **EMS Provider Patient Impressions**

The following three figures provide an overview of the types of medical calls each district responded to from 2016–2019.









All three departments have a similar percentage breakdown of EMS service demand. There is an opportunity for improvement regarding overall documentation. MFPD placed a higher focus on placing EMS calls into specific categories. CRFPD and DRFPD documented a much higher percentage of calls under the "other" category. A system-wide process for documentation would provide improved statistical analysis and corresponding quality assurance. The combined higher percentage of medical, cardiac, and respiratory calls is consistent with the earlier discussion on an aging population. Training opportunities should focus on the demand for service.



# SUPPORT PROGRAMS

The following section describes the various programs and services that support the EMS delivery system in Valley County.

## **Special Operations**

In today's fire service, emergency response is much more than simply responding to fire and EMS incidents. National and international incidents have identified a need for broader emergency response capabilities and missions, including unique partnerships with other emergency response organizations. Fire departments now are expected to effectively respond to and mitigate a wide range of emergency incidents, including domestic terrorism, active shooter situations, hazardous materials incidents, and technical/industrial rescue situations, to name a few.

The State of Idaho Office of Emergency Management (IOEM), a division of the Idaho Military Department, is responsible for ensuring statewide operational readiness and response to large-scale and unique disaster events, including terrorism, wildfires, natural disasters, weather emergencies, hazardous materials releases, and civil unrest. IOEM is the lead agency in supporting and coordinating the deployment of regional technical rescue task forces, including a task force comprised of Boise, Coeur d'Alene, Pocatello, and Idaho Falls fire departments. These teams can be deployed to 17 counties in the region, and are equipped and trained in the following technical and heavy rescue disciplines:

- Hazardous Materials Releases
- Heavy Rescue
- Trench Rescue
- Confined Space & High Angle Rope Rescue
- Structural Collapse Rescue

The three districts are minimally trained and equipped to perform at the technician level for any of the noted disciplines above. CRFPD maintains operations level certifications for those performing rope rescues, vehicle extrication, and swift water rescue. DRPFD does not support or train personnel in the above disciplines, except for vehicle/machinery extrication.



MFPD maintains a hazardous materials response trailer, and most personnel are trained to the Operations level. DRFPD does not have certified Hazardous Materials Operations trained personnel. However, it does maintain a minimal amount of containment supplies and gas detection equipment. Technical leak control and containment are delegated to the State's regional Haz Mat Team located in Boise.

Given the extensive winter backcountry trail systems, all three districts maintain backcountry search and rescue capability, including equipment and training to perform winter searches. Personnel are trained in avalanche danger recognition, assessment, and searches. The districts maintain specialized trail vehicles, extraction equipment, and snowmobiles.

#### Valley County Search & Rescue

Backcountry Search and Rescue (SAR) operations are an important part of the emergency services system in Valley County. The Valley County Search and Rescue Team (VCSRT) is a volunteer organization that operates under the administration of the Valley County Sheriff's Office. Volunteers meet monthly to discuss and train on SAR issues and conduct Team business. The volunteers are called out via text messaging system to perform searches in approximately 3,700 square miles of rugged Valley County terrain, and often coordinate their missions with rotary and fixed-wing air assets. The Team was formed as a tax-exempt 501(c)(3) organization, and donations and grants primarily fund operating and capital expenses.

## Public Education & Prevention Programs

Providing fire and life-safety education to the public to minimize the frequency and severity of emergencies, while training the community to take appropriate actions when an emergency occurs should be a foundational activity of a fire department.

Today, progressive fire departments deliver a broad range of public education initiatives beyond the "standard" fire prevention topics—to prevent and reduce injuries and illness in their communities. These initiatives typically begin after a historical analysis of incident types in the community, and the related population demographics (age, income, disability, etc.). Examples of these types of programs include: Remembering When<sup>®</sup>, an elderly adult fire and fall prevention program offered by the NFPA; Child care seat installation and inspections; Home safety inspections; Carbon monoxide alarm installations; and water/pool safety to name a few.



Each fire district administers and delivers a fairly narrow range of public safety education programs. The following figure summarizes the various public education programs offered.

| Program  | CRFPD | DRFPD        | MFPD      |
|--|-------|--------------|-----------|
| Calling 9-1-1                                    | Yes   | Yes          | As needed |
| EDITH House (Exit Drills in the Home)            | Yes   | As needed    | As needed |
| Smoke alarm installations                        | No    | Yes          | Yes       |
| Carbon Monoxide program                          | No    | Yes          | As needed |
| Fire Safety (chimney, electrical, cooking, etc.) | No    | Yes          | As needed |
| Injury Prevention (falls, burns, helmets, etc.)  | No    | Yes          | As needed |
| Fire extinguisher use                            | Yes   | As needed    | Yes       |
| Fire brigade training                            | No    | No           | No        |
| Elderly care and safety                          | No    | No           | As needed |
| School Fire Prevention Program                   | No    | Yes          | No        |
| Babysitting safety                               | No    | No           | No        |
| CPR Training/Blood pressure checks               | Yes   | Yes          | Yes       |
| Safety publications provided                     | No    | Social Media | No        |
| Bilingual publications available                 | No    | No           | No        |
| Annual fire prevention reporting                 | No    | No           | No        |
| Juvenile fire-setter program                     | No    | No           | No        |
| Wildland fire interface program                  | Yes   | Yes          | Yes       |

#### Figure 139: Public Education Programs by Valley County Fire Districts

As noted in the preceding figure, each district appears to focus efforts on fire prevention, and fire-related citizen training—especially in the wildfire prevention arena. However, as is the case with almost all fire departments providing EMS response, medical emergencies and trauma comprise the majority of EMS incidents. As noted previously, given the limited resources available to each fire district, consideration should be given to placing more emphasis on injury and illness prevention programs. Ideally, these efforts should be coordinated and supported in a consolidated fashion.

## Fire Code Enforcement & Investigations

Each of the fire districts provides varying levels of fire code enforcement. The 2015 edition of the International Fire Code<sup>®</sup> is referenced for all fire code issues in Valley County. Fire investigations in CRFPD and MFPD are primarily the responsibility of local law enforcement and the Idaho Fire Marshal's Office. DRFPD has a designated Fire Marshal (shift firefighter working in operations), and personnel trained in performing fire investigations. The following sections briefly summarize the fire-code enforcement responsibilities and resources in each fire district.

#### Cascade RFPD

The Fire Chief is the designated Fire Marshal for the District. One firefighter is also trained fire inspectors who conduct inspections of existing occupancies. The Valley County Building Department reviews and approves all new construction plans and fire protection system installations in the CRFPD service area—including the City of Cascade through an interlocal agreement. The District annually inspects only the Valley County Jail and various daycare facilities.

#### Donnelly RFPD

DRFPD Operations personnel are cross-trained to perform specific fire code enforcement activities. A designated Fire Marshal is assigned to operations, and two personnel have Fire Inspection, Code Enforcement, and Fire Investigation responsibilities. These individuals share public-education program responsibilities. The District performs new construction plan reviews, code enforcement, existing occupancy inspections, and fire protection systemacceptance testing. Inspection of existing buildings is performed upon request, or when the District is made aware of code issues.

## McCall FPD

MFPD performs new construction plan reviews and approves fire code compliance for all new developments and commercial building construction. The District does not routinely perform existing occupancy inspections unless requested by the business or property owner, or when otherwise made aware of a significant code violation or safety issue.

## Training & Continuing Medical Education Programs

Training is the foundation of all aspects of emergency services. An individual's ability to effectively utilize resources and equipment is dependent on the level of training an organization has provided. The following section provides an overview of the equipment, facilities, execution, and efficacy of the current training program.



#### **General Training Competencies**

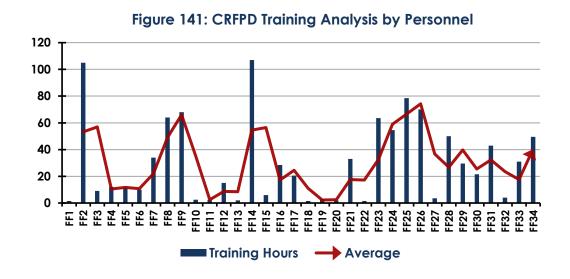
The following figure summarizes the general training topics and certification levels provided in each fire district.

| CRFPD       | DRFPD  | MFPD  |  |  |  |  |  |  |  |
|-------------|--|---|--|--|--|--|--|--|--|
| To ICS 300  | ICS 400  | Blue Card, NIMS   |  |  |  |  |  |  |  |
| No          | Yes  | No  |  |  |  |  |  |  |  |
| Yes         | Yes  | No  |  |  |  |  |  |  |  |
| No          | Yes  | Yes   |  |  |  |  |  |  |  |
| No          | Internal   | No  |  |  |  |  |  |  |  |
| Swiftwater  | Yes  | Various levels  |  |  |  |  |  |  |  |
| Operations  | Awareness  | Operations  |  |  |  |  |  |  |  |
| Firefight 2 | \$130/\$190  | Wildland Type II  |  |  |  |  |  |  |  |
| Yes         | Yes  | Yes   |  |  |  |  |  |  |  |
| ICRMP       | Yes  | Lewis-Clark College   |  |  |  |  |  |  |  |
| Yes         | Yes  | Yes   |  |  |  |  |  |  |  |
| Yes         | Yes  | Yes   |  |  |  |  |  |  |  |
| Yes         | Yes  | Yes   |  |  |  |  |  |  |  |
|             | To ICS 300<br>No<br>Yes<br>No<br>No<br>Swiftwater<br>Operations<br>Firefight 2<br>Yes<br>ICRMP<br>Yes<br>Yes | To ICS 300ICS 400NoYesYesYesNoYesNoInternalSwiftwaterYesOperationsAwarenessFirefight 2\$130/\$190YesYesICRMPYesYesYesYesYesYesYesYesYesYesYesYesYesYesYes |  |  |  |  |  |  |  |

#### Figure 140: General Training Competencies by Fire District

MFPD is the only district currently using the *Blue Card Incident Command System*. There is some disparity between the districts as to whether to require recertification or only acquire the initial certification. It is imperative that each fire district have a common format for maintaining incident command. Based on the information gathered, it appears that each district works in concert with each other on the fireground, but not necessarily under the same command system.

Another topic that will require focused evaluation is the training requirements for individual firefighters. A sample of firefighters from each district was taken for analysis, and the total number of training hours for each individual is graphically displayed. All three districts demonstrated limited consistency in the training hours that individuals had received in 2018–2019. The data supports the need for each district to develop a program with specific training topics and hours required by individual firefighters. There appears to be the need to establish minimal annual training requirements for all operations personnel.











#### **Training Topics Discussion**

The following figure summarizes the general training topics and the emphasis each district had for the specific disciplines during 2018–2019.

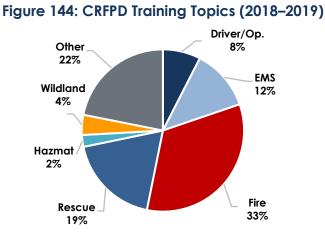
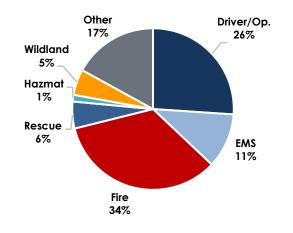
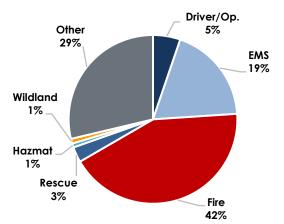


Figure 145: DRFPD Training Topics (2018–2019)



#### Figure 146: MFPD Training Topics (2018–2019)





While each district had a comprehensive and extensive training program, MFPD had more emphasis on fire-related training along with a higher emphasis on medical education. DRFPD had a higher percentage of Driver/Operator (DO)-related training. All three districts should consider a training philosophy and develop a standardized program that meets the needs of the community.

#### Training Methodologies & Delivery

Based on a combined analysis of the fire districts, there does not appear to be a balanced, scheduled approach to the training programs. The districts should consider balanced EMS/fire education programs. One portion of such programs should reflect retrospective statistical data from actual incidents. The districts should look for areas of improvement (Focused Continuing Education) or opportunities for additional levels of patient care or service. The second portion should be to fulfill the continuing education requirements for various certifications. A training calendar should be established that assigns specific monthly training to a specific purpose. Training opportunities can be placed on a 12-month calendar. Individuals can then plan on attending specific training sessions necessary for recertification. Following is an abbreviated example of a balanced EMS/Fire training program.

| January                                  | February                            | March                           | April               | May                            | June                                 |
|--|-------------------------------------|---------------------------------|---------------------|--------------------------------|--------------------------------------|
| Recert<br>(OB/Peds)/Car<br>diac Training | Recert<br>(Cardiac)<br>RIT Training | Recert<br>(Trauma),<br>Wildland | Focused<br>Training | Recert<br>(Medical),<br>Ladder | MCI,<br>Fireground<br>(night drills) |
| July                                     | August                              | September                       | October             | November                       | December                             |
|  |                                     | o o promision                   | Cerober             |                                | December                             |

#### Figure 147: Balanced Fire/EMS Training Schedule (Example)



#### Training Delivery & Scheduling

The following figure summarizes the training methodologies utilized by each of the Valley County fire districts.

| CRFPD<br>No | DRFPD<br>Yes   | MFPD  |
|-------------|--|---|
| No          | Yes  |   |
|             | 103  | No  |
| Yes         | No   | Yes   |
| No          | Yes  | Yes   |
| No          | Yes  | Yes   |
| IGEMS       | IGEMS  | Target Solutions  |
| 50/50       | EMT  | Yes   |
| No          | Both   | Both  |
| No          | Yes  | Yes   |
| No          | Yes  | Yes   |
| Annual      | Annual   | Annual  |
| No          | Yes  | No  |
| Annual      | Annual   | Annual  |
| No          | Yes  | Yes   |
| P           | Yes<br>No<br>No<br>GEMS<br>50/50<br>No<br>No<br>No<br>Annual<br>No<br>Annual | YesNoNoYesNoYesNoYesIGEMSIGEMS50/50EMTNoBothNoYesNoYesNoYesNoYesAnnualAnnualNoYesAnnualAnnual |

#### Figure 148: Methodologies Utilized in Training by District

There is disparity between the fire districts as to how training hours are allocated and documented. DRFPD and MFPD logs each job performance requirement (JPR) for each individual, which creates high annual training hours. CRFPD generally lists actual classroom or drill-ground hours. There is also disparity regarding budget allocation for training. A system-wide philosophy needs to be developed regarding how training activities are tracked, in addition to funding for training programs.

#### Figure 149: Annual Training Hours & Training Budget by District

| Description              | CRFPD   | DRFPD    | MFPD     |
|--------------------------|---------|----------|----------|
| 2018–2019 Training hours | 1,038   | 4,723    | 4,296    |
| Annual training budget   | Unknown | \$35,000 | \$40,000 |



#### Training Program Administration

To function effectively, a training program must be closely monitored, supported, and funded. Administrative program support is important, along with program guidance in the form of the development of training plans and establishing goals and specific training objectives.

All three districts have established administrative processes specific to their training programs. Individuals from each district serve in multiple roles—including the oversight of training. The CRFPD Chief is the ranking officer, as well as the "training officer" for fire-related training. The Donnelly Fire Marshal also oversees the training program for the District, and the MFPD shift Captains are currently responsible for training.

#### Training Facilities & Resources

In today's fire service, multiple resources are necessary to arm the educator with the tools needed to provide realistic, effective, and verifiable training. Some experts indicate the necessity to focus on "high-risk/low-frequency" events. This concept is evident in the amount of training for structure fires required, compared to actual call volumes. It is imperative that an organization has adequate training facilities to prepare for the infrequency and inherent danger of structure fires. Following is a brief summary of the current training resources and facilities available for each district.

| Facilities & Resources               | CRFPD        | DRFPD                | MFPD         |
|--------------------------------------|--------------|----------------------|--------------|
| Adequate training ground resources   | No           | Yes                  | No           |
| Live fire props                      | No           | Yes                  | No           |
| Fire & driving grounds               | No           | No                   | No           |
| Other training resources             | T. Solutions | No                   | T. Solutions |
| Classroom facilities adequate        | Yes          | Yes                  | Yes          |
| Video & computer simulations         | Yes          | Yes                  | Yes          |
| Instructional materials available    | Yes          | Yes                  | Yes          |
| EMS-related props & manikins         | Yes          | Yes                  | Yes          |
| EMS equipment assigned to training   | Yes          | Yes                  | Yes          |
| Other EMS-related training resources | No           | Online & conferences | St Luke's    |

#### Figure 150: Training Facilities & Resources by District



#### **Training Facilities**

CRFPD and MFPD do not maintain individual training facilities, although MFPD utilizes forcible entry and ventilation props. Donnelly RFPD has a separate training center with a burn room.

#### Training Facility & Resources Discussion

Based on this training analysis, it appears that a cooperative effort between CRFPD, DRFPD, and MFPD would provide an opportunity for improved training resources. All three districts are dependent on acquiring training facilities from outside agencies. A combined organization may have the resources to build training facilities that would include a burn building and other facilities. The addition of new facilities and resources would improve availability and utilization.

#### **Quality Management**

There are indications that the fire districts are providing excellent prehospital care. A challenge currently facing many EMS agencies is the lack of objective data to support the high-quality care provided. Evidence-based data can provide objective information regarding the quality of care. Additionally, the data can support program expansion and budgetary increases. ESCI's evaluation indicated that there is an opportunity for improvement regarding data collection and analysis.



The following figure shows a minimal data set and potential evaluation criteria that would be beneficial in making objective decisions.

| Figure 151: Dataset & Quality Assurance Criter |
|--|
|--|

| Time Study  | Efficacy Słudy  | Utilization Study   |
|---|---|---|
| Datasets:<br>Medication usage<br>Procedures performed<br>Expiration (waste)<br>BLS Transport<br>ALS Transport<br>Refusal<br>Treat and release   | Datasets:<br>• Vital signs<br>• Treatment results<br>• ETCO2<br>• ECG<br>• Pulse Ox<br>• Advanced airway<br>• Outcomes  | Datasets:<br>Travel<br>BLS On-Scene<br>ALS On-Scene<br>Ambulance On-Scene<br>En route to Hospital<br>Arrival Destination<br>Meds & Procedure Times<br>Average On-Scene Time   |
| <ul> <li>Evaluation (Quarterly):</li> <li>How quickly do patients receive ALS?</li> <li>What is the time delay between the arrival of BLS &amp; arrival of ALS?</li> <li>Is there a delay in transport for critical patients due to ambulance unavailability?</li> <li>What is the average on-scene time for BLS, ALS, cardiac arrests, trauma?</li> <li>How quickly/how often are critical medications administered?</li> <li>What is the average transport time?</li> </ul> | <ul> <li>Evaluation (Quarterly):</li> <li>Were inadequate vitals managed in a timely manner?</li> <li>What is the success/failure of all procedures performed?</li> <li>Were respiratory emergencies managed appropriately (ETCO2)?</li> <li>Was CPR effective (ETCO2)?</li> <li>Was the current ACLS performed?</li> <li>What was the hospital disposition?</li> </ul> | <ul> <li>Evaluation (Quarterly)</li> <li>What medications/supplies<br/>are being used &amp; what<br/>volume should be carried?</li> <li>Volume of medication &amp;<br/>procedures to determine<br/>inventory?</li> <li>What is BLS vs. ALS transport?</li> <li>What volume &amp; type of treat &amp;<br/>release (indications for<br/>community paramedic<br/>programs)?</li> </ul> |



# **Section II: FUTURE PROJECTIONS & EMS SYSTEM IMPROVEMENT STRATEGIES**



# **POPULATION & SYSTEM DEMAND PROJECTIONS**

In the following section, ESCI has developed a long-term forecast of population growth in Valley County, along with projected increases in EMS service demand over the next 10 years. This is important, as a community's population and demographics are the major drivers of the demand for EMS.

## **Population Growth Projections**

Valley County's residential population grew about 12% over the six-year period 2014 to 2019, with an annual growth rate averaging approximately 2.1–2.5% per year. The growth over the past six years, and the projected population growth through 2028, is shown in the following figure.<sup>32</sup>

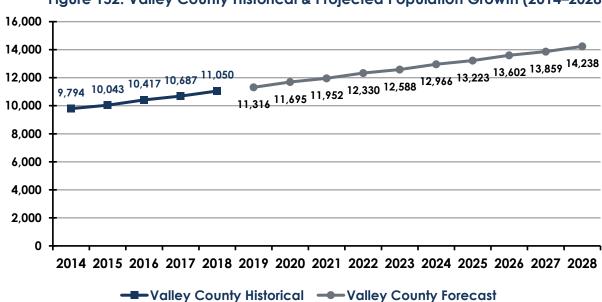


Figure 152: Valley County Historical & Projected Population Growth (2014–2028)

Valley County had a slightly higher population growth compared to the other counties in the State of Idaho. This continued trend will most likely increase the service demand for the three fire districts—particularly for calls for emergency medical services.

Population growth has been consistent over the past five years. Again, depending on data sources, the overall annual growth rate over the last five years was 2.5%. Based on forecast modeling, Valley County is projected to grow at a rate of 2.43%. In the next 8-10 years, the residential population of Valley County may reach approximately 14,238 persons.



The next figure presents the same projections as found in the preceding figure using an alternative that includes the results in a table format.

| Year | Population | Projected Growth |
|------|------------|------------------|
| 2020 | 11,695     | 2.15%            |
| 2021 | 11,952     | 3.07%            |
| 2022 | 12,330     | 2.04%            |
| 2023 | 12,588     | 2.92%            |
| 2024 | 12,966     | 1.95%            |
| 2025 | 13,223     | 2.78%            |
| 2026 | 13,602     | 1.86%            |
| 2027 | 13,859     | 2.66%            |
| 2028 | 14,238     | N/A              |

#### Figure 153: Valley County Population Projections (2020–2028)

It is important to note that these projections represent the resident population and do not include the transient population figures of the numerous visitors that frequent Valley County for recreational and other activities.

#### Impact of the Aging Population in Valley County

The previous method produces the potential number of calls in the future. However, it does not consider demographic changes. It is likely that the existing population will continue to age. The increasing number of elderly persons will increase the demand for EMS, since they tend to be disproportionately greater consumers of these services. National medical industry studies suggest that patients over 65 years of age are three times more likely to access local emergency services than other age groups.

The following figure shows the historical growth in Valley County residents age 65 or greater, and the projected growth over the next eight to ten years.

| Year | Age ≥ 65 Years | % Growth |
|------|----------------|----------|
| 2014 | 1,812          | 8.21%    |
| 2015 | 1,974          | 5.96%    |
| 2016 | 2,099          | 14.12%   |
| 2017 | 2,444          | 6.37%    |
| 2018 | 2,610          | 7.32%    |
| 2019 | 2,817          | 6.82%    |
| 2020 | 3,023          | 6.39%    |
| 2021 | 3,229          | 6.00%    |
| 2022 | 3,435          | 5.66%    |
| 2023 | 3,641          | 5.36%    |
| 2024 | 3,847          | 5.09%    |
| 2025 | 4,054          | 4.84%    |
| 2026 | 4,260          | 4.62%    |
| 2027 | 4,466          | 4.41%    |
| 2028 | 4,672          | N/A      |

Figure 154: Historical Population 65+ and Projected Growth

According to the 2018 estimates, the current population of persons 65 years and older and living in Valley County, is 2,610 or 23%.<sup>33</sup> Over the next ten years, it is estimated that this group will grow to 4,672, representing a 55% growth rate. The next figure is a graphic representation of the projected growth rate.



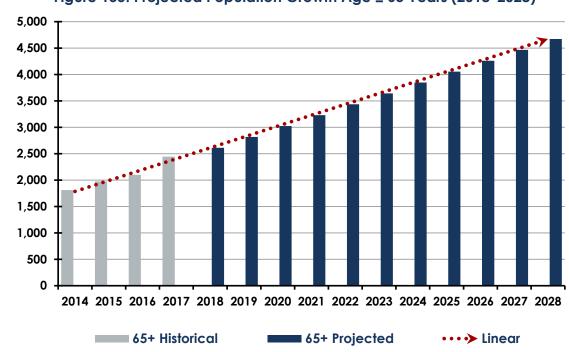


Figure 155: Projected Population Growth Age  $\geq$  65 Years (2018–2028)

It is reasonable to assume that the demand for EMS in this age group will increase proportionally to the increase in the overall population. Over the next 10 years, it may mean that the fire districts will likely experience a rise in the demand for EMS because of the greater number of elderly persons.

Without a more comprehensive study and sufficient data, is difficult to predict the exact impact of the elderly population on the number of future calls. It is also impossible to know whether older persons will remain in Valley County or move to other communities. In addition to the typical EMS responses, there may be an increase in the need for nonemergent incidents.

## Service Demand Projections

To forecast countywide future service demand, ESCI utilized the historical call volumes from the three fire districts. The data indicates that service demand within Valley County will increase within a range of 1.4%–6.3% annually, depending on the jurisdiction.

The population tends to be a relatively good indicator of service demand. However, based on historical data and an aging population discussed later in this section, call volumes among each of the fire districts will tend to be higher than the 2.5% projected population growth rate. The following two figures show the projected service demand for each district.



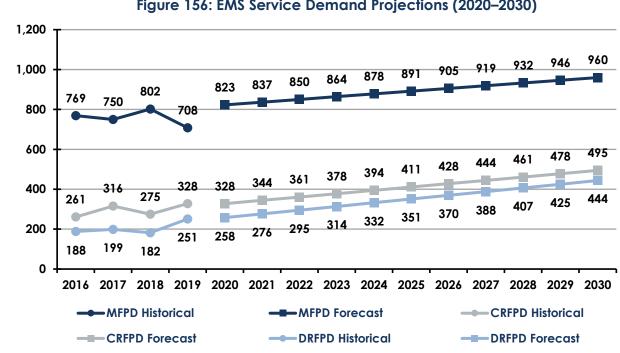


Figure 156: EMS Service Demand Projections (2020–2030)

Not unexpectedly, analysis of the available data indicates that McCall FPD will see the highest increase in EMS service demand over the next 10 years.

| Figure 157: EMS Service   | Demand Projections by Fire | District (2020–2030) |
|---------------------------|----------------------------|----------------------|
| ligure 157. Linis service | beiliana nojecnons by me   | Disilici (2020-2000) |

| Fire District | % Change |
|---------------|----------|
| Cascade RFPD  | + 53%    |
| Donnelly RFPD | + 42%    |
| McCall FPD    | + 80%    |

The combined fire districts are projected to see a 58% increase in EMS service demand over the next ten years. ESCI recommends exploring options to balance call volumes within Valley County, with a continued focus dispatching the nearest appropriate unit.

## **RECOMMENDED SYSTEM IMPROVEMENT STRATEGIES**

The following section outlines various proposed EMS system improvement goals. Some of these would apply to a new consolidated fire district, the fire districts individually, or through cooperative agreements between the districts. Improvement goals have been categorized as short-term (6–12 months), mid-term (12–24 months), and long-term (24 months or longer). It is important to note that these are estimates only, and some may be accomplished in a shorter or longer time.

## Short-Term Improvement Strategies

The following section describes the various short-term improvement goals, as recommended by ESCI.

#### **EMS Medical Direction**

- Appoint a single EMS Medical Director for Valley County and create a new contract with additional responsibilities.
- It will be critical for the EMS Medical Director to aggressively engage and support all elements of the EMS delivery system—which should be beyond clinical performance and protocol development. Substantial investment in a new Medical Director can produce numerous benefits to the EMS system. The Medical Director should be involved in EMS strategic planning, community outreach projects, and participation in the selection of new personnel that may be hired in key EMS-related positions.
- Consider developing a contractual relationship between the Valley County government and the EMS Medical Director. The terms of this agreement should require additional responsibilities beyond the minimum requirements of IDAPA 16.02.02, such as:
  - Regular ride-alongs and/or scene responses with fire and EMS personnel, participation in both continuing education and EMS quality management, and other EMS-related activities.
  - The agreement should be as flexible as possible, allowing for consideration of the EMS Medical Director's regular work schedule and personal activities.
  - The County should adequately compensate the EMS Medical Director.
  - Provide the EMS Medical Director with a portable radio and outerwear (or uniform) that clearly displays and indicates their role as "Physician Medical Director." The radio should be carried, and the uniform worn, during ride-a-longs.



 It will be important for the EMS Medical Director to be completely independent financially from the fire districts and other prehospital provider agencies. He or she must be in a position in which all EMS-related decisions are unbiased and in the best interests of the community, and without undue influence by any particular organization.

#### **EMS Quality Management**

- Establish a countywide EMS Continuous Quality Improvement committee that includes representatives from each of the fire districts, the EMS Medical Director, and, potentially, representatives from other relevant local emergency services organizations.
  - At a minimum, the committee should meet bi-monthly (every two months).
  - The program should evaluate both operational and clinical performance.
  - Feedback on clinical performance should be provided directly to EMS providers.
- Consider the development of performance standards based on the expectations of the constituents and geographic limitations.
  - Operational performance should be based on established performance standards and regular reports provided to all employees and key stakeholders.
- Work with local hospitals (and possibly the hospitals outside of Valley County) to determine options for identifying the outcomes of a select number of high-acuity patients.

#### **Outsource Ambulance Billing & Collection Services**

- Donnelly RFPD should consider discontinuing using in-house billing staff and work with the other two fire districts to develop a joint RFP to acquire a qualified and capable billing and collection services provider, and negotiate a lower fee.
- The vendor should have sophisticated software that will improve the accuracy of claims, increase revenue, provide detailed reporting and customized reports, and interface automatically with the fire district's EMS incident reporting software.
- Whether the fire districts jointly outsource billing services or continue their current practices, they should retain a qualified third-party firm to conduct a detailed annual audit of their billing, collection, and records management processes.
  - This should also include an analysis of both in-house and outsourced billing to determine each fire district's compliance with the requirements of the Office of the Inspector General.



#### **Ambulance Fees**

Ambulance fees are a key source of revenue for each of the fire districts participating in this study. ESCI notes that fee revenue in all three districts is relatively flat, despite the fact that EMS calls continue to increase.

- ESCI recommends an evaluation of EMS transport fees, and a comparison of rates to similar jurisdictions.
  - Ambulance transport rates should be evaluated and increased (if appropriate) on an annual basis.

#### EMS Training & Continuing Medical Education

- Consider the development of a regional training program with dedicated staff for both fire and EMS training and continuing medical education.
  - Establish a Regional Training Committee to develop an annual training schedule.
  - The fire districts should share training staff and resources in order to accomplish training goals and objectives.
- EMS training and CME should continue to be documented, utilizing the patient care reporting system.
  - The system can provide complete and accurate data collection, and support quality improvement. Most ePCR systems will export data to an Excel® format, and the data can be easily interrogated to provide various evaluations.

#### **Medical Equipment & Supplies**

- Conduct joint purchasing of capital medical equipment, ambulance vehicles, durable equipment, and disposable supplies.
- The fire districts should begin to work together and determine a standard configuration for the future purchase of ambulances.
- This should include standardization of how each is equipped, including stretchers, cardiac monitor/defibrillators, other capital equipment, and all other equipment and supplies.
- The fire districts should consider selecting a single vendor for the purchase of disposable supplies, and inventory management methods for distribution to each of the fire stations.



## **Mid-Term Improvement Strategies**

The following section describes the various mid-term improvement goals, as recommended by ESCI.

#### **Records Management & Data Collection**

- ESCI recommends DRFPD determine the cause of the documentation error so that accurate performance measurements can be determined.
- Develop an interface between the dispatch center CAD system and the records management systems of the fire districts. The interface should automatically download incident numbers, incident addresses (including latitude and longitude, if available), timestamps, and other relevant data elements.

#### Injury & Illness Prevention

• Consider expanding public education efforts to include non-fire related life safety programs, including but not limited to elder safety/fall prevention, smoke alarm installation, babysitting safety, car seat inspections, bicycle safety, water safety, etc.

#### **Additional Funding**

- The most recent available information is that the Idaho State legislature will be considering the adoption of the GEMT Program during the 2020 session.
  - Leaders and others in Valley County should support the adoption of this program and provide input to the legislature accordingly.
  - Once adopted, the fire districts should pursue participation in this program.
- Consider requesting Valley County to institute impact fees on new developments.
- As of the date of this report, funding through the ET3 program is no longer available. However, once the program is open again, the fire districts should explore the feasibility and capability to qualify for additional funding through this program.

#### **Emergency Operations**

**Incident Command** 

- ESCI recommends that each of the fire districts ensure that all personnel, especially command staff at the operations level, be provided with the same ICS training, and practice that accordingly.
- A standard ICS should be applied during emergency operations localized to each individual fire district, but especially during joint operations involving two or more districts.



#### Long-Term Improvement Strategies

The following section describes the various long-term improvement goals, as recommended by ESCI.

#### Valley County EMS Funding Distribution

- Valley County currently provides funding for the EMS system, which is equally distributed to each of the fire districts. A linear-trend forecast discussed earlier in this report indicates that the fire districts may be constrained by the not-to-exceed limit in the agreement in 2024 or 2025. This issue should be discussed with VCEMS during the next contract negotiations.
- While this may be the most politically acceptable, ESCI believes that the current funding distribution method is neither fair nor equitable. Costs of service and EMS service demand varies among the fire districts. Therefore, the communities with the greatest funding needs do not receive the majority of funds.
  - While recognizing the political and financial implications, ESCI recommends that Valley County consider a more equitable funding method for the distribution of funds among each of the fire districts.



# PROPOSED CONSOLIDATED FIRE DISTRICT

ESCI recommends that the elected officials of the three fire districts explore and consider the potential for legal consolidation into a single fire district. The primary rationale for

consolidation would be to improve the quality, effectiveness, and efficiency of the EMS delivery system, as well as fire protection, special operations and rescue services, and life-safety and prevention programs. It is likely that, if appropriately configured, consolidating the fire district would ensure long-term sustainability and potential reductions in costs.

ESCI recommends that the elected officials of the three fire districts explore and consider the potential for consolidation into a single fire district.

Idaho Statutes (ID Code § 31-1413 and § 31-1414), with the approval of the electorate, allow existing fire districts to consolidate.<sup>34</sup> The following section describes a proposed future infrastructure and related details of single consolidated fire district in Valley County.

## Interlocal Cooperation Agreements

In Idaho, public agencies may enter into Interlocal Cooperation Agreements (ICA) in accordance with ID Code § 67-2328.35 An ICA is a legal agreement that provides options for fire districts to collaborate on various services and programs.

Examples may include two fire districts developing an ICA to provide fire protection services; several agencies entering into an interlocal contract with other political subdivisions to form a joint operating agency with a separate governing board; or a simple, interlocal service contract where one jurisdiction may provide emergency services to another. These agreements are sometimes referred to as "collaborations," and can be developed in various formats.

The following section lists three types of collaborative options that could be accomplished through the implementation of an Interlocal Cooperation Agreement. Any of these options could be adopted independently or combined into one strategy.

These options could be utilized in lieu of a legal consolidation on a long-term basis, or as initial steps to consolidation. The benefit of this strategy is that the three districts could gain experience in working together through collaboration prior to a legal consolidation.



#### Administrative Collaboration

An Administrative Collaboration can occur when two or more agencies maintain their separate legal status and separate operational elements but combine some or all administrative functions. Examples include combining the administration under one Fire Chief and merging clerical, human resources, legal, financial, and other functions while maintaining separate operational activities. An Administrative Collaboration is accomplished legally through an agreement.

#### **Advantages**

The advantages of this approach include reduced overhead costs by eliminating administrative duplication; a gradual alignment of otherwise separate operations under a single administrative head; less resistance to change by the affected employees in the operational elements that typically occurs in other collaborative options; and singularity of purpose, focus, and direction at the governance level of the participating organizations. This option lends itself well to a gradual move toward a single, consolidated agency, where differences in attitude, culture, and/or operations are otherwise too great to overcome in a single consolidation process. The success or failure of this type of collaboration is heavily dependent on identifying and hiring the right leader who can clearly define and support the desired direction for multiple fire agencies, while avoiding the political issues that inherently arise from simultaneously serving the interests of multiple groups.

#### **Disadvantages**

The disadvantages include potential conflicts in policy direction from multiple fire district boards, potentially untenable working conditions for the Fire Chief ("one-person, multiple bosses"), and an increased potential for personnel conflict as separate employee groups vie for dominance and supremacy. Inherent management inflexibility can occur due to the political complexity of the agreement. An administrative team who must answer to two or more political bodies might become "whip sawn" by these entities, with conflicting direction and disagreement on crucial issues—resulting in a limited ability to manage the organization effectively.

Another disadvantage relates to funding operations. Contractual collaborations cannot change jurisdictional or taxing boundaries, thereby requiring the participating fire districts to define a fair method of funding the consolidated operations. In contrast, a legal merger creates a single taxing district with a more predictable funding stream that is insulated from the political challenges that can arise when funding is dependent on agreements between different jurisdictions.



To be effective in sustaining a long-term alliance, this approach requires close governance, collaboration, and consensus when creating the terms of the agreement, as well as trust in the administrative team in managing the alliance. Many interlocal cooperation agreements are in effect throughout the nation that have successfully centralized the administrative functions of fire districts.

#### **Functional Collaboration**

A Functional Collaboration is when the participating agencies continue to exist as separate fire agencies but combine certain functions into a common resource, such as combining fire and EMS training, fire prevention, public education, administrative support services, purchasing, and/or apparatus maintenance. Implementing this option may require some alignment of standard operating guidelines, policies, procedures, and certain operational aspects to make the collaborative processes perform properly.

A structure of shared administrative decision-making is typically created as they relate to the collaborative effort(s). This requires policymakers and administrators to voluntarily forfeit or delegate their authority to unilaterally change actions, activities, or direction in the joint functional areas, in favor of a collaborative approach. Like an Administrative Collaboration, a Functional Collaboration is also properly accomplished legally through an ICA between the agencies. In some cases, a Functional Collaboration is all that is required to accomplish the cooperative goals of the fire agencies without considering other forms of complete legal integration.

#### **Advantages**

The primary intent of such agreements is to share resources, improve service, and reduce costs at the program level. The advantages of this option are greater opportunities for efficiency; an opportunity to reallocate redundant available resources to those areas lacking in resources (e.g., transferring redundant training officers back to an operational function and increasing operational strength, assigning staff to address training deficiencies or special programs, etc.); and a closer working relationship between members of the fire agencies, which can spill over to other unrelated activities in otherwise separate organizations.



This type of collaboration may segue into greater levels of cooperation. Also, this option usually has the advantage of being a low-cost and low-risk improvement strategy, and can serve as a foundation on which fire agencies build the experience and trust necessary to implement other collaborative strategies and programs. Finally, this approach may reduce the human-factor barriers, as members of each fire agency realize that the other organizations' members "aren't so bad after all."

#### **Disadvantages**

The disadvantages of this approach are that the functional option requires much greater collaboration between the participating fire agencies than the other partnering options. Another disadvantage is that interaction by and between operational personnel of the different agencies increases the potential for friction. Numerous details must be worked out in advance of such a contract, including, but not limited to, work rules, employee assignments, volunteer opportunities, office location, logos, asset allocation, authority, funding (see the preceding discussion under "Administrative Collaboration"), and even the name of the consolidated program. Further, independence and autonomy are lost in the consolidated areas, spilling into other seemingly unaffected areas.

#### **Operational (Full Service) Collaboration**

This partnering option takes the next step in the continuum of closer collaboration and potential full legal consolidation. In this option, all operations are consolidated under a single organization that serves all participating jurisdictions. The fire districts would remain independent organizations from a legal, political, and taxing standpoint. However, from a service-level perspective, the fire agencies operate as one emergency services organization. The result features a single organizational structure and chain of command. Operational Collaboration is also legally accomplished through an ICA among the participating organizations.

Depending on the form of the agreement(s) establishing the organization, employees and members of each organization may remain with the original agency, or they may be transferred to one of the other agencies, or to an entirely new entity. One Fire Chief oversees a blended organization.

To be successful, this option should be considered only in the context of a formal and comprehensive agreement and substantial movement toward full consolidation between the agency policymakers and administrations. The level of trust required to implement an Operational Collaboration is very high since independence and autonomy have been willingly relinquished in favor of the preferred future state of full consolidation.



# Advantages

One of the primary advantages of this form of collaboration is that it produces the maximum opportunity for organizational flexibility and efficiency. This is typical of the operational option, where services are delivered to the communities, and the level of trust and cooperation required to make the implementation successful implies a near-readiness to take the next step towards full consolidation. It gives the participants the experience of functioning operationally, and opportunities to identify issues and operational deficits prior to legally consolidating.

# Disadvantages

The disadvantage is that administrators and policymakers must share power and gain consensus where they once had unilateral authority to control and implement policies and programs. If there are multiple bargaining unit agreements, they would ultimately need to be aligned. Further, it can become a challenge to determine which agency would be the contractor.

Finally, funding, as discussed in the preceding section under "Administrative Collaboration," remains an issue for full consolidation. Long-term funding for full consolidation can be a challenge as each participating fire agency must contribute funding from its own revenues, which are often subject to voter approval from only one member of the consolidated fire agency. Long-term debt-financing is also more challenging, as the consolidated fire agency generally cannot issue its own debt and must rely on the participating entities for debt financing.

# Legal Consolidation

As mentioned previously, Idaho Statutes allow two or more existing fire protection districts to consolidate into a single jurisdiction. ID Section 31-1413 outlines the requirements and steps that must be taken to pursue consolidation. First, each of the Boards of Commissioners must determine and agree that consolidation would be advantageous. If so, an agreement must be prepared that provides:

- A name for the new consolidated fire protection district.
- That all property of the districts to be consolidated shall become the property of the consolidated district.
- That all debts of the districts to be consolidated shall become the debts of the consolidated district.



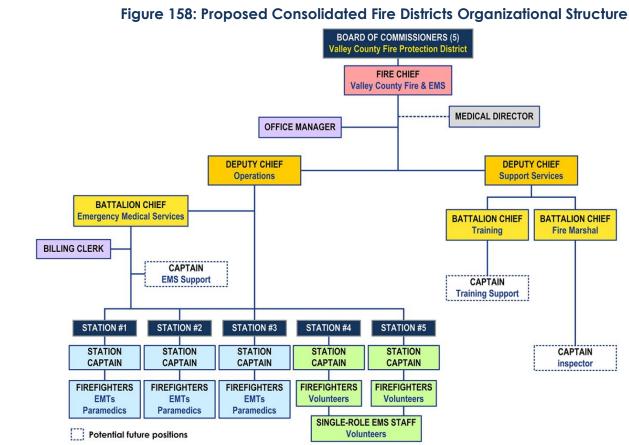
- That the existing commissioners of the districts to be consolidated shall be the commissioners of the consolidated district until the next election (described in more detail in Section 31-1413 [1] [d]).
  - The statute allows or a three- or five-member board of commissioners (ESCI recommends a board comprised of five members).
- That the employees of the consolidated fire protection district shall be selected from the employees of the fire protection districts being consolidated, which employees shall retain the seniority rights under their existing employment contracts.
- Following approval of the agreement of consolidation, each current fire protection district board shall hold a hearing not less than 10 days or more than 30 days thereafter (described in more detail in Section 31-1413 [2]).
  - During the hearings, if there are not a substantial number of objections, or any petitions in opposition to consolidation, each board may approve the agreement to consolidate, which will then become effective.
  - If a petition signed by 25% of the qualified electors of one or more of the current fire protection districts is filed, an election will be required in accordance with Idaho Code Sections 31-1405 and 31-1414.
- Once the agreement for consolidation becomes effective, the new board of fire commissioners must file a certified copy of the agreement with the Valley County recorder.
- Thereafter, the consolidated fire protection district will have the same rights and obligations as any other fire district in accordance with applicable Idaho statutes.

# **Organizational Structure**

The following section describes a proposed organizational structure of a new consolidated fire protection district in Valley County. It must be emphasized that this is not intended to be construed as final. If consolidation is pursued, an alternative configuration may be determined by the key stakeholders during the planning process.

The next figure shows a potential organizational chart that can serve as a basis for discussion during the planning process. For the purposes of this report, ESCI used the name, "Valley County Fire Protection District" operating as "Valley County Fire & EMS." Ultimately, the new name will be determined by the elected officials.





### **Fire Stations**

ESCI recommends that each of the existing fire stations be renumbered for a consolidated fire protection district as follows:

#### Figure 159: Proposed Fire Station Numbers in a Consolidated Fire District

| Current Fire Station   | New Number |
|------------------------|------------|
| McCall FPD Station     | Station 1  |
| Donnelly RFPD Station  | Station 2  |
| Cascade RFPD Station 1 | Station 3  |
| Cascade RFPD Station 2 | Station 4  |
| Cascade RFPD Station 3 | Station 5  |



### Career, Volunteer, & Other Staff

In this model, ESCI recommends that all employees and volunteers be transferred to the new organization without a decrease in wages or loss of current benefits. The figure shows renumbered fire stations (which will be discussed later in this report). The preceding figure starts with a five-member Board of Commissioners overseeing a single Fire Chief.

Subordinate to the Fire Chief would be a Deputy Chief (DC) of Operations and Deputy Chief of Support Services. The DC of Operations would oversee all career personnel and volunteer staff. Since EMS is a major component of all three fire districts, a Battalion Chief (BC) of Emergency Medical Services would be an important position responsible for all elements of EMS. If funding is adequate, an EMS Support Captain could be appointed immediately or in the future.

The Deputy Chief of Support Services would oversee a Battalion Chief of Training, responsible for all fire and EMS training and continuing medical education. A Training Support Captain should be appointed immediately or in the future.

Another Battalion Chief would serve in the role of Fire Marshal and be responsible for the typical life-safety programs, inspections, fire investigations, and prevention and public education programs. A Captain Inspector could be appointed immediately or in the future to assist to the Fire Marshal.

#### **Operational Staffing & Apparatus Deployment**

The next figure shows the proposed minimum daily staffing configurations, along with the recommended addition to the minimum apparatus types recommended for each station. This does not prevent assigning special operations vehicles and equipment, command vehicles, or other support units from being assigned to specific stations—but only to suggest minimum apparatus assignments. As with any fire district, apparatus can be moved and deployed from different stations depending on service demand and call types.

The model shown in the following figure assumes that at least four additional career Firefighter/EMTs would be necessary to meet the minimum daily staffing (as shown previously in the "Staffing & Personnel" section). However, it would not necessarily require hiring four new individuals. Some of these positions could be filled with Firefighter/EMTs who are part-time, volunteer, or current individuals on overtime.



| Fire Station | Engines | Medics         | Aerials | Tenders | Wildland | Daily Staffing <sup>B</sup> |
|--------------|---------|----------------|---------|---------|----------|-----------------------------|
| Station 1    | 1       | 2 <sup>A</sup> | 1       | 0       | 0        | 6                           |
| Station 2    | 1       | 1              | 0       | 1       | 1        | 4                           |
| Station 3    | 1       | 1              | 1       | 1       | 1        | 4                           |
| Station 4    | 0       | 0              | 0       | 1       | 1        | Volunteers                  |
| Station 5    | 1       | 0              | 0       | 0       | 1        | Volunteers                  |

#### Figure 160: Proposed Staffing Configurations & Apparatus Assignments by Station

<sup>A</sup>One Medic Unit staffed as a peak-demand unit 12 hours daily.

<sup>B</sup>Represents minimum staffing for 24 hours daily, with the exception of one 12-hour crew at Station 1.

This configuration also assumes that, when necessary, aerials, tenders, wildland, and other specialty vehicles assigned to Stations 1, 2, and 3 would be cross-staffed by on-duty career personnel or volunteers.

### **Peak-Demand Medic Unit**

It must be noted that Station 1 in McCall would have more daily career staff and a second peak-demand (10-hour) Medic Unit. Historical incident data indicated that the highest demands for service occurred in and around the City of McCall. This is not meant to minimize the importance of providing service to the other two fire districts; instead, to ensure that adequate and appropriate resources are assigned to those locations with the highest demands for service.

### **Combined Fire District Queuing Analysis**

A process called "queuing analysis" has been used to determine the number of units needed in each fire district by the time of day. This process utilizes a probability analysis to determine the number of units needed in each fire district, in order to reduce the likelihood that a response unit would not be available to respond to an incident 10% of the time or less. It uses the variable of incidents per hour, the number of available response units, and the average time committed per incident.

Though very useful to this effort, a queuing analysis has some limitations. It assumes that incidents occur at a constant rate, which is not always true in emergency services. It also assumes that each incident requires an equal amount of time from response units. While the average time committed to an incident was used for service time, some incidents require less or substantially more than the average.



The following figure illustrates the current deployment and proposed deployment plan for both the daytime (0900–2059 hours) and nighttime (2100–0859 hours) periods based on the 2019 incident activity of each of the fire districts.

|          | Figure 161. Current & Proposed Response Units by Fire District (2017) |                    |             |               |              |                |             |               |
|----------|---|--------------------|-------------|---------------|--------------|----------------|-------------|---------------|
|          | CURRENT CURRENT PROPOSED  |                    |             |               |              |                |             | OSED          |
|          | — CUR   | RENT —             | - PROBA     |               | <u> </u>     | OSED —         |             | ABILITY —     |
| District | Units<br>Per Day  | Units<br>Per Night | Day<br>Wait | Night<br>Wait | Day<br>Units | Night<br>Units | Day<br>Wait | Night<br>Wait |
| CRFPD    | 1   | 1                  | 10%         | 4%            | 1            | 1              | 10%         | 4%            |
| DRFPD    | 1   | 1                  | 6%          | 3%            | 1            | 1              | 6%          | 3%            |
| MFPD     | 1   | 1                  | 25%         | 10%           | 2            | 1              | 3%          | 10%           |
| Totals:  | 3   | 3                  |             |               | 4            | 3              |             |               |

# Figure 161: Current & Proposed Response Units by Fire District (2019)

Note: Percentages rounded to the nearest interval.

As shown, the preceding figure includes the current and proposed probability of wait times based on the current number of staffed units. Response time performance is analyzed using the "fractile" method, in which time-intervals are measured at the 90<sup>th</sup> percentile. ESCI recommends that a reasonable target for "customer" wait-times should be 10% or less.

The figure shows that both CRFPD and DRFPD have reasonable probable wait-times during both the day and night hours. However, at MFPD, the probable wait-time is 25% during the day hours. By adding a 12-hour peak-demand unit staffed during the day at MFPD, the probable wait-time could be substantially reduced to 3%.

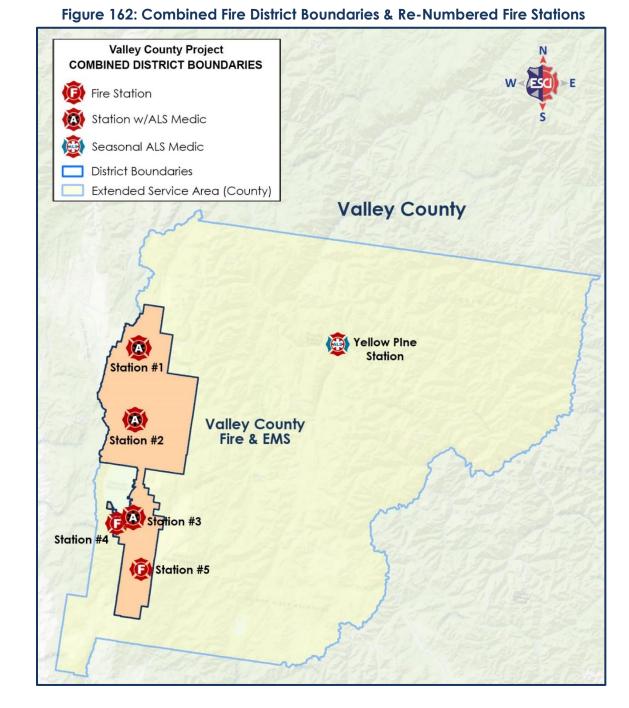
### **Organizational Identity**

An important issue in a consolidation is the development of a new organizational identity. For the purpose of this study, ESCI has used "Valley County Fire & EMS." Obviously, the name will ultimately be determined by the fire district's leadership. In addition, the consolidated fire district should include a new logo, apparatus decals, uniform patches, badges, and possibly different uniforms.

Recognizing there would be additional expenses associated with this, ESCI believes that the benefits would outweigh the costs. This would contribute to a perception among the employees and volunteers that this is a new agency and not modeled from one of the previous fire districts. In this way, staff would more likely embrace a "new district," rather than feeling they are being transferred to one of the former fire districts.



The next figure is a map that illustrates the boundaries of a new consolidated fire protection district to serve Valley County.



As shown in the preceding figure, the new fire protection district boundary (as well as the current district boundaries) would encompass those areas of Valley County with the highest population densities. At some point in the future, the Board of Commissioners may want to consider expanding the consolidated fire district boundary.



# **Consolidation Planning & Implementation**

Should the elected officials and other leaders of Cascade RFPD, Donnelly RFDPD, and McCall FPD agree to pursue a potential consolidation into a single fire protection district, ESCI recommends the following steps for planning and implementation.

It will be important to conduct a joint and comprehensive planning process that addresses the restructuring of the fire districts as they integrate at the policy level, as well as at the operational, administrative, and support levels. Greater efficiency can be achieved if the collaboration is developed with one methodology, one set of work rules, one standardized level of service to the community, and one organizational structure to administer it. The following represents simple basic steps, which could be modified as necessary.

### Step One—Development of a Shared Vision

The process of considering and implementing the recommendations will need to begin with a shared vision by the elected and appointed officials, as well as the leadership, employees, and volunteers of the three fire districts. From this vision, goals and objectives should be identified, which, if accomplished, compel the districts toward the vision. Essentially, this process is the framework of a plan for consolidation. When considering the development of both a collaboration and eventually consolidation, three questions must be asked. Will consolidation:

- Benefit the citizens served?
- Gain efficiencies for the benefit of the citizens served?
- Improve the overall level of service, standards of cover, and enhanced fire protection, EMS delivery, and other emergency services and programs for the benefits of the citizens served?

If the answer to all three questions is "Yes," then consolidation should be considered.

# Step Two—Establish a Planning Committee

Once a shared vision has been developed, it will be necessary to establish a Planning Committee and subcommittees. This group should be responsible for planning an initial collaboration (discussed in the next step) and the eventual consolidation process. The composition of the Planning Committee has been outlined in detail in Appendix C.

### Step Three—Initial Collaboration

ESCI recommends that the fire districts initially consider developing Interlocal Cooperation Agreements for Administrative and Functional collaborations. If successful, this should be followed by an agreement for Operational Collaboration. These agreements should continue for a period of at least 12 months, which provides an opportunity for the fire districts and Planning Committee to identify problems, successes, and other issues that will need to be addressed prior to legal consolidation.

# **Cost-Sharing During the Collaboration Period**

Depending on the type of collaboration agreements and the specific staff and programs that would be included, it may be necessary to share the costs—which should be done in a fair and equitable manner between the fire districts.

Usually, when a single local government provides fire protection to its residents, that community bears the entire financial burden because of the presumption that everyone benefits from the service. When two or more fire districts share in the provision of fire protection (as well as EMS and other services), the elected officials must ensure that each jurisdiction assumes only its fair pro-rata share of the cost—thereby fulfilling an obligation to act as stewards to the best interest of their respective constituencies.

There are several options (formulas) that can be utilized to share costs among jurisdictions during a temporary collaboration. Regarding the three fire districts in this study, ESCI recommends the following potential cost-sharing method. Note that certain administrative support costs (human resources, finance and payroll, IT support, etc.) will also need to be considered.

# Multi-Variable Allocation Method

Often in fire district collaboration, planning the policymakers and leadership find it difficult to reach an accord on the cost—even though everyone may agree on the benefit of a collaboration agreement.

The differences between community demographics and/or development can cause the perception of winners and losers, along with changes that occur within the system over the long term. This can be especially prevalent when a single variable is used to apportion costs. An agreement based on a combination of allocation methods may help resolve the issue. The following figure is a summary of each district's share of potential cost allocations. These are current estimates, and would need to be re-calculated in the future.



| -             |                | -                          | -              |
|---------------|----------------|----------------------------|----------------|
| Fire District | Assessed Value | <b>Resident Population</b> | Service Demand |
| Cascade RFPD  | 16%            | 22%                        | 23%            |
| Donnelly RFPD | 32%            | 6%                         | 17%            |
| McCall FPD    | 51%            | 72%                        | 59%            |

### Figure 163: Cost Allocation Method by Fire District & Percentages

One example of using a combined method to produce a multi-variable cost allocation could be as follows. It uses three determinants that would be applied to each jurisdiction.

- Population: 50% of the total ۲
- Service Demand: 25% of the total
- Assessed Value: 25% of the total

As mentioned previously, a community's population is the primary driver of the demand for EMS (as well as fires). Therefore, population is given the most weight in this formula. Actual service demand reflects the need for resources and needed staffing and deployment of apparatus and medic units. Communities with higher assessed values tend to have more commercial and residential properties that require more comprehensive fire protection although communities with a high number of residents in the lower socioeconomic range tend to have a higher demand for EMS.

# Step Four—Decide on Legal Consolidation

Based on the experience during the collaborative processes and any identified issues, the leadership will need to decide whether to pursue legal consolidation.

The Planning Committee should determine which, if any, constraints to consolidation could be addressed effectively. At this point, the Committee should complete the remaining planning processes necessary to implement consolidation.

# **Public Input**

It will be important for the Planning Committee and fire district Boards of Commissioners to provide opportunities for public input on consolidation. This can be accomplished through public hearings, public meetings, and other similar venues.



### Step Five—Implement the Consolidation Process

At this point, the fire districts should be in a position to begin and implement legal consolidation of the three fire protection districts in accordance with State of Idaho Statutes 31-1413 and 31-1414.

#### Step Six—Begin Operations

By now, the three fire protection districts should nearly be operating as a single organization. Complete any remaining administrative, staffing, logistics, or other steps necessary to become fully operational.



# **PROJECTED FINANCIAL IMPACTS**

The next section describes estimated and forecasted costs and financial impacts concerning the implementation and ongoing operation of a single consolidated fire protection district. It is important to note that, in doing these studies, ESCI takes a conservative approach when considering the financial impacts. Therefore, the costs presented here would likely be lower than shown. During the planning process, the participants will probably be able to identify current unnecessary costs that would result in a reduction of expenditures.

# **Employee Wages & Benefits**

For this study, ESCI made certain assumptions on employee wages and benefits to forecast the potential costs of a consolidated fire district. It must be emphasized that the dollar amounts used are by no means final, nor do they entail ESCI's recommendations for

wages. Ultimately, this will need to be determined by the leadership of the jurisdictions following negotiation with the employees and the bargaining unit. However, should consolidation occur, ESCI recommends that no employees be given a reduction in wages and/or benefits when transferred to the new organization.

Importantly, the wages and benefits listed in this report are by **no** means final, and are based on assumptions and estimates only for the purpose of forecasting the potential costs of a future consolidated organization.

# **Uniformed Career Personnel Benefits**

The following figure is a list of recommended benefits that represent a conglomeration of the various benefits found among each of the three agencies. In some cases, employees would see an increase in their benefits, while others will remain unchanged.



| Benefit Description       | Consolidated District |  |
|---------------------------|-----------------------|--|
| Uniform Allowance         | No                    |  |
| Educational Incentives    | Yes                   |  |
| Social Security           | Yes                   |  |
| Workers Compensation      | Yes                   |  |
| Pension                   | Yes                   |  |
| Deferred Compensation     | No                    |  |
| Medical, Dental, Vision   | Yes                   |  |
| Short-term Disability     | Yes                   |  |
| Life Insurance            | Yes                   |  |
| Survivor Income Benefit   | No                    |  |
| Additional Life Insurance | Employee purchase     |  |

### Figure 164: Proposed Benefits for Career Uniformed Personnel

# Non-Uniformed Staff Benefits

Administrative support staff (non-uniformed) should retain the same benefits they receive in their current positions within their respective fire districts.

# **Estimated Personnel Wages & Benefits**

The following figures represent the estimated cost of employee wages and benefits as well as the compensation rates for volunteers and residents. As mentioned previously, the minimum staffing includes four additional Firefighter/EMTs. Although this would not necessarily require adding four new employees, ESCI has taken the conservative approach in the next figure, to estimate a higher amount. Depending on the use of part-time personnel, volunteers, or overtime, the costs could potentially be lower.



| Staff Positions                     | FTE         | Annual<br>Base Salary | Estimated<br>Annual Benefits <sup>A</sup> | TOTAL COST  |
|-------------------------------------|-------------|-----------------------|---|-------------|
| Fire Chief                          | 1           | \$104,500             | \$44,935                                  | \$149,435   |
| Deputy Chief                        | 2           | \$99,750              | \$43,892                                  | \$287,284   |
| Battalion Chief                     | 3           | \$95,000              | \$40,850                                  | \$407,550   |
| Captain-Operations                  | 7           | \$85,536              | \$36,780                                  | \$856,212   |
| Firefighter/Paramedic               | 12          | \$73,746              | \$31,711                                  | \$1,265,484 |
| Firefighter/EMT                     | 18          | \$64,272              | \$27,637                                  | \$1,564,362 |
| Office Manager                      | 1           | \$63,000              | \$27,090                                  | \$90,090    |
| EMS Billing Clerk                   | 1           | \$59,000              | \$25,370                                  | \$84,370    |
| Minimum Staff Totals:               | 45          | \$3,351,600           | \$1,443,187                               | \$4,794,787 |
| Peak-Demand Unit & Fut              | ure Positio | ns                    |   |             |
| Firefighter/Paramedics <sup>B</sup> | 2           | \$73,746              | \$31,711                                  | \$210,914   |
| Future Captains <sup>c</sup>        | 3           | \$85,536              | \$36,780                                  | \$366,948   |
| Subtotals:                          | 5           | \$404,100             | \$173,762                                 | \$577,862   |
| Grand Totals:                       | 50          | \$3,755,700           | \$1,616,949                               | \$5,372,649 |

Figure 165: Projected Career Personnel Wages & Benefits

<sup>A</sup>Benefits calculated using average among the districts—43% of wages. Amounts are per/position cost.

<sup>B</sup>Two Firefighter/Paramedics assigned to the peak-demand unit.

<sup>C</sup>Salary plus 4% administrative premium pay.

To reiterate, the wage and benefit amounts listed in the preceding figure are not final and are utilized only for the purpose of developing conservative estimates of employee costs in a consolidated fire district. The total operations positions (Captain, Firefighter/Paramedic, Firefighter/EMT) were calculated using the following formula:

- 1.22 Staffing Relief Factor x 1 position x 3 = 3.66 personnel per position (rounded down to 3.5)
- 3.5 personnel per position x 12 positions daily = 42 total personnel needed
- 42 ÷ 3 shifts = 14 personnel assigned per shift

Routine daily staffing would be to staff each shift with two Firefighter/Paramedics, one Captain, and two Firefighter/EMTs.

Next, ESCI recommends assigning two Firefighter/Paramedics on each shift at Stations 1, 2, and 3. This would allow for Firefighter/Paramedic leave-time usage without having to hire back a full-time Firefighter/Paramedic on overtime, or use a part-time person. It would also allow flexibility to send two Firefighter/Paramedics on a high-acuity ambulance transport when indicated.

Creating a pay schedule for part-time and volunteer personnel is a challenge, as each district uses different pay categories, methodologies, and pay rates. ESCI evaluated these parameters, and in most cases, applied the highest hourly pay. For simplicity, in the next figure, the following rates were utilized.

| Staff Positions                 | Pay Rate                 |  |
|---------------------------------|--------------------------|--|
| Part-Time Firefighter           | \$12/hour                |  |
| Part-Time Firefighter/EMT       | \$12/hour                |  |
| Part-Time Firefighter/Paramedic | \$18/hour                |  |
| Part-Time EMT                   | \$12/hour                |  |
| Part-Time Paramedic             | \$18/hour                |  |
| Volunteer Paramedic             | \$18/hour                |  |
| On-Call                         | \$7/hour                 |  |
| On-Call (holiday)               | \$8/hour                 |  |
| Pay-per-Run (volunteer)         | \$16/call                |  |
| Shift Replacement               | Hourly rate <sup>A</sup> |  |

### Figure 166: Projected Part-Time & Volunteer Pay Rates

<sup>A</sup>Hourly rate of replacement position.

Part-time wages were based on the current MFPD pay rates. DRFPD is the only district that applies a lump-sum "On-Call" pay in various categories. ESCI calculated the hourly rates of pay for each of these categories, and averaged them to establish a generic on-call hourly pay rate. In addition, this pay was increased slightly for being on call during holidays.



Due to the unknowns related to how these positions would be used to backfill for vacancies, or deployed during times of peak service demand across a consolidated organization, calculating the total potential annual costs of this proposed pay schedule is not possible. Establishing an accurate volunteer/part-time employee expenditure budget will likely be based on the first-year personnel expenditure budget after deployment changes are implemented. Determining the use of part-time and volunteer personnel in augmenting and backfilling daily staffing should be given high priority during the implementation planning process.

# Projected Revenue & Expenditures for a Consolidated District

ESCI created an example consolidated district 2021–2025 budget based on MFPD's current levy rates (projected to be \$.0009471 in 2021). In turn, these rates are based on linear forecasts of MFPD's assessed value and levy. However, it is ultimately up to the new district commissioners and citizens to set and approve a new levy rate, as outlined in the following Idaho Code 31-1423(2)(b):

(2)(b) Provided however, that if the higher levy rate provided for in subsection (2)(a) of this section exceeds the lowest levy rate of any of the districts to be consolidated by more than three percent (3%), the commissioners of the districts consolidating shall recommend, by a majority of the commissioners of each district involved, at a public hearing where a quorum of each district board is present, a levy rate that falls between the highest levy rate and the lowest levy rate (emphasis added). In determining such recommended levy rate, the commissioners shall recommend a levy rate that shall be sufficient to defray the cost of equipping and maintaining the new consolidated district. If such recommended levy rate exceeds by more than three percent (3%) the lowest current district levy rate of any of the districts to be consolidated, an election shall be held in a manner consistent with the provisions of section 31-1414, Idaho Code. In such election, the electors residing in the fire protection districts seeking to consolidate shall vote to approve or disapprove the recommended levy rate and the proposed consolidation of districts. The question put to the electors shall be the same or similar to the question provided for in section 31-1414, Idaho Code, except that the question shall include, in addition to the language described in section 31-1414, Idaho Code, a reference to the recommended levy rate provided for in this section and a reference to the percentage change of such recommended levy rate from the levy rate in existence in each district in the immediately preceding year.

The difference in the levy rates among the three districts is well over 3% and would require setting a levy rate somewhere between the lowest (CRFPD) and highest (MFPD) current levy rates.



The example forecasted levy is about \$150,000 higher than the total of the three individual levies. Other revenues (grants, charges for services, miscellaneous) are totals of the projected revenues of each individual district, as depicted in the financial section of this report.

To ensure break-even financials over the first five years, as summarized in the following figure, ESCI also assumes an increase of 14.2% to the above property tax rate, for a total rate of .001081 in the year 2021. This results in a 2025 projected ending balance that equals the 2021 projected beginning balance.

Data on salaries and benefits across the districts is somewhat scarce, and inflationary pressures for a unified district are hard to estimate. We note that over the past 6 years, the combined salaries and wages of the districts have averaged a 7.8% annual increase (the increase caused by increased staffing is unknown, but we assume this caused a significant part of the increase). ESCI projected annual salary and benefits increase to a total of 3.5% across the board.

Note that the peak-demand unit and future Captain positions are not included in the following figure, but all 18 firefighter/EMTs are. Other expenses (Operations, Equipment, Capital) are totals of the projected costs of each district, as depicted in the financial section of this report.

It should be noted that the projected wages and benefits in Figure 165 (\$4,794,787), which are used in the following figure, are about \$1.1 million higher than the total of all the projected wages and benefits of the individual districts (\$3,688,546). Without the additional property tax discussed above, this would result in a deficit in our projections, and that it may be possible to run a unified district with surplus revenues.



#### Figure 167: Projected Recurring Revenue & Expenses in a Consolidation (2021–2025)

| Description               | 2021                      | 2022                        | 2023        | 2024        | 2025                        |  |  |  |
|---------------------------|---------------------------|-----------------------------|-------------|-------------|-----------------------------|--|--|--|
| Beginning Balance         | \$4,180,791               | \$4,139,466                 | \$3,994,515 | \$3,725,129 | \$3,308,641                 |  |  |  |
| Recurring Revenue Source  | Recurring Revenue Sources |                             |             |             |                             |  |  |  |
| Property Taxes            | \$3,728,352               | \$3,830,163                 | \$3,932,963 | \$4,036,607 | \$4,140,976                 |  |  |  |
| Intergov'l Rev/Grants     | \$315,383                 | \$315,383                   | \$315,383   | \$315,383   | \$315,383                   |  |  |  |
| Charges for Services      | \$1,760,613               | \$1,878,186                 | \$1,995,758 | \$2,113,331 | \$2,230,904                 |  |  |  |
| Miscellaneous/Other       | \$104,494                 | \$104,494                   | \$104,494   | \$104,494   | \$104,494                   |  |  |  |
| Total Revenue:            | \$5,908,841               | \$6,128,225                 | \$6,348,598 | \$6,569,814 | \$6,791,756                 |  |  |  |
| <b>Recurring Expenses</b> |                           |                             |             |             |                             |  |  |  |
| Salaries & Benefits       | \$4,794,787               | \$5,086,311                 | \$5,398,401 | \$5,732,698 | \$6,121,557                 |  |  |  |
| Operations and Maint.     | \$591,847                 | \$612,961                   | \$634,546   | \$656,620   | \$679,203                   |  |  |  |
| Equipment                 | \$175,101                 | \$186,430                   | \$198,520   | \$211,423   | \$225,196                   |  |  |  |
| Capital/Debt/Other        | \$388,431                 | \$387,474                   | \$386,517   | \$385,560   | \$384,604                   |  |  |  |
| Total Expenses:           | \$5,950,166               | \$6,273,176                 | \$6,617,984 | \$6,986,301 | \$7,410,560                 |  |  |  |
| Net Income (Deficit):     | (\$41,325)                | <b>(</b> \$144,951 <b>)</b> | (\$269,386) | (\$416,488) | <b>(</b> \$618,80 <b>4)</b> |  |  |  |
| Ending Balance            | \$4,139,466               | \$3,994,515                 | \$3,725,129 | \$3,308,641 | \$2,689,837                 |  |  |  |

As previously noted, the amounts of Property Taxes and Salaries & Benefits above are not the same as the totals from the existing districts. Figure 168 shows what the equation would look like if we simply summed up all the existing revenues and expenses.

| Figure 168: Combined Total Forecasted Revenue | & Expenses (2021–2025) |
|---|------------------------|
|---|------------------------|

| Description           | 2021        | 2022        | 2023        | 2024        | 2025        |
|-----------------------|-------------|-------------|-------------|-------------|-------------|
| Total Revenue:        | \$5,333,737 | \$5,608,228 | \$5,882,752 | \$6,157,311 | \$6,431,903 |
| Total Expenses:       | \$4,910,679 | \$5,153,784 | \$5,398,121 | \$5,643,761 | \$5,890,780 |
| Net Income (Deficit): | \$423,058   | \$454,443   | \$484,631   | \$513,549   | \$541,123   |



# **CONCLUSION**

The preceding observations and recommendations are the culmination of ESCI's detailed objective analysis of the districts' administrations, support services, and emergency operations performance, primarily related to the provision of emergency medical services.

Given the small, rural nature of the districts, ESCI believes they would benefit from increased collaboration, up to and including full legal consolidation. Doing so will take a long-term commitment from each district's leadership, and a true desire to want to do what is best for the residents and visitors in the region.

ESCI was impressed with the level of professionalism and dedication of each district's leadership and elected officials. This dedication should be leveraged to ensure that the region has enough resources to meet the projected increased demand for services well into the future. Our company stands ready to assist the districts' future collaborative planning efforts if desired, as we believe our recommendations and approach are in the best interests of your respective communities.



# **Section III: APPENDICES**



# **APPENDIX A: RESULTS OF THE ONLINE SURVEY**

A total of 55 respondents completed the survey.

Question #1: "I am currently employed or affiliated with one of the following (if you are affiliated with more than one, select the one in which you spend most of your time)."

| Organization             | Responses | Percent Total <sup>1</sup> |
|--------------------------|-----------|----------------------------|
| Cascade RFPD             | 16        | 29%                        |
| Donnelly RFPD            | 16        | 29%                        |
| McCall FPD               | 21        | 38%                        |
| Valley County Government | 1         | 2%                         |
| Other                    | 1         | 2%                         |

<sup>1</sup>Rounded to the nearest integer.

Question #2: "If you are assigned to an emergency operations position in one of the three fire districts, what is your current level of EMS certification?

| Organization                      | Responses | Percent Total <sup>1</sup> |
|-----------------------------------|-----------|----------------------------|
| Emergency Medical Responder (EMR) | 2         | 4%                         |
| Emergency Medical Technician      | 13        | 24%                        |
| Advanced EMT                      | 11        | 20%                        |
| Paramedic                         | 19        | 35%                        |
| Other                             | 3         | 5%                         |
| None of the above                 | 7         | 13%                        |

<sup>1</sup>Rounded to the nearest integer.



Question #3: "My current position with one of the fire districts involved in this study is:"

| Organization   | Responses | Percent Total <sup>1</sup> |
|--|-----------|----------------------------|
| Career firefighter                                     | 13        | 24%                        |
| Volunteer or paid-on-call firefighter                  | 21        | 38%                        |
| Career officer (Captain or Lt.)                        | 8         | 15%                        |
| Volunteer or paid-on-call officer (Captain or Lt.)     | 2         | 4%                         |
| Career officer (above Captain rank)                    | 3         | 4%                         |
| Volunteer or paid-on-call officer (above Captain rank) | 0         | 0%                         |
| Other non-uniformed support position (fleet, etc.)     | 0         | 0%                         |
| Non-uniformed administrative support staff             | 2         | 4%                         |
| Appointed or elected official                          | 4         | 7%                         |
| Other  | ]         | 2%                         |

<sup>1</sup>Rounded to the nearest integer.

Question #4: "If you are assigned to emergency operations at one of the three fire districts, what EMS-related functions do you typically perform?"

| EMS Role                                | Responses | Percent Total <sup>1</sup> |
|---|-----------|----------------------------|
| Medical first-response (MFR) only       | 0         | 0%                         |
| EMS transport on an ambulance only      | 2         | 4%                         |
| Both MFR and transport                  | 4         | 7%                         |
| Rescue and extrication only             | 2         | 4%                         |
| MFR, transport, rescue, and extrication | 38        | <b>69</b> %                |
| None of the above                       | 8         | 15%                        |

<sup>1</sup>Rounded to the nearest integer.



Question #5: "My opinion of a possible 'consolidation' into a single district of two or three of the fire districts involved in this study is:"

| Respondent Opinion                                 | Responses | Percent Total <sup>1</sup> |
|--|-----------|----------------------------|
| FAVOR (depending on configuration) <sup>2</sup>    | 28        | 55%                        |
| AGAINST (regardless of configuration) <sup>2</sup> | 14        | 27%                        |
| No opinion   | 9         | 18%                        |

<sup>1</sup> Rounded to the nearest integer

<sup>2</sup> Includes individuals not directly employed or affiliated with any of the fire agencies

The details of the results of Question #6 have been described previously at the end of the "Personnel Staffing & Management" section of this report.



# **APPENDIX B: FACTORS TO CONSIDER IN A CONSOLIDATION**

# **Motivating Factors**

When organizations were asked to list reasons for undertaking a strategic restructuring (consolidation), respondents most often cited internal decisions to increase the effectiveness and/or efficiency of their organization.<sup>36</sup> Notwithstanding the tax limitation issues facing many communities, most perceive that they undertook strategic restructuring to improve the quality or range of service.

The least mentioned reasons for restructuring were funding issues; but not surprisingly, when funding was judged as a motivator, those involved in the development of an intergovernmental alliance were less likely to mention it than those organizations undertaking complete consolidation.<sup>37</sup> Collaboration is less threatening than consolidation to an organization's autonomy. The recognition of imminent financial problems can cause some to take a greater organizational risk.

Fire departments sometimes tend to consider the options of collaboration and consolidation when the agencies experience certain events. This may be due to a sudden interruption of the status quo, such as the loss of key leadership, a financial crisis, a rapid change in the community, or a substantial increase in service demand—any or all of which can compel significant change.

Other times, forward-thinking policymakers and/or fire department leaders may champion the idea. Frequently, these same leaders work against their own self-interest, especially in promoting consolidation. Last, the political or operational climate in which the fire department operates may dictate a change in the way it does business.

# **Success Factors**

The success of a fire district consolidation depends on many factors. In ESCI's experience with dozens of consolidations and cooperative agreements, credible leadership is the single most important factor that most frequently determines success. Nearly always, a credible key staff or board member champions the concept, garnering the support of the various affected groups (political, labor, employees, and community). In addition, good leadership fosters an organizational culture receptive to planning, calculated risk-taking, and flexibility.



The way leaders promote a trusting relationship between all groups and enable respectful and meaningful dialogue between them proves essential. For example, research by Kohm, Piana, and Gowdy identified five factors that most often tend to contribute to the successful implementation of a collaboration or consolidation.<sup>38</sup> These include:

- Leadership that believes strongly in the collaborative partnership and demonstrates this belief—often by acting selflessly to maintain it.
- Multiple forms of communication to keep all persons (employees, elected and appointed officials, and community members) up to date about plans, problems, and benefits concerning the partnership.
- Consistent face-to-face communications with the collaborative partners in the form of meetings, training, and other forums to build trust and understanding among staff.
- Flexibility through an expectation that even in the best-planned collaborative partnerships, unforeseen issues will arise, mistakes will be made, and alternative paths will be identified.
- **Early evidence of the potential benefits**, in order to assure everyone that they are on the right track—such as better service, lower costs, and improved efficiencies.

# **Cultural Complications**

Fire department collaborations or consolidations may fail for many reasons. Sometimes legal constraints prohibit the concept from the outset. Other times, the proposal may be doomed by the unfavorable outcome of a public election or the reality of financial constraints. Finally, disagreements over control or poor communication can doom the effort.

During the ESCI phone interviews with the internal stakeholders, differing organizational cultures and community characteristics were common themes expressed that would likely jeopardize significant collaborative efforts, especially operational collaboration and legal consolidation between the three districts.

Fire departments inherently create their own unique cultures. The paramilitary structure, the reliance on teamwork, and the hazards faced in the workplace build strong bonds between the members, who tend to share group behaviors, assumptions, beliefs, and values. Bringing two or more groups together with cultures formed through different experiences always results in a change to organizational cultures. For new partnerships to be successful, a new culture will morph from the old cultures.



Often, consolidation planners underestimate powerful culture intangibles and decide to force change, instead of allowing new cultures to be created naturally as firefighters, officers, and employees bring their cultural values into the new organization. This process can be helped by enabling personnel to help create a new identity for the new organization, including but not limited to creating a new district name, changing uniforms, creating new patches, logos, and other department identifiers. At the same time, previous traditions and organizational identifiers must also be recognized and honored.

In any future planning effort that includes operational consolidation/collaboration and subsequent legal consolidation, leaders from each district should support efforts that enable the creation of a new organizational identity, while also honoring and preserving each district's tradition and positive values.

# **Other Potential Complications**

Fire department/district collaborations or consolidations may fail for many reasons. Sometimes legal constraints prohibit the concept at the outset. Other times, the proposal

may be doomed by the unfavorable outcome of a public election or the reality of finance. Aside from these issues, four major pitfalls may cause even the most feasible collaboration or consolidation to fail. Specifically, these are command, communication, control, and culture.

# Command

Undertaking any partnership absolutely requires a demonstration of consistent, courageous, and

Even in the bestplanned collaborative efforts, unforeseen issues may arise, errors made, and alternative paths identified.

effective leadership at all levels. Policymakers and leaders must guide their respective fire districts, yet (at the same time) must cooperate with the other organizations. Ineffective or perceived selfish leadership styles may tend to cause passive resistance at best, and open conflict at worst. Problems with sharing control and making decisions send the wrong message to the firefighters and employees of the organizations—which can lead to an unraveling of even the best proposal.



# Communication

Silence or limited information from leaders about potential or upcoming collaborative efforts breeds fear, mistrust, and misinformation among affected persons. The leadership of collaborating organizations must agree to communicate actively with all affected groups. Everyone must be provided with the same information at the same time. Most importantly, leaders must demonstrate two-way communication skills by carefully listening to, considering, and strategically acting on the concerns of the affected parties.

As described earlier in this report, ESCI conducted an online survey and invited all career and volunteer personnel from each of the fire districts, support staff, and appointed and elected officials to participate. It was evident from the comments that there were misconceptions among some of the respondents—although the majority (55%) favored consolidation.

# Control

Frequently, the collaborative or consolidation process is compared to a marriage. As the saying goes, "Marriage is when two people become as one; the trouble starts when they try to decide which one." As in marriage, consolidation often fails because of organizational or personal ego issues.

The tenets of leadership require that someone be in charge, but in the interest of the greater good, some of those in leadership positions must agree to yield power. Some who are used to operating in a position of control may have trouble adjusting to new roles that require more collaboration. Personal sacrifice in the interest of community good may not always win out.

# Culture

There tend to be two schools of thought regarding organizational culture. The first camp views culture as implicit in social life, naturally emerging as individuals transform themselves into social groups (tribes, organizations, communities, and nations). The second camp offers that culture is comprised of distinct observable forms (language, use of symbols, customs, methods of problem-solving, and design of work settings) that people create and use to confront the broader social environment. This second view is most widely used in the evaluation and management of organizational culture. But, the first is no less important when considering bringing three distinct organizations into a closer relationship.



The general characteristics of a fire district encourage the creation of a culture unique to that organization. The paramilitary structure, the reliance on teamwork, and the hazards of the work build strong bonds between the members, who tend to share group behaviors, assumptions, beliefs, and values. Bringing three such groups together with cultures formed through different experiences always results in a change to their respective organizational cultures. If the partnership is successful, no one culture will overcome the other-instead, a new culture will evolve from the three. If the organizational cultures are incompatible—the partnership will likely fail.

Often, the planners of consolidations forget about the intangibles found in the individual cultures of the affected organizations. Leaders must be aware of the importance of these and their role in the wellness of the agency's soul. Attempting to eliminate those cultures in order to create a new "culture" cannot only prevent the creation of a new organization, but may also disrupt or destroy the positive attributes and morale.

New cultures will tend to be created naturally as firefighters, officers, and employees merge their former cultures into a new culture. A new department name, new uniforms, new patches and logo, and other organizational identifiers can contribute to the transition to a new culture. However, previous traditions and organizational identifiers must also be recognized and honored.

# **Historical Recognition**

Should consolidation eventually occur, the histories of each of the three fire districts must continue to be recognized and valued. Historical photos, trophies, certificates of recognition, antique fire equipment, and other related paraphernalia from each of the fire agencies should be preserved and displayed prominently.

# Other Potential Complications

In addition to the potential issues described previously, in his article in Fire Engineering, Murphy lists other elements that should be considered:39

- People (employees)
- Money
- Politics

It is important not to allow a small setback or period of adversity to derail the momentum for a positive change.



### People (Employees & Volunteers)

Culture and communication are closely related to this element. Effective leaders recognize that the most important resource in their organization is their people. A consolidation that results in reductions in salaries and/or benefits of any employees would only produce disgruntled and discontented staff members, and should be avoided. ESCI considered this when proposing specific positions and salaries in a new organization.

The firefighters, volunteers, and employees of each of the fire districts have a degree of responsibility towards making a consolidation successful. Without a doubt, there will be differences in culture, operational methods, and training among the firefighters and company officers of each of the organizations. It will be important for members to recognize that change is inevitable and that they must begin to develop an attitude of mutual respect.

Firefighters are stronger together than divided. By working together as a group, as well as providing constructive suggestions to management, the potential for a successful consolidation is much greater.

Because many changes can take place in the event of consolidation, every effort should be made to ensure that employees (in all positions) are not adversely affected. During the consolidation process, the planners should work diligently to transfer all employees to similar or better positions within the new organization. In some cases, it may be necessary to "grandfather" a few employees who do not meet the job standards of the new organization. It has been ESCI's experience that requiring these individuals to work towards attaining the standard will suffice in the long term.

### Money

A common misconception is that a merger will produce major cost savings to the individual jurisdictions. Often, this is not reality. The real objective of a consolidation is to create and achieve improved efficiencies in the delivery of emergency services. Efficiencies can also be found in leaner and less top-heavy leadership, increased purchasing power, consolidation of stations, larger sources of revenue, and the ability to pass bonds and levies successfully.

Certainly, there may be methods to lower costs by reducing overhead; eliminating certain redundancies; merging certain administrative, support, and operational functions; and other potential cost-saving methods. However, the primary impetus for consolidation should not be the desire to generate major reductions in costs.



### **Politics**

Not surprisingly, local politics can be a significant obstacle in collaborative or consolidation efforts. Political issues can occur at all levels, from volunteer and career firefighters to the elected officials of each of the jurisdictions. In order to achieve success, the following (and other) political questions must be addressed prior to moving forward with a full consolidation:

- Who will be the political/elected leaders in the new organization?
- How will each of the jurisdictions be represented?
- Will it be necessary to hold a vote of the taxpayers?
- As mentioned previously, who will be the Fire Chief? •
- Why is my jurisdiction paying more than the partner agencies? •



# **APPENDIX C: PLANNING GROUPS & COMMITTEES**

The process of considering and implementing any of the recommendations starts first with a shared vision by the policymakers of the participating agencies. From this vision, goals, and objectives can be identified, which, if accomplished, propel the agencies toward the vision. This process is the framework of a strategic plan for the creation of consolidated fire protection district.

The process flowchart begins with the policymakers convening a series of meetings to discuss and develop a shared vision of the fire districts. Key external stakeholders may be invited into the process to lend their expertise and perspective, ensuring that the communities are represented in these important deliberations. Often, internal stakeholders have difficulty with "possibilities thinking" because of their close association with the status quo, which is human nature. The external stakeholders add valuable perspectives by asking key questions and challenging the status quo.

# Establish Implementation Working Groups

Various Implementation Working Groups (IWG) should be established by the Planning Committee and charged with the responsibility of performing the necessary detailed work involved in analyzing and weighing critical issues and identifying specific tasks. Membership for IWGs should be identified as part of that process, as well. The adjacent figure is a flowchart that outlines a process whereby these strategies can be further refined, other critical issues



Figure 169: Planning Process

identified, timelines assigned, and specific tasks developed and implemented.

The following are key recommended working groups used in collaborative processes, and a description of some of their primary assigned functions and responsibilities. The actual number and titles of the working groups will vary depending on the type and complexity of the strategies pursued. These are recommendations and can be adjusted accordingly.



### Governance Working Group

This group will be assigned to examine and evaluate various governance options for the consolidated fire district. A recommendation and the proposed process steps will be provided back to the Planning Committee. Once approved, this working group is typically assigned the task of shepherding the governance establishment through to completion. The membership of this group typically involves one or more elected officials and senior management from each fire district. Equality of representation is important.

# Administration Working Group

Working in partnership with the Governance Working Group, this group will study the administrative and legal aspects concerning the final leadership composition (Governing Board) of the consolidated fire district. Where necessary, this group will oversee the preparation and presentation of policy actions such as proposed ordinances, joint resolutions, dissolutions, and needed legislation to the policymakers. The membership of this group typically involves senior management staff from the entities involved and may also include legal counsel.

# Logistics/Support Services Working Group

This group will be responsible for any required blending of capital assets, disposition of surplus equipment and vehicles, upgrades necessary to accommodate operational changes, and the preparation for ongoing administration and logistics of the cooperative effort. The membership of this group typically involves mid-level fire district management, administrative, and support staff. Where involved, support functions such as maintenance or fire prevention may also be represented.

# **Operations Working Group**

This group will be responsible for an extensive amount of work and may need to establish multiple sub-groups to accommodate its workload. It will work out the details necessary to make operational changes required by the strategy, using the recommendations contained in this study as a basic guideline. This involves a detailed analysis of assets, processes, procedures, service delivery methods, deployment, and operational staffing. Detailed integration plans, steps, and timelines will be developed. The group will appoint and coordinate closely with a Logistics/Support Services Working Group. The membership of this group typically involves senior management, mid-level officers, training staff, volunteer leadership, and labor representatives. This list often expands with the complexity of the services provided by the agencies.



### Finance Working Group

This group will be assigned to review the financial projections contained in the ESCI study and complete any refinements or updating, as necessary. The group will look at all possible funding mechanisms and will work in partnership with the Governance Working Group to determine the impact on local revenue sources and options. Where revenue is to be determined by formula rather than a property tax rate, such as in a contractual cooperative venture, this group will evaluate various formula components and model the outcomes, resulting in recommendations for a final funding methodology and cost distribution formula. The membership of this group typically involves senior financial managers and staff analysts, and may also include representatives from the agencies' administrative staffs.

### Labor Working Group

This group will have the responsibility, where necessary, for blending the workforces involved. This often includes the analysis of differences between collective bargaining agreements (which may not be applicable in Valley County), shift schedules, policies, and working conditions. Often, once the policymakers articulate the future vision, labor representatives are willing to step up and work together as a team to identify the challenges presented by the blending of employees and volunteers from various fire districts. The membership of this group typically involves labor representatives, career and volunteer firefighters, senior management, and legal counsel (if needed).

### **Communication Working Group**

This is one of the most important groups and will be charged with developing an internal and external communication policy and procedure to ensure consistent, reliable, and timely distribution of information related exclusively to the cooperative efforts.

The group will develop public information releases to the media and will select one or more spokespersons to represent the communities in their communication with the public on this process. The importance of speaking with a common voice and theme-both internally and externally—cannot be overemphasized. Fear of change can be a strong force in motivating a group of people to oppose that which they do not clearly understand. A wellinformed workforce and public will reduce conflict. The membership of the group typically involves public information officers and senior management.



# Meet, Refine, & Address the Challenges

Once the working groups are established, they will set their meeting schedules and begin their various responsibilities and assignments. It will be important to maintain organized communications up and down the chain of command. The working group chairs should also report regularly to the Planning Committee. When new challenges, issues, impediments, or opportunities are identified by the working groups, this needs to be communicated to the Planning Committee immediately, so that the information can be coordinated with the findings and processes of the other working groups. Where necessary, representatives of the Planning Committee and a working group chairperson can meet with the policymakers to discuss significant issues requiring a refinement of the original joint vision.

The process is continual as the objectives of the implementation plan are accomplished one by one. When specific objectives have been met, the Planning Committee can declare various goals as having been accomplished, subject to implementation approval by the policymakers. This formal turning over will mark the point at which implementation ends and integration of the agencies—to whatever extent has been recommended begins.



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# **APPENDIX E: REFERENCES**

<sup>1</sup> American Community Survey, United States Census Bureau (2018).

<sup>2</sup> American Community Survey, United States Census Bureau (2017).

<sup>3</sup> QuickFacts, United States Census Bureau.

<sup>4</sup> Ibid.

<sup>5</sup> Ibid.

<sup>6</sup> QuickFacts, United States Census Bureau.

<sup>7</sup> lbid.

<sup>8</sup> Sperling's Best Places (website).

<sup>9</sup> Ibid.

<sup>10</sup> Idaho Statesman. "Tourism: Idaho's Third-Largest Industry." May 28, 2016.

<sup>11</sup> Valley County. State of Idaho Official Site.

<sup>12</sup> Cascade Rural Fire District.

<sup>13</sup> Idaho Office of Healthcare Policy Initiatives.

<sup>14</sup> Respiratory Protection Standard 29 CFR 1910.134; Occupational Health & Safety Administration.

<sup>15</sup> NFPA 1710: Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, to the Public by Career Fire Departments.

<sup>16</sup> NFPA 1720: Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Volunteer Fire Departments.

<sup>17</sup> Recommendations for Improving the Recruiting and Hiring of Los Angeles Firefighters, Rand Corporation, 2015.

<sup>18</sup> Emergency Duties and Deaths from Heart Disease among Firefighters in the United States, New England Journal of Medicine, March 2007; 356:1207-1215.

<sup>19</sup> Findings from a study of cancer among U.S. Firefighters, National Institute of Occupational Safety & Health, July 2016.



<sup>20</sup> NFPA 1582: Standard on Comprehensive Occupational Medical Program for Fire Departments.

<sup>21</sup> ESCI Used Dispatch CAD records for 2014–2015 and RMS Firehouse data for 2016–2019. A linear forecast was then used to project call data through 2025.

<sup>22</sup> Amount may include other fee revenue; sufficient data unavailable.

<sup>23</sup> ESCI Used Dispatch CAD records for 2014–2015 and RMS Firehouse data for 2016–2019. A linear forecast was then used to project call data through 2025.

<sup>24</sup> ESCI Used Dispatch CAD records for 2014–2015 and RMS Firehouse data for 2016–2019. A linear forecast was then used to project call data through 2025.

<sup>25</sup> "Inappropriate Payments & Questionable Billing for Medicare Part B Ambulance Transports." U.S. Department of Health & Human Services, Office of the Inspector General (September 2015).

<sup>26</sup> "OIG Compliance Program Guidance for Ambulance Suppliers." Federal Register, Vol. 68, No. 56; March 24, 2003.

<sup>27</sup> NFPA 1901: Standard for Automotive Fire Apparatus; Section D.3.

<sup>28</sup> Valley County Emergency 911 Center CAD Records.

<sup>29</sup>NFPA 1710: Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, & Special Operations to the Public by Career Fire Departments; & the Commission on Fire Accreditation (CFAI) Standards of Cover, 6th Edition.

<sup>30</sup> How Busy Is Busy? Fire Engineering.

<sup>31</sup> Ibid.

<sup>32</sup> USADATA, Inc.

<sup>33</sup> The upper end of I-84 was chosen as a cutoff based on the fact that the average life spans currently for all persons is 19 years over 65 per the CDC National Center for Health Statistics website.

<sup>34</sup> Idaho Title 31—Counties and County Law, Chapter 14—Fire Protection Districts, Sections 31-1413 and 31-1414 (2018).



<sup>35</sup> Idaho Title 67—State Government and State Affairs, Chapter 23—Miscellaneous Provisions, Section 67-2328 Joint Powers of Exercise.

<sup>36</sup> Amelia Kohm, David La Piana, and Heather Gowdy, "Strategic Restructuring, Findings from a Study of Integrations and Alliances Among Nonprofit Social Service and Cultural Organizations in the United States." Chapin Hall, June 2000, page 15.

37 Ibid

38 Ibid

<sup>39</sup> Murphy JK, "Fire Department Mergers, Consolidations, and Annexations." Fire Engineering; 9-04-14.

