

*Buena Vista and Salida Fire Departments,
Chaffee County and South Arkansas Fire Protection
Districts, and Chaffee County EMS
Colorado*

Agency Evaluation and Feasibility Study

July 2012



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**Buena Vista and Salida Fire Departments,
Chaffee County and South Arkansas Fire Protection Districts,
and
Chaffee County EMS, CO**

Agency Evaluation and Feasibility Study

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Executive Summary

Emergency Services Consulting International (ESCI) was engaged by the Buena Vista and Salida Fire Departments, the Chaffee County and South Arkansas Fire Protection Districts, and Chaffee County EMS to evaluate the feasibility of more efficient cooperation between and among the agencies, up to and including strategies of consolidation. This report is the culmination of that evaluation.

ESCI thanks the staff of each of the agencies for their outstanding cooperation in the preparation of this report. All involved were candid in their comments and provided an enormous amount of information.

The study took into account the critical issues facing the emergency services agencies and how such matters affect the effort to construct a model for efficient service. Those issues identified were analyzed and specific recommendations can be found in Findings and Recommendations. A compilation of agency specific recommendations are found in Appendix B: Summary Table of Recommended Actions by Agency (Current Conditions).

Evaluation of Current Conditions

An analysis of current conditions of the agencies is catalogued in seven survey tables presented in a side-by-side format for simplicity of comparison. Each of the tables provides the reader with general information about that element as well as specific observations and an analysis of any significant issues or conditions that are pertinent to the topic discussed. Observations are supported by data collected during the information gathering process, through analysis of the collected data, and from the collective emergency services experience of the ESCI project team. Current conditions also encompassed emergency service delivery and performance and fiscal analysis. This snapshot in time was the basis for developing the collaborative strategies for the participating agencies.

Survey tables include an organizational overview and an evaluation of each organization's management, governance, staffing and personnel management, service delivery and performance, training, Emergency Medical Services (EMS), capital facilities and apparatus, and fiscal health and practices. Additional discussion also addressed the areas of communications (9-1-1), emergency system interoperability, mutual and automatic aid, and incident control and management methods.

Criterion used to evaluate the agencies' operations has been developed over many years. These gauges include relevant guidelines from national accreditation criteria, the National Fire Protection Association (NFPA) standards, federal and state mandates for fire and EMS systems, recommendations by various organizations such as the Center for Public Safety Excellence (CPSE), and generally accepted best practices within the Fire and EMS industry.

Leadership

All of the participating agencies have a customer service ethic that places service above self. The leaders of the agencies are resolute in their desire to serve the community and express frustration at barriers to their perceptions of the right thing to do. Individually each agency is stretched thin in its staffing to one degree or another, as are resources and the ability to deliver the level of service they want to provide. The economy has dealt a blow to each agency, prompting this study to find greater efficiencies. ESCI believes that with the fire and EMS organizations operating independently the current structure is not sustainable long term.

Agency Comparisons

The agencies are diverse in structure and operation: two municipal fire departments, two fire districts and one county-administered EMS agency. Salida Fire Department (SFD), a municipal department of the City of Salida, is providing urban services to its constituents as well as providing contracted fire and EMS services to South Arkansas Fire Protection District (SAFPD). Buena Vista Fire Department (BVFD, the other municipal department) operates independent of Chaffee County Fire Protection District (CCFPD), although Chaffee's headquarters is located 1.25 miles away. Chaffee County EMS (CCEMS) is a county-administered ambulance service serving all of Chaffee County with two continuously staffed ambulances. Salida Fire Department provides basic and limited intermediate life support EMS with EMTs (emergency medical technician). Buena Vista FD responds to medical incidents and Chaffee County FPD is dispatched to motor vehicle accidents, coronary events, and other EMS incidents if requested.

Service Delivery

Chaffee County is a large rural county with a total area of approximately 1,013 square miles. Over 800 square miles (80 percent) of the land in Chaffee County is publically managed land controlled by federal (USFS or BLM) or state agencies.

Fire stations are generally well located to provide reasonable response time intervals throughout the County. However, the location of Buena Vista Fire Station No. 7 and Chaffee County FPD

Fire Station Nos. 1 and 15 have overlapping areas of coverage. With three fire stations located in the Town of Buena Vista, ESCI believes there are opportunities for cooperative efforts to enhance service delivery and for future cost avoidance. ESCI has recommended that a new fire station be built in Buena Vista that could meet current and future needs of a consolidated fire and EMS organization.

Contracted fire and EMS between SFD and SAFPD is operated from Fire Station No. 11. The station is staffed by SFD personnel and houses apparatus owned by both Salida Fire Department and South Arkansas Fire Protection District. Fire Station No. 4 is a CCFPD station located in the Town of Poncha Springs and serves as CCFPD's primary response station in the southern portion of the its service area. CCEMS's facility at the county fairgrounds primarily serves the area around Salida and Poncha Springs and houses EMS administration and Chaffee County Search and Rescue (SAR).

Ambulances are well located to provide EMS service to the most densely populated areas of the county within eight minutes of travel. The majority of the primary transportation routes through Chaffee County are within 20 minutes of travel of a CCEMS ALS ambulance; service demand is highest in the more densely populated areas in and around the incorporated communities and along the transportation routes.

The standard initial response for any emergency varies across the departments serving Chaffee County. ESCI modeled travel time at 6, 8, and 12-minute travel time from the current station locations. The communities of Buena Vista, Poncha Springs, and Salida are within eight minutes travel of one or more fire stations. The majority of the primary transportation routes and the adjacent developed property are within 12 minutes travel of a station.

The most frequently recorded response time in the overall study area was in the three to four-minute range. The average response time in 2011 was 7 minutes 4 seconds (07:04) with 90 percent of all emergency incidents answered in 14 minutes or less. ESCI recommends that a "closest force" response be established by all emergency response agencies to all incidents in Chaffee County without regard to political jurisdictional boundaries through an automatic aid agreement. In conjunction with closest force response ESCI recommends that the County Communications Center:

- *Transition to a run card system for each agency, accommodating the needs of each agency in a pre-programmed fashion through CAD.*
- *Auto-record all telephonic and radio transmissions and keep on file for at least 90 days.*

- *Time stamp all pre-response, response, and post response elements to the nearest whole second. Make data available to customer agencies via an automated, web-based system.*
- *Establish a User Group consisting of agency representatives to recommend standards, service adjustments, and improvements in dispatch infrastructure.*

Opportunities for Collaboration

There are six overarching strategies that address organizational structure and governance. The various partnering strategies are described, beginning with a do-nothing approach and ending with complete consolidation of the agencies into a new emergency service provider. The following alternatives were evaluated and discussed:

- Overarching Strategy A – Status Quo
- Overarching Strategy B – County-wide FA (Fire Authority) including CCEMS
- Overarching Strategy C – Merge SFD into SAFPD
- Overarching Strategy D – Merge BVFD into CCFPD
- Overarching Strategy E – IGA SFD and CCEMS
- Overarching Strategy F – CCFPD and SAFPD District Boundary Readjustment

Overarching Strategy A – Status Quo

Keeping the status quo and proceeding with only operational cooperation between the agencies has merit and would produce short-term benefits. As with any relationship that lacks long-term commitment, it is inevitable that a change in governing bodies, agency administration, financial situation, vision, or turning inward of focus will lead to a breakdown of cooperation. It is ESCI's experience that for mutual benefit of the region, development of a regional vision and an FA or IGA has a greater potential for long-term success.

Overarching Strategy B – Countywide FA (Fire Authority) including CCEMS

An FA allows the five agencies to have input on services to be provided, levels of service, budgets, and governance decisions. This strategy can provide cost avoidance in administrative, operational, and capital costs. It allows for long-term planning for facilities, apparatus, equipment, and staffing. Additional cost avoidance could be made with a reduction in the number of fire apparatus, disposal of surplus capital facilities, and reduced expenditures for maintaining and operating fewer fire stations.

Note: In this and the other strategies, there is no reduction in the number of full-time career firefighter/EMTs in Salida.

The FA administrative and support staffing concept would result in a total cost avoidance of approximately \$80,726. However, the staffing strategy includes the addition of an assistant chief of EMS which results in net cost avoidance of \$8,078; plus applicable benefit decreases, primarily in the medical insurance costs.

Overarching Strategy C – Merge SFD into SAFPD

Annexation of the City of Salida to the SAFPD is not financially sustainable without incremental contributions from the City.

Overarching Strategy D – Merge BVFD into CCFPD

Annexation of the Town of Buena Vista to the CCFPD is financially sustainable. The financial analysis of the strategy shows that the property tax method of providing revenue to the CCFPD will result in a 15 percent increase in the operation fund balance by 2017.

This strategy allows for long-term planning for facilities, apparatus, equipment, and staffing. Additional cost avoidance could be by a reduction in the number of fire apparatus, disposal of surplus capital facilities, and reduced expenditures for maintaining and operating fewer fire stations.

Overarching Strategy E – IGA SFD and CCEMS

Joining SFD and CCEMS under terms of an IGA could increase costs but has the potential of improving the level of fire and EMS service to the community. With a contract for inter-facility transports, the strategy could result in increased revenue and cost avoidance for patients and Heart of the Rockies Regional Medical Center.

Overarching Strategy F – CCFPD and SAFPD District Boundary Readjustment

Adjusting the fire protection district boundaries of SAFPD and CCFPD to create contiguous service areas eliminates islands and is a sensible decision. It ends spaces where fire and EMS services delivery varies between adjoining properties. The importance of this strategy is diminished or eliminated if a decision is made to create a single fire and EMS organization (Overarching Strategy B – Countywide FA (Fire Authority) including CCEMS)

Recommended Overarching Strategies

ESCI recommends that Overarching Strategy B – Countywide FA (Fire Authority) including CCEMS and Overarching Strategy E – IGA SFD and CCEMS be pursued by the Chaffee County Commission, Salida City Council, Buena Vista Board of Trustees, and fire district BODs.

Any cooperative venture between Chaffee County, the fire departments, and the fire protection districts presents the organizational leaders with a series of challenges. Successful implementation of these proposals will require that significant matters be addressed regardless if or which form or level of cooperative effort is chosen.

Overarching Strategy B – Countywide FA (Fire Authority) including CCEMS

Overarching Strategy B – Countywide FA (Fire Authority) including CCEMS with establishment as an FA should be under an IGA with terms and conditions developed and agreed upon by the elected officials. An FA under Strategy B involves:

1. A reduction to one fire chief position. The combined service area has three fire chiefs that represent four fire agencies and the three fire service providers. Other position responsibilities are re-aligned and job functions modified to meet the needs of the FA. The conceptual modification to the administrative functions for an FA results in a net reduction of 2.4 positions.
2. A battalion chief configuration is appropriate to the number of fire stations supervised but not for the distance traveled. However, given the total number of emergency responses per year for the combined agencies that the majority of risk and service demand in and around Buena Vista and Salida, incident supervision and emergency response readiness could be managed by rotating coverage between chief officers (volunteer and career).
3. Establishing an FA under an IGA (intergovernmental agreement), with each of the agencies retaining taxing authority and governance maintains a high degree of local control. An IGA model is considered an interim step to further alignment of the agencies. The long-term goal should be to merge the five agencies into a single regional fire and emergency service provider.
4. The FA administrative and support staffing concept will result in a cost avoidance of approximately \$8,078 plus applicable benefit decreases, primarily in the medical insurance costs. Staffing is increased with the addition of an assistant chief of EMS.
5. With an FA the four fire agencies and Chaffee County have input on services to be provided, level of service, budgets, governance, and policy level decisions. This strategy can provide cost avoidance in administrative, operational, and capital costs.

With a unified emergency service organization the number of facilities (fire and EMS stations) is reduced and allows for the disposal of surplus properties. Disposal of surplus facilities and apparatus will net revenue but as important is the long-term benefit of lower capital replacement and maintenance costs.

CCFPD and SAFFPD rely primarily on property taxes for funding. The fire protection districts are forecast to experience flat or declining tax revenue over the next three years. CCEMS, BVFD, and SFD are single departments in larger organizations that have multiple sources of revenue. The City of Salida and the Town of Buena Vista have sales tax revenue and fees for service to support the general fund and thus the fire department. The other major source of revenue for CCEMS is fees for service, including EMS and transport services. There is a benefit, balance, and stability with three potential sources of revenue for an FA.

Overarching Strategy E – IGA SFD and CCEMS

Overarching Strategy E – IGA SFD and CCEMS would increase emergency staffing and provide a source of revenue. It would also:

1. Increase the availability of full-time fire and EMS personnel for emergency response to medical incidents. The concept calls for one CCEMS unit and a SFD EMS transport unit with two medically trained personnel be dispatched to medical emergencies. In situations where SFD arrives first and determines that the patient requires a basic level of care and transport, the CCEMS ALS unit can be recalled. For patients requiring an advanced life support, CCEMS would continue. The most appropriate unit would transport to the medical center.

Medical incidents in the City of Salida currently involve all on-duty fire and fire/EMS personnel of SFD and the CCEMS transport unit assigned to cover the south end of Chaffee County. Adding a BLS EMS transport unit to the SFD and cross-training CCEMS personnel in fire suppression adds flexibility to the system.

2. Meet the needs of the Heart of the Rockies Regional Medical Center for transportation of patients to medical facilities outside of Chaffee County. CCEMS has a limited capacity for providing inter-facility EMS transport services. The additional capacity of one BLS transport unit would allow a CCEMS ALS unit to remain available for response and immediate response for BLS inter-facility transfers.

An issue since the strategy was developed is that the medical center signed a six-month contract with AMR to do inter-facility transports. A potential deal killer for the strategy is if SFD and CCEMS are unable to secure a long-term contract for inter-facility transports.

3. ESCI recommends that SFD and CCEMS operate under terms of an IGA. While this strategy could increase costs it has the potential of improving the level of fire and EMS service to the community. With a contract for inter-facility transports, the strategy could result in increased revenue and cost avoidance for patients and Heart of the Rockies Regional Medical Center.
4. CCEMS provides much of the inter-facility transport service from Heart of the Rockies Regional Medical Center to medical treatment outside of Chaffee County. Benefits of adding a BLS transport unit to provide inter-facility EMS transport service include:
 - Greater depth of ambulance resources to meet requests for inter-facility transports from Heart of the Rockies Regional Medical Center.
 - Lower cost to patients not requiring air transportation that presently may be flown because of EMS personnel availability.
 - Untapped revenue resource for CCEMS and SFD.

Strengths, Weaknesses, Opportunities and Challenges (SWOC)

The study takes into account the many shared critical issues that face the five agencies and how such matters affect the effort to construct a model for efficient service. These issues were identified and analysis and specific recommendations are offered in the section titled, Appendix B: Summary Table of Recommended Actions by Agency (Current Conditions).

Organizational Strengths

It is important for any organization to identify its strengths in order to assure it is capable of providing the services requested by customers and to ensure that strengths are consistent with the issues facing the organization. Often, identification of organizational strengths leads to the channeling of efforts toward primary community needs that match those strengths. Programs that do not match organizational strengths or the primary function of the business should be seriously reviewed to evaluate the rate of return on precious staff time. In the course of ESCI's stakeholder interviews, the strengths of Buena Vista Fire Department (BVFD), Salida Fire Department (SFD), Chaffee County Fire Protection District (CCFPD), South Arkansas Fire Protection District (SAFPD), and Chaffee County EMS (CCEMS) were identified. They are listed below as stated by those interviewed.

Organizational Strengths				
BVFD	SFD	CCFPD	SAFPD	CCEMS
Timely response by volunteers	Good customer service	Low cost to operate; size of the organization	District supports 24/7 service provided by Salida	Local familiarity
Cost effective; involved in the community	Well-trained 24/7 department; EMS well regarded; good cooperation with other providers in south county	Location of stations; Great training; mutual aid entities work well together; strong command structure; experienced crews		
	Good people in all roles; 24-hour coverage; good equipment	Guaranteed mutual aid with BVFD and SFD		
		Good financial position; number of personnel and assets are good		

Organizational Strengths				
BVFD	SFD	CCFPD	SAFPD	CCEMS
		Dedication of volunteers; people are here because they want to give back to the community		
		Number of volunteers is growing, expertise is increasing, apparatus is improving		
		Personnel and apparatus		

Organizational Weaknesses

Performance or lack of performance within an organization depends greatly on the identification of weaknesses and how they are confronted. While it is not unusual for these issues to be at the heart of the organization’s overall problems, it is unusual for organizations to be able to identify and deal with these issues effectively on their own.

For any organization to either begin or to continue to move progressively forward, it must not only be able to identify its strengths but also those areas where it does not function well. These areas of needed enhancements are not the same as challenges, but rather those day-to-day issues and concerns that may slow or inhibit progress. As with the strengths (listed previously), ESCI asked stakeholders to list organizational weaknesses in their respective organizations. They are listed below, as reported by the interviewees.

Organizational Weaknesses				
BVFD	SFD	CCFPD	SAFPD	CCEMS
Aging volunteer force; no mentoring program	Cost is high for a small town	Volunteer organization-- recruitment, retention, training requirements are burdensome	County should pay for SAFPD responses into Chaffee County	Rural coverage and alignment of district boundaries
Volunteer response not reliable	Would city be better served by EMS agency and less fire	No cross-training with other agencies; impaired communication system; Fire and EMS should be together; County needs to move up to first responder level, but EMS training is burdensome (\$) on volunteers		
	Too much overlap; EMS should be located here.	Interesting allocation of funds; unnecessary duplication of equipment; public pretty confused about how the fire service is set up; creates divisiveness and causes cliques (north vs. south)		
		Struggle to follow through; good ideas, but we don't always follow through		
		Response times, especially during the day; not all stations are treated equally (north vs. south)		
		Huge demands on department; politics often difficult and interfere with interagency relations and financial management of district		
		Loss of volunteers; mentoring/teaching/tutoring new members		

Opportunities

The opportunities for an organization depend on the identification of strengths and how they are built upon and in what way weaknesses are diminished. The focus of opportunities is not solely on existing service but on expanding and developing new possibilities both inside and beyond the traditional boundaries of business as usual.

Because the questions posed to stakeholders by ESCI were presented in the context of a cooperative efforts feasibility study, most responses were provided in that frame of reference.

Because of the collaborative focus of answers, the opportunities identified are applicable to all of the participating agencies.

Opportunities
Spirit of cooperation; public knows they are getting the best for their money.
Cost savings; less duplication
24-hour coverage for county; larger tax base
Improved response times; consistent revenue source
Elimination of duplicated efforts—equipment and people
Staffing and locations provide additional benefit for Chaffee County.
A heightened level of public safety
Better service if we can overcome social/political boundaries
Quicker response times; standardization of SOGs and equipment
Finances
Financing of the EMS system
Service delivery, fewer facilities, less apparatus, and better service.

Challenges

To draw the strong suit and gain full benefit of any opportunity, the challenges to the organization, with their new risks and threats, must also be identified. By recognizing potential challenges, an organization can greatly reduce the potential for future setbacks.

As with opportunities and the context in which the questions were posed to the interviewees, responses tended to be in effect applicable to the four organizations. In some instances the challenges may affect the outcome of cooperative efforts with Buena Vista Fire Department, Salida Fire Department, Chaffee County Fire Protection District, South Arkansas Fire Protection District, and Chaffee County EMS.

Challenges
Some differences between Chaffee County FPD north and south
Loss of control
Different cultures; resistance from career personnel; differences in training philosophies
Volunteers leaving
Political head-butting but no operational issues
SFD and SAFPD should merge at the least—probably no problems convincing South Arkansas citizens of this
Putting two volunteer agencies and one paid agency together; you need a leader from outside the existing agencies
Communication—everyone should know that they will be involved in the process
Loss of volunteers
Levy rates and funding
Pension plan

After discussing core services, organizational strengths and weaknesses, and the opportunities and challenges posed by the current environs, ESCI asked stakeholders to identify the critical issues they perceive each agency is facing. The following reflect the critical issues that the respondents felt pose the greatest risk today to the success of cooperative service delivery initiatives.

Critical Issues	
First Critical Issue:	Issue of financial stability and ability to maintain expected level of service
Second Critical Issue:	Need for standardization of level of service and interoperability
Third Critical Issue:	Unification of governance, leadership, and command structure at the policy, administration, and service delivery level
Additional issues raised by three or more stakeholders:	Perception that the County caters to larger organizations leaving smaller districts being marginalized

Evaluation of Current Conditions

The Agency Evaluation and Feasibility Study involves Buena Vista Fire Department (BVFD), Salida Fire Department (SFD), Chaffee County Fire Protection District (CCFPD), South Arkansas Fire Protection District (SAFPD), and Chaffee County EMS (emergency medical services) (CCEMS). Data provided by the participating emergency service agencies was combined with information collected in the course of ESCI’s field work and used to develop an overview of the subject organizations. The purpose of the following organizational overview is two-fold. First, it verifies the accuracy of the baseline information and ESCI’s understanding of each agency’s composition—the foundation from which the feasibility analysis is developed. Secondly, the overview serves as a reference for the reader who may not be familiar with the details of each agency’s operations.

Survey Table 1: Organizational Overview

Survey Component	Organizational Overview – Observations				
	BVFD	CCEMS	CCFPD	SFD	SAFPD
1. Responsibilities and Lines of Authority					
A. Governance	Board of trustees, consists of one mayor and six board members elected at large. The board appoints a town administrator, town attorney, town clerk, town treasurer and municipal judge.	Chaffee County, County Commissioners	Board of directors	City council	Board of directors
i) head of governing body	Mayor, Joel Benson	Chairman of the Board, Frank Holman	Board Chairperson, Rob Thorp	Mayor, Don Stephens	Board President, Jim Scanga
ii) key employee of governing body	Town Administrator, Sue Boyd	Josh Hadley, Operations Manager	Jim Wingert, Administrator/Fire Chief	Dara MacDonald, City Administrator	Doug Bess, Interim Fire Chief

Survey Component	Organizational Overview – Observations				
	BVFD	CCEMS	CCFPD	SFD	SAFPD
iii) meetings	Second and fourth Tuesdays at 7:00 PM	Provide monthly report at County Commissioners meeting. Agency meeting on a “as needed” basis	Second Thursday at 7:00 PM, in odd months meetings are conducted in the south end, even months in north	First and third Tuesdays	Second Monday of the month at the fire station, pension board meeting follows
B. Elected official authority defined	Yes	Yes	Yes	Yes	Yes
C. Fire chief position	Elected bi-annually by the membership	N/A	Yes	Yes	N/A
i) hired by contract	No	N/A	No, at will employee	No	N/A
ii) term of contract	N/A	N/A	N/A	N/A	N/A
iii) periodic performance evaluation	No	N/A	In first year, every six months, then annually thereafter	Yes	N/A
D. Fire chief/authority defined	Yes, town ordinance	N/A	Yes	Yes, city code	SFD fire chief is SAFPD fire chief by board resolution
E. Policy and administrative roles defined	None that apply to the fire department	Yes, job descriptions and SOPs (stand operating policies)	Yes	Yes	N/A
2. Attributes of Successful Organizations					
A. Rules and regulations maintained	Yes, constitution and by-laws	Yes	3 sets of bylaws, 1 for the BOD, 1 for membership and 1 for the pension plan	Yes, fire department	N/A
i) process for revision provided	Yes	Yes	No	No	N/A
B. Legal counsel maintained	Yes, contracted town trustees	Yes, county attorney	No retainer, legal counsel called upon as needed	Yes, city attorney	Yes
i) consultation available	Yes	Yes	Yes	Yes	Yes

Buena Vista and Salida FDs, Chaffee CO and South Arkansas FPDs, and Chaffee CO EMS, CO
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Survey Component	Organizational Overview – Observations				
	BVFD	CCEMS	CCFPD	SFD	SAFPD
ii) labor counsel	Yes	N/A	Legal counsel called upon as needed	Yes	N/A
C. Financial controls					
i) financial control system	Town treasurer	County Finance Director, Dan Short	Administrative assistant manages day to day, fire chief approves expenditures within his authority, BODs ratifies, board treasurer is actively involved	City finance and administrative director	District contracted for bookkeeping and financial
ii) financial review	Yes	Yes	Yes	Yes	Yes
iii) auditor	Rubin and Brown	Scott Wright	Elizabeth Gobble, CPA	Johnson, Holscher & Company, P.C.	Fred Wanch
iv) frequency of review	Annual	Annual	Monthly	Annually	Annually
D. Governing body minutes maintained					
i) availability of minutes	Yes	Yes	Yes	Yes	Yes
3. Organizational Structure					
A. Structure type	Municipal fire department	County EMS system	Colorado special district	Municipal fire department	Colorado special district
B. Descriptions of all jobs maintained					
i) job descriptions updated	As needed	Yes	BODs intends to revise as necessary this year	Yes	N/A
C. Employment agreements					
	N/A	No	No, all employees are at-will	No	N/A
4. Chain of Command					
A. Unity of command	Yes	Yes	Yes	Yes	N/A
B. Span of control	5:1	3:1	5:1	4:1	N/A

Survey Component	Organizational Overview – Observations				
	BVFD	CCEMS	CCFPD	SFD	SAFPD
C. Hiring/Firing authority	Vote of the membership	Josh Hadley, Operations Manager	Fire chief reports issue to personnel committee, who makes recommendation to board	Fire chief with approval of the city administrator	N/A
5. Formation and History					
A. Organization formed	1881	All volunteer service until 1996; 1996 to 1999 3 FTEs; 3 to 4 FTEs until 2002 then 12 to 13 FTEs; 2006 current structure which allowed IFT	March 1975	1892	1952
B. History maintained	Yes	Not officially	Yes, informally	Not officially	Not officially
C. Individual or group responsible	Yes, fire chief	No	Paid staff	No	No
6. Fire Department Overview					
A. Agency type	Municipal fire department	County EMS system	Fire protection district	Municipal fire department	Fire protection district
B. Area, square miles	3.44 square miles	1,013.40 square miles	994.07 square miles, approximately 200 square miles is private property and the balance is federal and state land (Calculated by ESCI)	2.57 square miles	14.91 square miles (Calculated by ESCI)
C. Headquarters	111 Linderman Ave, Buena Vista, CO 81211	10364 County Road 120 Salida, Colorado 81201	499 Antero Circle Buena Vista, CO 81211	124 E ST Salida, CO 81201	124 E ST Salida, CO 81201
D. Fire stations	1	N/A	6	1	1

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Agency Evaluation and Feasibility Study

Survey Component	Organizational Overview – Observations				
	BVFD	CCEMS	CCFPD	SFD	SAFPD
E. Other facilities	0	1 Station in the northern section of the county, living quarters in nearby apartment, shared apparatus bay with CCFPD at Fire Station No. 1	1 Old Poncha Springs fire station used as storage for Type 6 apparatus and hazardous materials trailer	0	Hazardous materials trailer (stored in county airport hangar).
F. Emergency vehicles					
i) engine	2	0	5	2	0
ii) engine, reserve	1	0	0	0	0
iii) ladder truck	0	0	1	1	0
iv) ladder truck, reserve	0	0	0	0	0
v) ambulance	0	2 Type 3s; 2 pickups	0	0	0
vi) ambulance, reserve	0	2 Type 3s	0	0	0
vii) command	1	0	3	1	0
viii) command, reserve	0	0	0	0	1 Utility 11
ix) boat	0	0	0	0	0
x) tenders	0	0	4	0	2
xi) tenders, reserve	0	0	0	0	0
xii) brush	0	0	5 Type 6 2 Type 7 4 Type 4	0	2
xiii) brush, reserve	0	0	0	0	0
xiv) Additional apparatus	1 (rescue)	No	2 hazardous materials trailers 1 air/light trailer 2 rescue units (R-1 and R-4)	1 Rescue 11	1 hazardous materials trailer

Survey Component	Organizational Overview – Observations				
	BVFD	CCEMS	CCFPD	SFD	SAFPD
G. ISO rating	5	N/A	Poncha Springs 5, 6/9 for the remainder of the district	4/9	5/9
i) date of most recent rating	11-01-2008	N/A	12-01-2006	10-01-2005	10-01-2005
ii) maximum fire department points possible	18.93/50	N/A	Awaiting data	25.40/50	25.40/50
iii) relative classification	7	N/A	Awaiting data	5	5
iv) divergent reduction	10.92	N/A	Awaiting data	9.46	11.53
v) total points	51.65	N/A	Awaiting data	63.24	54.24
H. Total fire department personnel, uniformed and civilian	19 18 firefighters	N/A	65 volunteers, 5 paid	15	N/A
i) administrative and support personnel, full-time	No	1 administrative assistant	2	1	N/A
ii) administrative and support personnel, part-time	1	0	0	1	Part-time contractor for bookkeeping and records
iii) administrative and support personnel, volunteer	0	0	0	0	N/A
iv) operational personnel, full-time	0	12	3	9	N/A
v) operational personnel, part-time	1 (part-time mechanic/inspector)	12	0	0	N/A
vi) operational personnel, volunteer	18 total 15 active, 3 inactive	0	65	4 (reserve)	N/A
7. Finance Overview					
A. Designated fiscal year	Calendar	Calendar	Calendar	Calendar	Calendar

Buena Vista and Salida FDs, Chaffee CO and South Arkansas FPDs, and Chaffee CO EMS, CO
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Survey Component	Organizational Overview – Observations				
	BVFD	CCEMS	CCFPD	SFD	SAFPD
B. Assessed property value, FY 2011	Property taxes are not assessed by the city	N/A	\$196,531,839	\$739,346,278 Property taxes are not assessed by the city	\$37,884,746
C. Revised 2011, 2012 general operating fund budget, fire department	\$72,172	2011, \$1,141,000 2012, \$1,281,000	2012, \$912,707	\$792,400, \$39,962,521 GAV (gross assessed valuation)	\$160,864
D. General fund property tax, City/District levy FY 2012	N/A, funding is via the town general fund. General fund is primarily through sales tax revenue.	N/A	2012, \$859,250 property taxes	N/A, funding is via the town general fund. General fund is primarily through sales tax revenue.	\$144,464 ad valorem tax \$15,000 specific ownership tax
i) levy rate (FY 2008 through 2012)	Share of the 2% sales tax assessed by the County based on auto registrations. Funding is not specifically allocated to support the fire department.	N/A	3.936	Share of the 2% sales tax assessed by the County based on auto registrations. Funding is not specifically allocated to support the fire department.	3.615
E. Bonds, fire department	No	No	No	No	No
i) levy rate	N/A	N/A	N/A	N/A	N/A
F. Other tax levy, public safety	N/A	N/A	No	No	No
i) levy rate	N/A	N/A	N/A	N/A	N/A
8. Demographics					
A. Population, 2010	2,615	17,809	Approximately 6,900 (estimated by ESCI), includes 1,220 inmates at the Buena Vista Correctional Complex	5,233	Approximately 3,000 (estimated by ESCI)

Survey Component	Organizational Overview – Observations				
	BVFD	CCEMS	CCFPD	SFD	SAFPD
i) population history (2000 – 2010)	2000, 2,202 2010, 2,615 18.7% change	2000, 16,312 2010, 17,809 9.1% change	14.8% increase in population of unincorporated Chaffee County, 2000 to 2010	2000, 5,586 2010, 5,233 -6.3% change	14.8% increase in population of unincorporated Chaffee County-2000 to 2010
ii) percent urban/suburban	100%	48.2% (incorporated city or town)	10.7% (Poncha Springs)	100%	N/A
iii) percent rural	N/A	51.8% (unincorporated)	89.3% (unincorporated)	N/A	100%
B. Total residential units, 2010	1,379	10,036	4,676 (estimated by ESCI)	2,897	1,084 (estimated by ESCI)
C. Businesses, 2010	Not reported	Not reported	199	517	Not reported
9. Alarms, Calendar Year					
A. Fire	19	N/A	58	12	17
i) value of property exposed to fire, 2011	Not tracked	N/A	\$909,500	\$1,386,000	\$1,218,500
ii) value of property lost to fire, 2011	Not tracked	N/A	\$28,000	\$188,500	\$1
B. Rupture or explosion	0	N/A	0	6	1
C. EMS/rescue	138	2011, 1,844	90	497	115
D. Number of EMS transports	N/A	2011, 1,095 2011, IFT (inter facility transfer) 170	N/A	N/A	N/A
E. Hazardous condition	6	N/A	54	158	11
F. Service call	5	N/A	7	119	48
G. Good intent call	4	N/A	64	70	34
H. False call	17	N/A	9	36	5
I. Severe weather	0	N/A	5	0	0
J. Other	0	N/A	0	1	0
K. Total Incidents	188	1,844	287	899	231

Figure 1: BFD Organizational Chart

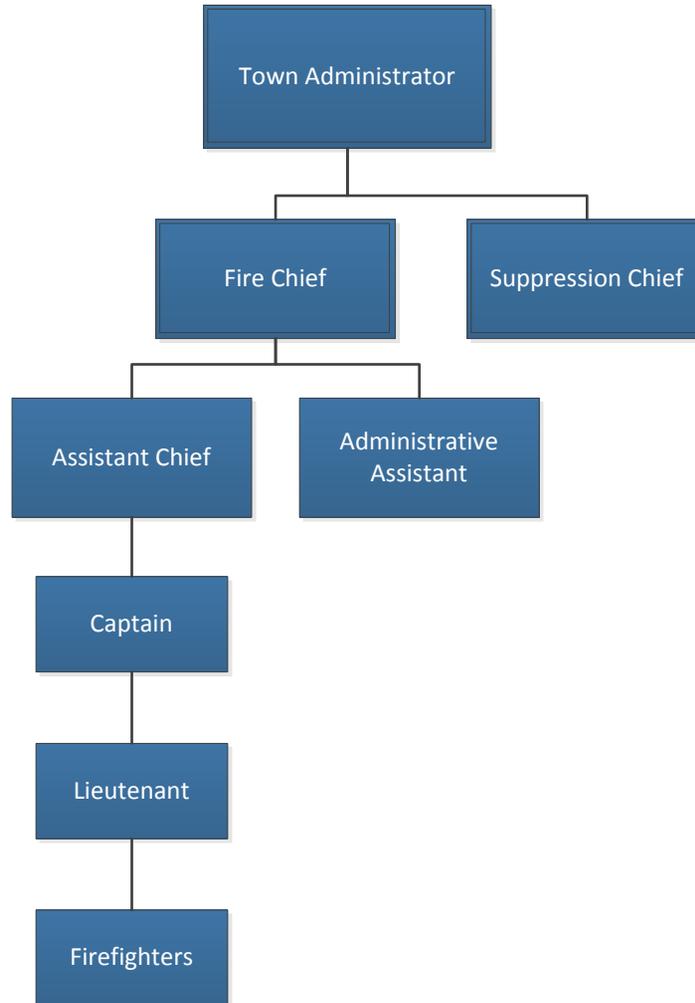


Figure 2: CCEMS Organizational Chart

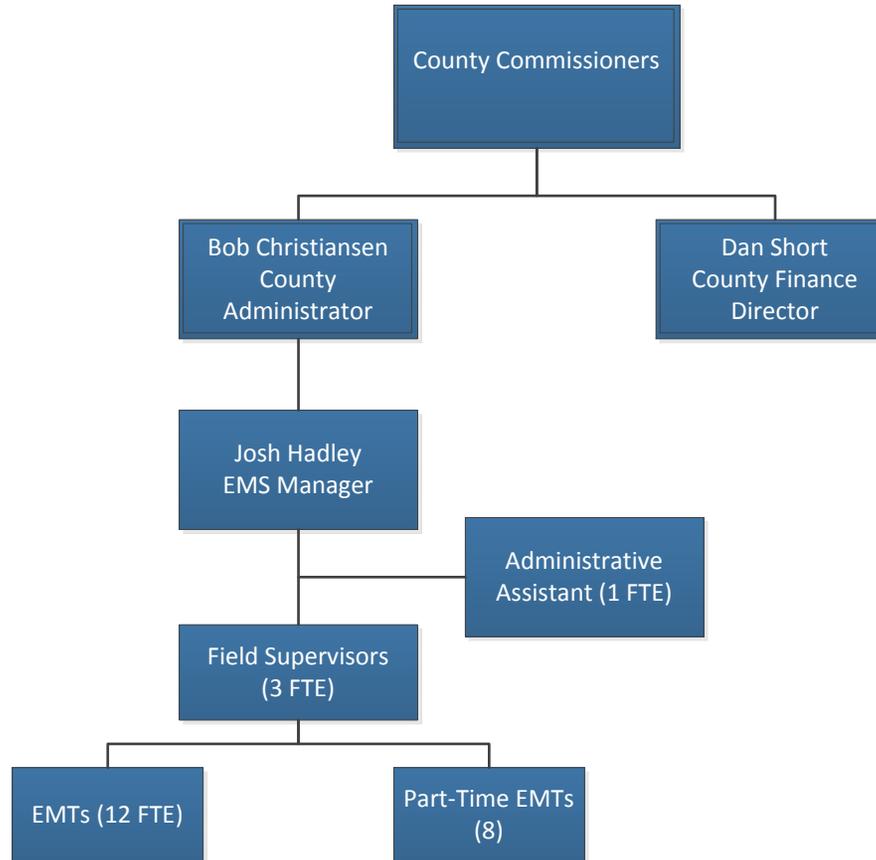
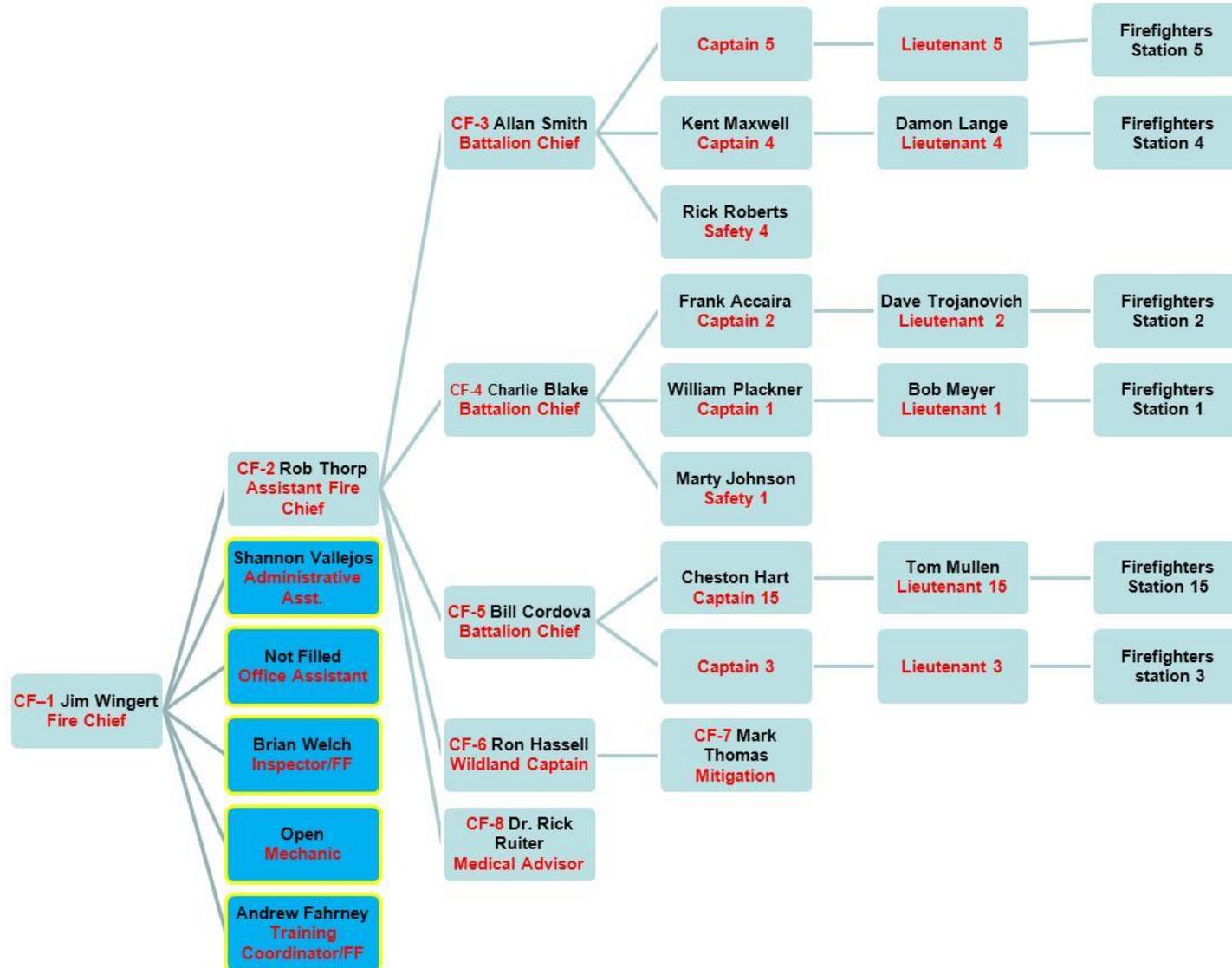
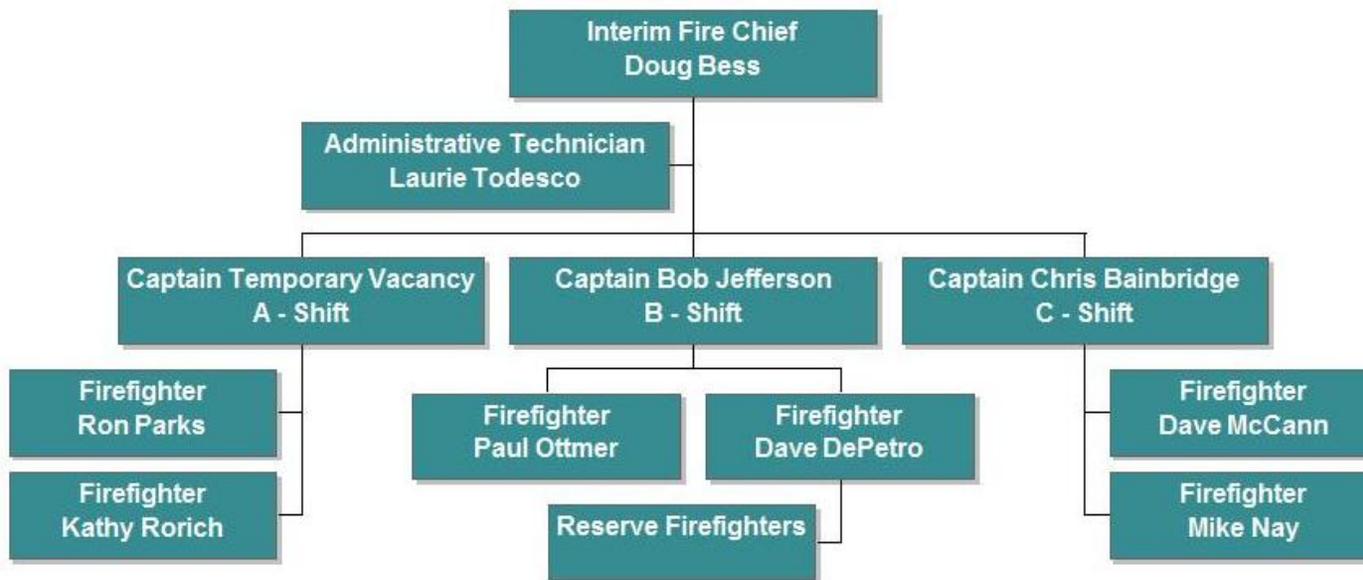


Figure 3: CCFPD Organizational Chart¹



¹ Client provided organizational chart.

Figure 4: SFD Organizational Chart²



² Salida Fire Department Organizational Chart, July 2012.

Figure 5: SFD Reserve Corps FD Organizational Chart³



³ Salida Fire Department Reserve Corps, August 2011.

Survey Table 2: Management Components

Organizational growth and change are common challenges for today's fire and EMS service leaders. BVFD, SFD, CCFPD, SAFPD, and CCEMS must be equipped to plan, budget, and execute management processes in order to meet current and future conditions. Contemporary emergency service providers must address management complexities in areas that include the consistency and adequacy of response, maintenance of competencies, and recruitment of a qualified and diverse workforce, adequate administrative controls, and a complete logistical support system.

To be effective, management of fire districts/departments and EMS providers needs to be based on multiple components. The elements of appropriate management begin as simply as identifying and institutionalizing the organization's mission and vision and progress through a spectrum of essential mechanisms, including the establishment of policy and operational documents, development of internal and external communications practices and implementing proper reporting and record keeping. Finally, one of the most critical components is that of establishing appropriate financial practices.

The size of an organization may be considered a factor determining the degree to which the basic management components apply. However, all of the identified elements apply equally to any fire department, without regard to its size or complexity. For this reason, the analysis of management components is applied equally to BVFD, SFD, CCFPD, and CCEMS. In the following report section, ESCI examined each agency's efforts to manage the organization effectively and identified measures that are recommended for the future.

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Survey Component	Management Components – Observations			
	BVFD	CCEMS	CCFPD	SFD
1. Mission, Vision, Strategic Planning, Goals and Objectives				
A. Mission statement adopted	Yes, adopted 03/07/2012	Yes	Yes	Yes
i) displayed	No	Yes	Yes	Yes, in annual report
ii) periodic review	No	Not routinely	Yes	No
Recommendations: <i>BVFD: Mission statement should be regularly assessed and prominently displayed (such as on letterhead, facilities, website) to remind all personnel of their purpose.</i> <i>CCEMS: Mission statement should be regularly assessed.</i> <i>SFD: Mission statement should be regularly assessed.</i>				
B. Vision established and communicated	No, in process of being developed	No	Yes	Yes, in annual report
Recommendations: <i>BVFD: Continue development of organizational vision statement and communicate it broadly throughout the agency – include personnel in its development.</i> <i>CCEMS: Develop and broadly communicate organizational vision statement – include personnel in its development.</i>				
C. Values of staff established	No	No	Yes	Yes
i) organizational focal points	No	No	No	Yes
Recommendations: <i>BVFD: Establish organizational values to guide personnel in decision-making. Communicate points of emphasis for department annually.</i> <i>CCEMS: Establish organizational values to guide personnel in decision-making. Communicate points of emphasis for department annually.</i> <i>CCFPD: Communicate points of emphasis for department annually.</i>				
D. Strategic or master plan	No	No	Yes, master plan	No
i) adopted by elected officials	N/A	N/A	Yes, 2005	N/A
ii) published and available	N/A	N/A	Not published, but in a department binder	N/A
iii) periodic review	N/A	N/A	Yes, equipment	N/A
Recommendations: <i>BVFD: Develop Master Plan, then Strategic Plan, both to be adopted by elected officials, published, and made available to your constituency.</i> <i>CCEMS: Develop Master Plan, then Strategic Plan, both to be adopted by elected officials, published, and made available to your constituency.</i> <i>CCFPD: Develop Strategic Plan. Consider scanning the current Master Plan document and including it on department website.</i> <i>SFD: Develop Master Plan, then Strategic Plan, both to be adopted by elected officials, published, and made available to your constituency.</i>				

Survey Component	Management Components – Observations			
	BVFD	CCEMS	CCFPD	SFD
E. Agency goals and objectives established	No	No	Yes, as part of master plan (to become more of a combination department)	Yes for goals, no measurable objectives
i) date developed	N/A	N/A	2005	March 1, 2009
ii) periodic review	N/A	N/A	Yes	Yes
iii) tied to division/personnel performance statements/plans	N/A	N/A	No	No, other than those goals contained in personnel performance reviews
iv) objectives linked to programs	N/A	N/A	No	N/A
v) performance objectives established	N/A	N/A	No	N/A
Recommendations: <i>BVFD: Establish a strategic plan with goals and objectives for divisions, programs, and performance metrics with timelines and intended outcomes.</i> <i>CCEMS: Establish a strategic plan with goals and objectives for divisions, programs, and performance metrics with timelines and intended outcomes.</i> <i>CCFPD: Establish a strategic plan with goals and objectives for divisions, programs, and performance metrics with timelines and intended outcomes.</i> <i>SFD: Establish a strategic plan with goals and objectives for divisions, programs, and performance metrics with timelines and intended outcomes.</i>				
F. Code of ethics established	No, in process	No	No	Yes
Recommendations: <i>BVFD: Continue the development of a code of ethics and broadly disseminate throughout the organization.</i> <i>CCEMS: Establish a code of ethics and broadly disseminate throughout the organization.</i> <i>CCFPD: Establish a code of ethics and broadly disseminate throughout the organization.</i>				
2. Availability of SOPs/SOGs, Policies, and Rules and Regulations				
A. Copies of rules, regulations, and policies provided	Bylaws	Yes	By-laws, SOGs (standard operating guideline) and policies	City personnel manual

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Survey Component	Management Components – Observations			
	BVFD	CCEMS	CCFPD	SFD
i) last date reviewed	1980 – 1990	In process	Annually	In process, last complete review was in 2004
B. Copies of SOPs/SOGs available	Yes, SOGs	Yes	Yes	City intranet
i) regular update	Update of SOPs in process	Periodically	Yes	As needed
ii) process for development of new SOPs/SOGs	Yes, initiated by the fire chief	All personnel	Firefighter may have a suggestion, chief seeks input from chief officers	No
iii) SOPs/SOGs used in training evolutions	Yes	Yes	Yes	Yes
Recommendations: <i>BVFD: Develop a formal process for proposed, changes, or additions to SOPs/SOGs.</i> <i>CCFPD: Develop a formal process for proposed, changes, or additions to SOPs/SOGs.</i> <i>SFD: Develop a formal process for proposed, changes, or additions to SOPs/SOGs; incorporate SOPs/SOGs into training.</i>				
C. Policy manual available	No	Yes	Yes, human resource manual, rewritten in 2010	Yes
i) reviewed for consistency	N/A	In process	Yes	Yes
ii) reviewed for legal mandates	N/A	Yes	Yes, entire manual reviewed by legal counsel	Yes, city attorney, contract employee
iii) training on policies provided	N/A	Yes	Yes	Yes, provided and require an acknowledgement form
Recommendation: <i>BVFD: Establish a department policy manual and routinely review them for consistency between polices, legal requirements and train personnel on department policies.</i>				
3. Critical Issues				
A. Agency identified critical issues				
i) first critical issue	Interagency cooperation	Financial support	Finances, 3.96 mill levy with 10% reduction last year	Staffing, struggle to meet 2-in-2-out
ii) second critical issue	Training differences between agencies	Administrative support (director)	Staffing (volunteer and paid)	Budget, insufficient to maintain equipment

Survey Component	Management Components – Observations			
	BVFD	CCEMS	CCFPD	SFD
iii) third critical issue	N/A	Inter facility transfers (IFT)	The previous two are the clearest critical issues	Interoperability with neighboring agencies
4. Challenges of the Future				
A. Agency identified challenges				
i) first challenge	Adequate response personnel	Secure funding for EMS	Application process for volunteers, needs to be overhauled	Budget
ii) second challenge	N/A	Administrative staff (director)	Responses and response times, 6 stations and 65 volunteers covering 1,000 square miles (80% of county is public lands)	Communications between agencies
iii) third challenge	N/A	Increased service demand	Recruit and maintain a volunteer core, training standards, response requirements	Response areas, not sending closest unit
iv) fourth challenge	N/A	Adequate facilities in Buena Vista. Locate ambulance and crew in the same facility.	N/A	Call center, has antiquated procedures
5. Internal and External Communications				
A. Internal communications	E-mail to the fire chief or the paid part-time personnel	Primarily verbal	Use chain of command, e-mail, and verbal	Rely on department heads to distribute information
i) regularly scheduled staff meetings (fire department)	Yes, fire chief	No, as needed	Yes, weekly captain meeting	Yes, city department heads meet every two weeks. Once or twice yearly all-hands meeting for city employees
ii) written staff meeting minutes	Yes	Yes	Yes, notes	Yes
iii) memos	Yes	Yes	Yes	Yes
iv) member newsletter	No	No	Yes, monthly	No

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Survey Component	Management Components – Observations			
	BVFD	CCEMS	CCFPD	SFD
v) member forums	No	Yes	Yes, monthly officer meetings	Yes, monthly officer meetings
vi) open door policy	Yes	Yes	Yes	Yes
vii) bulletin board	Yes	Yes	Web-based bulletin board that is interactive and used for emergency and non-emergency purposes, "Firefighter Response System"	Yes
viii) vertical communication path clearly identified	Yes	Yes	Yes	Yes
ix) e-mail	Fire chief and paid part-time administrative assistant	Yes	Yes	Yes
x) employee mail boxes	Yes, attached to individual's bunker gear storage	Yes	Yes	Yes
xi) voice mail	Fire department general voice mail	No	Yes, for paid staff	No
xii) issues taskforce	Yes	No	Yes, on a case-by-case basis, called together by battalion chiefs normally	Yes
B. External communications				
i) community newsletter	Formerly did a community newsletter, now general information included in the water bill. Department is going to draft a monthly newspaper column entitled "NozzelNews."	No	No	No
ii) website	Yes, town website	Yes	Yes, in need of updating	Yes
iii) advisory committee(s)	No	No	No	Yes
iv) complaint process	No	Yes	Yes	No
v) e-mail	Town e-mail address	Yes	Yes, for career personnel	No
vi) community survey	No	No	No	No

Survey Component	Management Components – Observations			
	BVFD	CCEMS	CCFPD	SFD
vii) local community planning organizations	No	No	Yes, 9-1-1 authority board, emergency management council, LEPC	Yes
viii) focus groups	As specified in code and ad-hoc	No	No	Yes
Recommendations:				
<i>BVFD: Develop a process for improving communications with citizens: impanel citizens' advisory committee, develop formal process for registering citizen complaints, contribute to the town newsletter, and conduct a community survey.</i>				
<i>CCEMS: Develop a process for improving communications with citizens: create and distribute a community newsletter or provide material to the county for distribution, impanel citizens' advisory committee or focus groups.</i>				
<i>CCFPD: Develop a process for improving communications with citizens: impanel citizens' advisory committee, create and distribute a community newsletter, conduct a community survey.</i>				
<i>SFD: Develop a process for improving communications with citizens: create and distribute a community newsletter, develop formal process for registering citizen complaints, conduct a community survey.</i>				
6. Decision Making Process				
A. Preferred management methodology of fire chief	Collaborative	Open input	Lead from within, be part of the team	Servitude-management/somewhat Brunacini model
B. Management process identified	Yes	Yes	Yes	Yes
C. Decision making process established	Yes	Yes	Yes, final say by chief if all subordinate officers have failed to make one.	Yes
7. Document Control				
A. Process for public records access established	Yes	Yes	Yes	Yes
B. Hard copy files protected	Locked offices	Yes	Yes	Yes
C. Computer files backed up	Yes	Yes	Yes	Yes
8. Security				
A. Building security	Yes	Yes	Yes	Yes
B. Office security	Files locked	Yes	Yes	Yes
C. Computer security	Password protected	Yes	Yes	Yes
D. Vehicle security	Yes	Yes	Yes	Yes to the extent possible

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Survey Component	Management Components – Observations			
	BVFD	CCEMS	CCFPD	SFD
E. Capital inventory maintained	Yes	Yes	Yes, items above \$5,000	Yes
i) asset security system used	No	No	No	No
ii) inventory interval	Infrequently	Annual	Annually for larger assets	Yes, annual fixed asset review
Recommendations:				
<i>BVFD: Establish an “attractive asset” security system and conduct an annual inventory.</i>				
<i>CCEMS: Establish an “attractive asset” security system.</i>				
<i>SFD: Establish an “attractive asset” security system and conduct an annual inventory.</i>				
F. Monetary controls used				
i) cash access controls	No petty cash	Yes	No petty cash	No petty cash
ii) credit card controls	Yes, fire chief and administrative assistant, debit card with \$1,000 limit	Yes, reviewed by finance director	Assigned to individuals and chief audits receipts. Treasurer of board audits chief's charges	Yes, audited by fire chief and BOD
iii) purchasing	Yes	Yes	Yes, limited number of authorized users	Yes
9. Reporting and Records				
A. Records kept by computer	Some records	Yes	Some records	Hard copy and through ADP
i) type of platform	PC	High Plains©	PC	PC
ii) operating system	Windows 7	Windows	Windows 7	Windows
B. Periodic report to elected officials				
i) financial report	Monthly	Yes	Yes	Annually
ii) management report	Semi-monthly	Yes	Yes	Monthly for sales tax
iii) operational report	Monthly	Yes	Yes	Yes
iv) distributed to others	Yes, board of trustees	Yes	No	Yes, monthly to SAFPD BOD
C. Annual report produced	Not formally	No	Yes	Yes
i) distributed to others	N/A	N/A	SAFPD BOD, county commissioners, and Poncha Springs	SAFPD BOD provides to city
ii) analysis of data provided	No	No	Yes	Yes

Survey Component	Management Components – Observations			
	BVFD	CCEMS	CCFPD	SFD
Recommendations: <i>BVFD: Create an electronic annual report and post to website. Provide analysis of information for layperson.</i> <i>CCEMS: Create an electronic annual report and post to website. Provide analysis of information for layperson.</i> <i>CCFPD: Distribute board reports to district membership.</i>				
D. Required records maintained				
i) incident reports	Yes	Yes	Yes	Yes, SAFPD same as SFD, jointly maintained
ii) patient care reports	N/A	Yes	Yes	Yes, FireHouse
iii) exposure records	Compiled with NFIRS records	Yes	Yes	SAA
iv) SCBA testing	Yes, annually	N/A	Yes	SAA
v) hose	Yes	N/A	Yes, not always done	SAA
vi) ladder	Yes	N/A	Yes	SAA
vii) pump	Yes, Front Range Fire Service (no documentation supplied)	N/A	No, one pump was tested following engine rebuild	SAA
viii) breathing air	Yes	N/A	Yes	SAA
ix) vehicles	Yes	Yes	Yes	SAA
x) gas monitors	Yes	N/A	Yes	SAA
Recommendations: <i>BVFD: Obtain and maintain pump test records on site.</i> <i>CCFPD: Conduct annual hose testing and pump testing in compliance with NFPA standards – liability risk.</i>				
10. Budgetary Controls				
A. Designated fiscal year	Calendar	Calendar	Calendar	Calendar (city and district)
i) budget cycle	Annual	Annual	Annual	Annual (city and district)
B. Budget officer	Town treasurer	Finance director	Board treasurer	City finance director, District BOD president
C. Budget development process				
i) governance	Town trustees	County commissioners	Final approval	City council
ii) administration	Town treasurer	Finance Director, Dan Short	Receive estimated calculation of revenue for upcoming year, board treasurer develops budget	City finance director, District BOD president

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Survey Component	Management Components – Observations			
	BVFD	CCEMS	CCFPD	SFD
iii) management	Town treasurer	Finance director/operations director	Chief solicits input from each fire station, work with assistant chief and office staff, compiles and presents input to treasurer	City department directors, fire chief with staff input reports to the SAFPD BOD.
iv) staff	No	No	Provide input	Yes, SFD staff for SAFPD
v) community	Public budget hearing	Public budget hearing	Public budget hearing	Yes, city and district public budget hearing
Recommendations: <i>BVFD: Include staff in budget development.</i> <i>CCEMS: Include staff in budget development.</i> <i>CCFPD: Include community in budget development.</i>				
D. Budget adoption process	Begins with a strategic planning session with the trustees, capital budget, then department heads with town administrator and town treasurer, draft budget, work session in September for the board of trustees	Begins (in August) with the finance director creating a baseline year with guidelines, capital requests and budget increase requests subject to County Commissioner approval	Begins with appointing budget officer in Sept., who develops in concert with others, submits to board, then public hearing in November. December board approves final budget	City begins with the finance director creating a baseline year with guidelines. SAFPD, drafted by fire chief and bookkeeper, adopted by BOD in December.
i) budget approval	Town trustees	County commissioners	Board of directors	Salida city council, SAFPD BOD
ii) funding approval	Town trustees	County commissioners	Fire chief authorized to \$1,500, beyond is approved by board	City council and city purchasing policy. SAFPD BOD and fire chief
E. Financial control officer	Town treasurer	Finance director	Board treasurer	City finance director, SAFPD BOD president
i) financial report	Yes, annually	Yes, annually	Issued by administration assistant/board secretary	Yes, city annually, SAFPD monthly
ii) financial review	Yes, annual audit	Yes, annual audit	Board and third party CPA reviews quarterly, and auditor annually	Yes, city and SAFPD annual audit

Survey Component	Management Components – Observations			
	BVFD	CCEMS	CCFPD	SFD
F. Basis of accounting	Modified cash accrual	Accrual accounting	Modified cash accrual	City and SAFPD modified cash accrual
G. Purchasing				
i) purchasing policy	Yes	Yes	Yes, fire chief authorized up to \$1,500	Yes, city and SAFPD modified cash accrual
ii) credit cards	Yes	Yes	Yes	Yes, city and SAFPD
iii) purchase orders	No	Yes, for purchases \$5,000 or greater	No	Yes, for purchases \$5,000 or greater, no for SAFPD
iv) open accounts	Yes	Yes	Yes	Yes, city and SAFPD
v) petty cash accounts	No	Yes	No	No, for city and SAFPD
vi) central supplies/logistics	No	Yes	Yes, office supplies managed at headquarters, Fire Station No. 15 is equipment supplies location	No, city and SAFPD
vii) joint agreements/ventures	None	Mutual aid with Arkansas Valley Ambulance and SAFPD	Currently negotiating with Colorado Fire Camp to provide equipment and facility for FFI and hazardous materials training in exchange for free/reduced cost training for staff	Yes, ladder testing with BVFD, CCFPD, mutual and automatic aid, no for SAFPD
viii) IGAs	No	Chaffee County FPD (shared facility)	Yes, Chaffee County Safety Complex.	Yes, city and SAFPD
ix) bidding	Yes	Yes	Yes, on items over \$5,000 and price checking on items under \$5,000.	Yes, city and SAFPD
x) leases	No	No	Yes, aerial ladder, fire chief, staff vehicles, and water tender	Yes, 2 water tenders

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Survey Component	Management Components – Observations			
	BVFD	CCEMS	CCFPD	SFD
11. Planning				
A. Strategic/Master planning	City comprehensive plan (2008), no fire department	No	Master plan	City comprehensive plan, no fire department
i) plan period	N/A	N/A	5 years	N/A
ii) periodic review	N/A	N/A	Yes	N/A
iii) goals	N/A	N/A	Yes	N/A
iv) funding	N/A	N/A	No	N/A
Recommendations:				
<i>BVFD: Establish and adopt a Master Plan and a Strategic Plan.</i>				
<i>CCEMS: Establish and adopt a Master Plan and a Strategic Plan.</i>				
<i>CCFPD: Establish and adopt a Strategic Plan. Scan the Master Plan document and including it on district website.</i>				
<i>SFD: Establish and adopt a Master Plan and a Strategic Plan.</i>				
B. CIP Capital Improvement Plan	Town has a CIP (capital improvement plan)	Yes	Yes, for apparatus	Two year, city plans to develop a ten-year plan, yes for the fire department includes apparatus, turnout gear, and hose. SAFPD for apparatus
i) plan period	2012 – 2021	Yes, annually	25 years	Yes, city annually, SAFPD 25 years
ii) periodic review	Updated annually during budget preparation	Yes	Yes, annually	Yes, annually city and SAFPD
iii) projects	Fire station and pumper	Seek grants and attempt to secure general fund funding	Yes	Seek grants and attempt to secure general fund funding
iv) funding	Yes, primarily grant funding	Yes, annually	Yes, annually	Yes, annually city and SAFPD
12. Budget				
A. Service level defined	No	No	No	No, city and SAFPD
Recommendations:				
<i>BVFD: Tie budget to service levels, incorporating the service level definitions into the budget document.</i>				
<i>CCEMS: Tie budget to service levels, incorporating the service level definitions into the budget document.</i>				
<i>CCFPD: Tie budget to service levels, incorporating the service level definitions into the budget document.</i>				
<i>SFD: Tie budget to service levels, incorporating the service level definitions into the budget document.</i>				

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Survey Component	Management Components – Observations			
	BVFD	CCEMS	CCFPD	SFD
B. Operating budgetary funds				
i) organized by program or category	Category	Yes	Yes	Category, city and SAFPD
ii) sub accounts	Yes	No	Yes	No, city and SAFPD
C. Reserve funds	There is a reserve fund for the Town	General fund reserves	Yes	General fund reserves and requirement for 20% because of voter approved initiative. SAFPD capital reserve account.
D. Revenue funds	No specific revenue, receive incidental donations	Transport revenue and inter-facility transfer	Yes	City, inspections and plans review. SAFPD plans review, inspections, and impact fees for alternate water sources.
E. Enterprise funds	No	No	No	No
F. Adopted budget FD income accounts, 2012 actual amounts	None	\$1,203,930	\$1,004,757	City \$79,500, SAFPD \$100,000
i) EMS transport revenue	N/A	Billed, \$1,542,556.39 Received, \$647,342.21	N/A	N/A
ii) Plan review and permits	Yes, fire department does plans review, no revenue	N/A	Yes, plan review for new development	Yes, city and SAFPD
G. Revised budget FD expense accounts, 2012 General Fund	\$72,172	\$1,281,009	\$1,004,757	\$1,385,900
i) personnel	\$25,891	\$551,369	\$482,355	\$704,600
ii) materials and services	\$46,381	\$484,940	\$345,500	\$97,800
iii) capital outlay	\$0	\$155,000	Yes, \$550,000	\$0
H. District overhead				
i) reserve fund contributions	No	No	Yes	None
ii) fleet rental charges	No	No	None	None
iii) fleet maintenance charges	Yes, fire department has a part-time mechanic	Yes	\$30,000	\$11,000
iv) motor fuel charges	Yes	Yes	\$30,000	\$9,500
v) property/ casualty insurance	Yes	County pays	\$45,000	City pays

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Survey Component	Management Components – Observations			
	BVFD	CCEMS	CCFPD	SFD
vi) medical and dental insurance	Yes, offered to the membership, COSFFA	Yes	\$47,000	City pays 80%, employee pays 20%.
vii) workers' compensation	Yes	Yes	Included above	City pays, SAFPD carries a secondary disability policy for firefighters
viii) workers' compensation mod rate	Not determined	Not determined	1.43	0.72
ix) employee pension plan	FPPA (Fire and Police Pension Association) of Colorado	No	Volunteer pension administered for the district, FPPA for career personnel	FPPA (Fire and Police Pension Association) of Colorado
Recommendations:				
<i>BVFD: Determine mod rate for workers' compensation, which is a reflection of employee claims history. Lower mod rates equate to lower annual costs and lower claims history.</i>				
<i>CCEMS: Determine mod rate for workers' compensation, which is a reflection of employee claims history. Lower mod rates equate to lower annual costs and lower claims history.</i>				
13. Debt				
A. Bonded debt	No	No	No	No
B. Capital lease	No	No	Yes	No
C. Unfunded liability				
i) pension fund	Not supplied	No	\$502,086	8% city and 8% employee contribution
ii) workers' compensation claims	No	Yes	None	No
14. Revenue				
A. Tax levy				
i) limitations	No	No	Assessed property taxes, 3.936 mill rate	No
B. Service contracts	No	Yes, LifePaks, gurneys, and data entry system	No	Yes, City with SAFPD, no for SAFPD
C. Grants				

Survey Component	Management Components – Observations			
	BVFD	CCEMS	CCFPD	SFD
i) recent awards	No	Yes, paramedic training tuition, Colorado provider grant for 2012-medical equipment	Yes, VFA and BLM, \$13,000 and \$10,000 respectively	Yes, city EOC (Emergency Operations Center), Yes, SAFPD \$30,000, VFA Grant \$4,000
ii) county grants	No	No	Title III grant with the county	No, city, yes for SAFPD Title III grant with the county
ii) outstanding applications	No	Yes, Colorado provider grant application for 2013	No	No, city and SAFPD
Recommendation: <i>BVFD: Seek grants and other non-tax revenues to augment community service.</i>				
D. Fundraising	Yes, Gold Rush Days and other public civic events	None by agency, by foundation	No	Yes, city for fireworks donations, \$9,000, no for SAFPD
i) Foundation	No	EMS Foundation does fund raising for public safety	Yes, Friends of CCFPD Firefighters	No, city and SAFPD
ii) Volunteer association	Yes	No	No	No, city and SAFPD
E. Fees for service				
i) ambulance transport fee structure	N/A	See below	N/A	N/A
ii) billing for fire response	No	N/A	Yes, extrication, traffic control	N/A
iii) inspection fee	No	N/A	Yes, for non-tax-paying customers	Yes, city and SAFPD, \$35/hour for new business, \$25/hour for existing structures, plans review based on square footage
iv) hazardous materials	No	N/A	Yes	Yes, city and SAFPD actual costs

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Survey Component	Management Components – Observations			
	BVFD	CCEMS	CCFPD	SFD
v) cost recovery -- external	No	N/A	Interagency dispatches for wildland fires	Yes, city and SAFPD fireworks permit sales \$100 per stand, SAFPD (impact fee) alternative water supplies \$1 per gallon, and SAFPD reimbursement for wildland deployment,
vi) impact fee(s)	Yes, only for schools	N/A	No	No, city and SAFPD
vii) school/student fee	No	N/A	No	No, city and SAFPD
viii) event stand-by charges	Yes, standby fees for personnel and apparatus	Yes	No	Yes, city only for a large event, then charge actual costs, SAFPD no
ix) Wildland mobilizations	No	No	Yes	City, personnel cost recovery plus actual expense reimbursement, SAFPD actual expense
Recommendation: <i>BVFD: Maximize non-tax revenue opportunities, such as billing for certain fire responses, inspection fees, hazardous materials, external cost recovery, wildland mobilizations.</i>				
F. Ambulance service collection(s)	N/A	IFT-Billed, \$473,358.64 Adjusted, \$54,442.08 Outstanding, \$25,191.14	No	N/A
i) percentage collected (2010)	N/A	57%	N/A	N/A
ii) collection fee(s)	N/A	6%	N/A	N/A

Figure 6: CCEMS Fee Schedule⁴

Level of Service	Rate
BLS (Basic Life Support)	\$795.00
ALS 1 (Advanced Life Support)	\$930.00
ALS 2 (Advanced Life Support)	\$1,065.00
Mileage	\$26.30
Treat and Release	\$200.00

Comments: While all of the agencies have developed a Mission Statement, BVFD and CCEMS should take the next step of creating a Vision Statement and corresponding Values (or behaviors) for the organization. Along those same lines, it is recommended that each agency pursue Master Plan and Strategic Plan development (with the exception of CCFPD which does have a Master Plan as noted). An organization’s strategic plan provides a detailed roadmap into the future. It is a living, working document, and a “tool” to be used at all levels of the organization. Constant evaluation of outcomes is critical to determining the success of the organization’s efforts and direction. A set of performance objectives needs to be developed to provide a quantitative method to monitor performance. In addition, plans should include targets for maintenance or improvement of the specific measures.

The current environment surrounding local fire departments require policy makers to look at efficiencies and innovation to ensure they are delivering the best possible services within the financial restraints that are present. This requires that the assumptions regarding revenues, expenditures and service delivery are reliable and sustainable today and into the future. With proper planning, policy makers can forecast costs and service demands. This “predictability” will assist the organization in determining how and to what level services will be delivered. The foundation of succeeding in meeting the needs of the community being served is proper planning.

⁴ Rates effective as of March 1, 2011.

Survey Table 3: Staffing and Personnel Management

Fire and EMS organizations must provide adequate staffing in three key areas: emergency response and operations, administration, and support. ESCI considered these elements when reviewing the staffing methodologies of the study agencies to assure that an appropriate balance between the three is maintained, given the realities of available local resources.

Several standards address staffing issues. Specifically, the OSHA Respiratory Protection Standard 29 CFR 1910.134; NFPA 1710 Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, to the Public by Career Fire Departments; and 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 are frequently cited as authoritative documents. In addition, the Center for Public Safety Excellence (CPSE) publishes benchmarks for the number of personnel required on the emergency scene for various levels of risk.⁵

However, numbers and deployment of people are not the only considerations. Careful attention must be paid to managing the workforce to achieve maximum productivity for the organizations as well as maximum satisfaction for the individuals. A safe working environment, fair treatment, and recognition for a job well done are key components to job satisfaction.

It is also important that the organization's members know to whom they should go when they have a problem, question, or issue related to their relationship to the organization. In large organizations, a human resource department typically handles this function. Staff within such a department addresses questions, issues, and tasks related to appointment, benefits, performance, discipline, promotion, or termination of employees. These duties are often combined with other responsibilities in smaller organizations.

⁵ CPSE: formerly the Commission on Fire Accreditation International (CFAI).

Survey Component	Staffing and Personnel Management – Observations			
	BVFD	CCEMS	CCFPD	SFD
1. Policies, Rules, Regulations, and Operational Guidelines				
A. Human resource manager	Handled by the volunteer association	No	Fire chief	City, finance and administrative services (finance director), SAFPD N/A
B. Personnel policy manual maintained	Association by-laws	County employee handbook and agency SOGs	Yes	Yes, city, SAFPD N/A
i) manual provided at initial hiring	Yes	Yes	Yes	Yes
ii) training provided	Yes	Yes	Yes	No
iii) periodic review and update	No	Yes	Yes	Currently under review
Recommendations:				
<p><i>BVFD: The Human Resource Manager position manages many legal risks for the agency (even an all-volunteer agency), thus it is critical that the position is a well-trained management position.</i></p> <p><i>CCEMS: The Human Resource Manager position manages many legal risks for the agency, thus it is critical that the position is a well-trained management position. The county HR director should serve in this capacity.</i></p> <p><i>SFD: Incumbent and new personnel should be training on the contents of the HR manual.</i></p>				
C. Rules and regulations provided	Yes, association by-laws	County employee handbook and agency SOGs	Yes	Yes, city, SAFPD N/A
D. Operational guidelines provided	Yes, SOGs	Yes, SOGs	Yes	Yes, inclusive of SAFPD
E. Position descriptions current/accurate	Yes, association by-laws	Yes	Yes for career staff	Yes, city, SAFPD N/A
E. Desk manuals	No	Yes	Yes	Yes, city, SAFPD N/A
F. Retention program established	No, working on one	No, only offer continuing education opportunities	No	Yes, city, SAFPD N/A
Recommendations:				
<p><i>BVFD: Complete development and implementation of a member retention program.</i></p> <p><i>CCEMS: Develop and implement a member retention program.</i></p> <p><i>CCFPD: Develop and implement a member retention program.</i></p>				

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Survey Component	Staffing and Personnel Management – Observations			
	BVFD	CCEMS	CCFPD	SFD
2. Compensation, Point System, and Benefits				
A. Uniformed employee compensation, FT annual				
i) fire chief	N/A	N/A	\$80,386.83	\$61k-\$92k range; current \$72,600
ii) assistant fire chief	N/A	N/A	0	N/A
iii) deputy fire chief	N/A	N/A	0	N/A
iv) battalion chief	N/A	N/A	0	N/A
v) captain, training	N/A	N/A	\$30,708.34 (training coordinator/FF)	N/A
vi) fire marshal	N/A	N/A	N/A	N/A
vii) PIO/educator/ inspector	N/A	N/A	\$42,031.54	N/A
viii) captain EMS/MSO	N/A	N/A	N/A	N/A
ix) director of administrative services	N/A	N/A	N/A	N/A
x) administrative services manager	N/A	N/A	\$35,173.94	N/A
xi) finance assistant	N/A	N/A	N/A	N/A
xii) office assistant	\$12.30 per hour	N/A	N/A	N/A
xiii) secretary	N/A	N/A	1 (volunteer for the volunteers)	\$23k-\$29k (part time)
xiv) staff assistant	N/A	N/A	N/A	N/A
xv) fleet manager	N/A	N/A	N/A	N/A
xvi) lead mechanic EVT	N/A	N/A	N/A	N/A
xvii) mechanic EVT	N/A	N/A	N/A	N/A
xviii) mechanic	Not supplied	N/A	\$32,553.30 (to be EVT certified within 1 year)	N/A
xix) facility maintenance	N/A	Yes	N/A	N/A
xx) facilities technician	N/A	N/A	N/A	N/A
xxi) battalion chief, operations	N/A	N/A	N/A	N/A
xxii) captain paramedic, operations	N/A	N/A	N/A	N/A
xxiii) captain, operations	N/A	N/A	N/A	\$45k-\$59k
xxiv) lieutenant paramedic, operations	N/A	N/A	N/A	N/A

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Survey Component	Staffing and Personnel Management – Observations			
	BVFD	CCEMS	CCFPD	SFD
xxv) lieutenant, operations	N/A	N/A	N/A	N/A
xxvi) engineer, operations	N/A	N/A	N/A	N/A
xxvii) firefighter/paramedic, operations	N/A	N/A	N/A	N/A
xxviii) firefighter/EMT, operations	N/A	N/A	46 (volunteer)	\$28K-\$42K
B. Additional compensation				
i) EMT premium pay	N/A	N/A	No	No
ii) paramedic pay	N/A	Primary job function	No	No
iii) clothing allowance	No	Yes, \$200 annually for full-time employees; Part-time \$100.	Furnished by district	Furnished by department
iv) longevity pay	No	No	No	No
v) other specialty pay	N/A	IFT, 0.50 mileage stipend EMT-P, flat rate of \$100 EMT-I, \$75 EMT-B, \$50	No	Yes, for wildland firefighting
C. Career employee benefits				
i) social security	Yes	Yes	Yes	Yes
ii) workers' compensation	Yes	Yes	Yes	Yes
iii) pension	No	Yes	Yes	Yes
iv) deferred compensation	No	No	No	Yes
v) medical insurance	N/A	Yes	Yes	Yes
vi) dental insurance	N/A	Yes	Yes	Yes, regular employees
vii) short and long term disability insurance	N/A	Yes	Yes	No
viii) life insurance	Yes, \$1,000	Available	Yes	Yes
ix) vision insurance	No	Yes	Yes	No
x) survivor income benefit	No	No	Through pension for volunteers	Yes, benefit is through FPPA and state
xi) additional life insurance	No	N/A	No	N/A
D. Volunteer compensation				
i) LOSAP	No	N/A	\$5/call	N/A

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Survey Component	Staffing and Personnel Management – Observations			
	BVFD	CCEMS	CCFPD	SFD
ii) other benefits/incentives	Longevity recognition	Continuing education opportunities	District pays 100% of the fitness membership after the first 3 months, flu shots, training expenses for out-of-town training	N/A
3. Disciplinary Process				
A. Disciplinary policy established	Yes	Yes	Yes	Yes
B. Disciplinary process communicated	Yes	Yes	Yes	Yes
C. Appeal process provided	Not supplied	Yes	Yes	Yes
i) recent litigation	Not supplied	No	No	No
ii) pending litigation	Not supplied	No	No	No
4. Counseling Services				
A. Critical incident stress debriefing ⁶	Not supplied	Yes, provided by an outside source	Yes	Yes, if requested
B. Employee assistance program	Not supplied	Yes	No	Yes
C. Intervention program	Not supplied	Yes	No	Yes
Recommendations: <i>BVFD: Establish a CISD program, possibly in partnership with neighboring agencies. Establish an employee (volunteer) assistance program for personnel in need of counseling services.</i> <i>CCFPD: Establish an employee (volunteer) assistance program for personnel in need of counseling services.</i>				
5. The Application and Recruitment Process				
A. Recruitment program	Not supplied	No	In process of development	Reserve employees are the first source and posting
Recommendations: <i>BVFD: Establish an ongoing recruitment program to maintain a ready pool of potential volunteers</i> <i>CCEMS: Establish an ongoing recruitment program to maintain a ready pool of potential employees</i> <i>CCFPD: Establish an ongoing recruitment program to maintain a ready pool of potential volunteers</i>				
B. Application process				
i) qualification check	Not supplied	Yes	No	Yes
ii) reference check	Not supplied	Yes	Yes	Yes

⁶ An Employee Assistance Program (EAP) is a confidential, self-referral program typically made available to all members and their families. The programs are provided by contract with providers external to the organization, are inexpensive and highly beneficial.

Survey Component	Staffing and Personnel Management – Observations			
	BVFD	CCEMS	CCFPD	SFD
iii) background check	Not supplied	Yes	Yes	Yes, city human resources
iv) physical standards established	Not supplied	Yes	Yes	Yes
v) knowledge testing	Not supplied	Yes	No	Yes
vi) interview	Not supplied	Yes	Yes	Yes
vii) medical exam required	Not supplied	Yes	No	Yes
viii) psychological exam required	Not supplied	No	No	No
Recommendations: <i>BVFD: Establish a thorough volunteer selection process for prospective new volunteers, including qualifications, reference and background check, establish physical standards, knowledge testing, interviews, medical examination, and psychological examination.</i> <i>CCEMS: Add a psychological examination to the hiring process with satisfactory passage a condition of employment.</i> <i>CCFPD: Establish a thorough volunteer selection process for prospective volunteers, including qualification review, general knowledge testing, interviews, medical physical and psychological examinations.</i> <i>SFD: Establish a thorough selection process for prospective new employees, including psychological examination.</i>				
6. Testing, Measuring, and Promotion Process				
A. Periodic competence testing	Planned	Yes	No	Yes
B. Periodic physical competence testing	Planned	No	Yes	Yes, NFPA and hazardous materials compliance testing every other year
C. Periodic performance review	No	Yes	Yes, for paid staff	Citywide written performance review
D. Promotional testing	No, elected by membership	No, by appointment	No	Yes
Recommendations: <i>BVFD: Establish minimum physical abilities, skills and performance standards and evaluate all personnel annually. Establish promotional testing based on skills and competence.</i> <i>CCEMS: Establish minimum physical abilities standards and evaluate all personnel annually. Establish promotional testing based on skills and competence.</i> <i>CCFPD: Establish minimum skills standards and evaluate all personnel annually. Establish promotional testing based on skills and competence.</i>				
7. Health and Safety				

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Survey Component	Staffing and Personnel Management – Observations			
	BVFD	CCEMS	CCFPD	SFD
A. Medical standards established	Not supplied	Yes	No	Yes, NFPA 1582
i) periodic medical exam ⁷	Not supplied	Annual blood work	No	Yes, annually
B. Safety committee established	Not supplied	No	Yes	Yes
i) membership	Not supplied	N/A	Two safety officers, one north and one south	N/A
ii) meetings	Not supplied	N/A	As needed	N/A
iii) meeting minutes	Not supplied	N/A	Yes	N/A
Recommendations:				
<i>BVFD: Establish minimum medical standards for personnel and provide periodic medical exams. Establish a safety committee, include line personnel, hold meetings at least quarterly and keep minutes of meetings.</i>				
<i>CCEMS: Establish a safety committee, include line personnel, hold meetings at least quarterly and keep minutes of meetings.</i>				
<i>CCFPD: Establish minimum medical standards for personnel and provide periodic medical exams.</i>				
<i>SFD: Safety committee membership should include line personnel. Hold meetings at least quarterly and keep minutes of meetings.</i>				
8. Administration and Other Support Staff				
A. Fire chief	1	N/A	1	1
B. Assistant fire chief	2	N/A	1 (volunteer)	0
C. Deputy fire chief	0	N/A	0	0
D. Battalion chief	0	N/A	3 (volunteer)	0
E. Captain, training	0	N/A	1	0
F. Fire Marshal	0	N/A	Sheriff appoints fire chief as fire marshal for county	0
G. PIO/Educator/Inspector	0	N/A	1 (firefighter/inspector)	0
H. Captain EMS/MSO/Medic	0	N/A	1 (physician advisor is a volunteer, and contracted (paid) to provide EMS oversight)	Contracted physician advisor
I. Director of administrative services	0	N/A	0	0
J. Administrative services manager	0	N/A	0	0

⁷ Annual medical examination requirements are established both in OSHA Respiratory Protection Standard 1910.34 and NFPA Standards 1500 – Standard on Fire Department Occupational Safety and Health Program and 1582 – Standard on Comprehensive Occupational Medical Program for Fire Departments

Survey Component	Staffing and Personnel Management – Observations			
	BVFD	CCEMS	CCFPD	SFD
K. Finance assistant	0	N/A	0	0
L. Office assistant	0	1 (administrative assistant)	1 (administrative assistant)	1 (administrative assistant)
M. Secretary	1 (secretary/treasurer, part-time)	N/A	0	0
N. Staff assistant	0	N/A	0	0
O. Fleet manager	0	N/A	0	0
P. Lead mechanic EVT	0	N/A	0	0
Q. Mechanic EVT	0	N/A	0	0
R. Mechanic	0	N/A	1 (preventative maintenance engineer)	0
S. Facility maintenance	0	N/A	See above	0
T. Facilities technician	0	N/A	0	0
U. Total administrative and support staff	2 (both part-time)	1	4	2
V. Percent administrative and support to total personnel	Not determined	4.0%	5.6%	13.3%
9. Emergency Service Staff				
A. Battalion chief	1 (suppression chief)	N/A	3	0
B. Captain paramedic	0	N/A	0	0
C. Captain	1	N/A	7	3
D. Lieutenant paramedic	0	N/A	0	0
E. Lieutenant	1	N/A	4	0
F. Engineer	0	N/A	0	0
G. Firefighter/paramedic	0	N/A	1	0
H. Firefighter/EMT	2	N/A	49	10 (6 career and 4 reserve)
I. Total operational staff	18 total: 15 active, 3 inactive	Total = 24-12 FTE: 6 EMT-P, 1 EMT-I, 5 EMT- B 12 Part time: 5 EMT-P, 1 EMT-I, 6 EMT-B	65	13
J. Fire department total	19 total	25	67	15

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Survey Component	Staffing and Personnel Management – Observations			
	BVFD	CCEMS	CCFPD	SFD
K. Percent of operational officers to firefighters	N/A	N/A	9.1%	30.0%
10. Use of Career and Volunteer Personnel				
A. Career schedule				
i) length of normal duty period	N/A	48/96	40 hour work week	48/96
ii) FLSA period	N/A	N/A	Yes	28 day cycle
iii) duty hours per week	N/A	56 (216 for overtime)	40	56 (212 for overtime)
iv) normal shift begins	N/A	0700	0800	0730
v) callback requirements	N/A	No	Yes	No
vi) residency requirements	N/A	N/A	Yes	Yes
vii) standby duty requirements	N/A	No	Yes, for volunteers	No
B. Operational career services				
i) fire suppression	N/A	N/A	Yes, operations	Yes
ii) EMS/rescue, first response	N/A	Yes	Yes	Yes
iii) EMS, advanced life support	N/A	Yes	No	Yes
iv) specialized rescue	N/A	Yes, water rescue	Yes, swiftwater and low angle	Yes, swiftwater, ice, high and low angle
v) fire prevention inspections	N/A	N/A	Yes	Yes
vi) emergency management	N/A	N/A	Yes	Yes
vii) public education	N/A	Yes	Yes	Yes
viii) hazardous materials response (level)	N/A	Awareness	Yes, operations	Yes, technician level
D. Volunteer services				
i) battalion chief	0	N/A	3	0
ii) captain	1	N/A	7	0
iii) lieutenant	1	N/A	4	0
iv) apparatus operator	0	N/A	N/A	0
v) firefighter	14	N/A	49	4 (reserve)

Survey Component	Staffing and Personnel Management – Observations			
	BVFD	CCEMS	CCFPD	SFD
vi) EMS	2, EMT-B 16, 1 st Responder	12 medically trained personnel 6, EMT-P 1, EMT-I 5, EMT-B 12 part time personnel medically trained 5, EMT-P 1, EMT-I 6, EMT-B	1, Paramedic, 9 EMTs, 8 First Responders, and 47 CPR/First Aid	14 medically trained personnel 1, EMT-P 1, EMT-I 12, EMT-IV
vii) chaplain	0	0	1	0
viii) civilian administrative volunteer	0	0	0	0
11. Responsibilities and Activity Levels of Personnel				
A. Assignment of routine duties:				
i) by position	Yes	Yes	N/A	Yes
ii) by areas of personal interest	Yes	Yes	N/A	Yes
B. Special duties assigned by:				
i) bid	N/A	No	N/A	No
ii) duty assignment	N/A	Yes	N/A	No
iii) areas of personal interest	Yes	Yes	N/A	No
C. Committees and work groups				
i) EMS quality management	No	Yes	No, Dr. Rick Ruitter handles this as physician advisor	Yes
ii) chaplain	No	No	No	Not formally
iii) training	No	Yes	No	No
iv) safety	No	No	Yes	No
v) building development	No	No	Yes	Yes
vi) standards	No	Yes	Yes	Yes

Comments: None noted.

Survey Table 4: Service Delivery and Performance

This survey table compares the various components and provides observations of the elements that make up the delivery of the most critical core services provided by the four service providers. The primary focus is on the existing capacity of the agencies and the context of the baselines and benchmarks used to make incremental improvements in the future. The service delivery and performance analysis also provides a methodology to develop a Standard of Cover (SOC) document that provides a tool for measuring service delivery performance, which is important and necessary if an agency desires accreditation. For a graphic depiction of the Cascade of Events recommendations in Section 5: Performance, see Figure 7 following the matrix.

Survey Component	Service Delivery and Performance – Observations			
	BVFD	CCEMS	CCFPD	SFD
1. Demand				
A. Risk analysis				
i) target hazards identified	Yes	N/A	Some information available from fire inspections	Company inspections and Tier II hazmat records
ii) geographical call distribution by type/severity	No	Not Tracked	Not tracked	Not tracked
iii) fire flows identified	Yes	N/A	Yes	Yes
iv) call distribution by time of day/day of week	No	Tracked in monthly report	Information available in FireHouse RMS	Reported in annual report
Recommendations:	<p><i>BVFD: Track geographic call distribution for future station siting decisions. Track call distribution by time of day/day of week to understand highest vulnerability periods for targeted recruitment of volunteers during high exposure windows.</i></p> <p><i>CCEMS: Track geographic call distribution to site current or future ambulance resources where the high risk/high demand areas are.</i></p> <p><i>CCFPD: Track geographic call distribution to site current or future fire stations where the high risk/high demand areas are.</i></p> <p><i>SFD: Track geographic call distribution to site current or future fire stations where the high risk/high demand areas are.</i></p>			
2. Distribution				
A. Facilities				
i) effective reach identified	N/A	N/A	Yes, in master plan	N/A single fire station
ii) geographical barriers/gaps identified	Personnel have good knowledge of area	Personnel have good knowledge of area	Personnel have good knowledge of area	Personnel have good knowledge of area

Survey Component	Service Delivery and Performance – Observations			
	BVFD	CCEMS	CCFPD	SFD
iii) inefficient overlap of response areas	Two CCFPD fire stations within Buena Vista	N/A	Two CCFPD fire stations within Buena Vista and areas where CCFPD and SAFPD share borders	Areas where CCFPD and SAFPD share borders.
Recommendations: <i>BVFD: Measure effective travel time reach from BV fire station. Partner with CCFPD for effective response coverage.</i> <i>CCFPD: Measure effective travel time reach from each fire station. Partner with BVFD for effective response coverage.</i>				
B. Apparatus				
i) vehicles appropriate to risk	Yes	Yes	Yes	Yes
ii) pumping capacity effective for initial attack	Yes	N/A	Yes	Yes
iii) ladders appropriate for rescue/elevated operations	Ground ladders, Tower available by mutual aid from CCFPD	N/A	Ground ladders, 100' tower (Quint) at Fire Station No. 1 in Buena Vista	Ground ladders, 75' Quint
C. Staffing				
i) adequate for initial attack of predominant risk	No	N/A	Minimum staffing guidelines in place for responses, 2 in, 2 out observed	2 in, 2, out at full staffing with duty officer; not at minimum staffing, includes the fire chief, thus there is no officer to take command.
ii) volunteer staffing turnout time	Not tracked separately from response time	N/A	Not tracked separately from response time	N/A
Recommendations: <i>BVFD: Increase recruiting of volunteer personnel to increase likelihood of achieving adequate staffing for initial attack of predominant risk. Staffing turnout time must be tracked as a separate component of response time. This is a controllable component of total response time but must be measured to be addressed.</i> <i>CCEMS: Staff turnout time must be tracked as a separate component of response time. This is a controllable component of total response time but must be measured to be addressed.</i> <i>CCFPD: Staff turnout time must be tracked as a separate component of response time. This is a controllable component of total response time but must be measured to be addressed.</i> <i>SFD: Staff turnout time must be tracked as a separate component of response time. This is a controllable component of total response time but must be measured to be addressed.</i>				
3. Concentration				
A. Effective response force				

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Survey Component	Service Delivery and Performance – Observations			
	BVFD	CCEMS	CCFPD	SFD
i) defined by call type	Response guidelines by incident type in place	N/A	Response guidelines by incident type in place	Response guidelines by incident type in place
ii) achieved by 10 minutes	Not reported	N/A	Not reported	Not reported
Recommendations:				
<p><i>BVFD: Establish critical task analyses for each major response type, determine staffing levels required to implement these critical tasks, and determine ability to assemble necessary resources in the first ten minutes of the incident. This defines whether the agency is primarily offensive, defensive, or transitional.</i></p> <p><i>CCEMS: Establish critical task analyses for each major response type, determine staffing levels required to implement these critical tasks, and determine ability to assemble necessary resources in the first ten minutes of the incident. For an EMS provider, this defines where and what types of incidents where mutual assistance is required while responding, avoiding loss of valuable time waiting until arrival.</i></p> <p><i>CCFPD: Establish critical task analyses for each major response type, determine staffing levels required to implement these critical tasks, and determine ability to assemble necessary resources in the first ten minutes of the incident. This defines whether the agency is primarily offensive, defensive, or transitional.</i></p> <p><i>SFD: Establish critical task analyses for each major response type, determine staffing levels required to implement these critical tasks, and determine ability to assemble necessary resources in the first ten minutes of the incident. This defines whether the agency is primarily offensive, defensive, or transitional.</i></p>				
4. Reliability				
A. Workload analysis				
i) unit hour utilization	Not tracked by apparatus	EMS turnaround time tracked	Not tracked by apparatus	Not tracked
ii) failure rate by unit identified	Not tracked	Not tracked	Not tracked	Not tracked
iii) concurrent calls/demand shifting quantified	Not tracked	Not tracked	Not tracked	Not tracked
iv) percent of total impact on timely assembly of effective response force	Not tracked	Not tracked	Not tracked	Not tracked

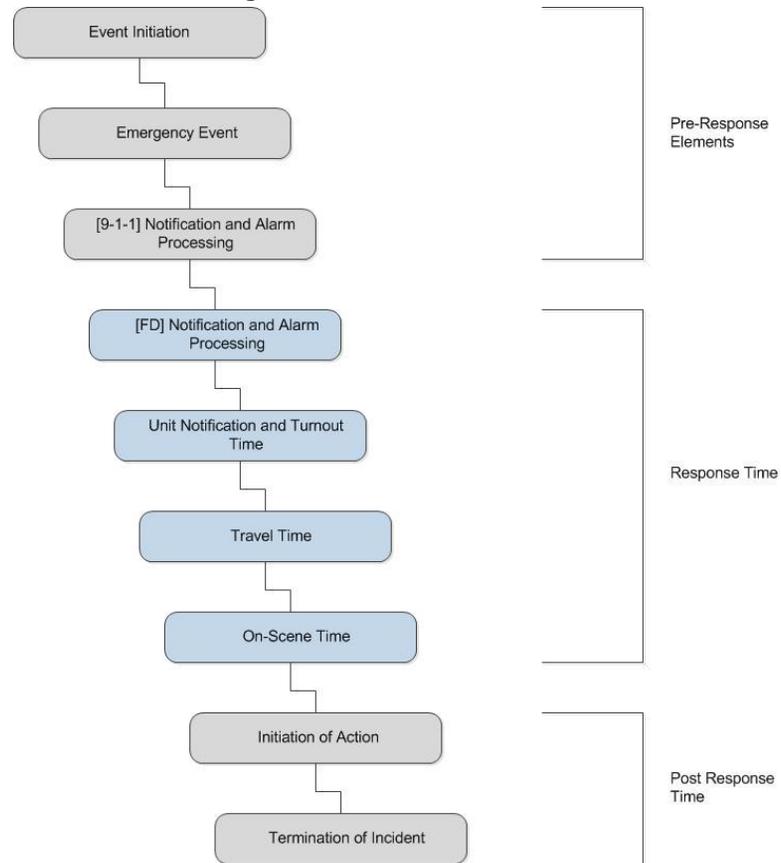
Survey Component	Service Delivery and Performance – Observations			
	BVFD	CCEMS	CCFPD	SFD
Recommendations:				
<i>BVFD: Track all workload analysis components, enabling good management decisions based on good management data. Significant duplication can be eliminated and partnership opportunities identified by tracking these data points.</i>				
<i>CCEMS: Track all workload analysis components, enabling good management decisions based on good management data. Significant duplication can be eliminated and partnership opportunities identified by tracking these data points.</i>				
<i>CCFPD: Track all workload analysis components, enabling good management decisions based on good management data. Significant duplication can be eliminated and partnership opportunities identified by tracking these data points.</i>				
<i>SFD: Track all workload analysis components, enabling good management decisions based on good management data. Significant duplication can be eliminated and partnership opportunities identified by tracking these data points.</i>				
5. Performance				
A. Cascade of events				
i) alarm time	Available from Dispatch Center	Available from Dispatch Center	Available from Dispatch Center	Available from Dispatch Center
ii) notification time	Available from Dispatch Center	Available from Dispatch Center	Available from Dispatch Center	Available from Dispatch Center
iii) call processing time	Available from Dispatch Center	Available from Dispatch Center	Available from Dispatch Center	Available from Dispatch Center
iv) turnout time	Available from Dispatch Center	Available from Dispatch Center	Available from Dispatch Center	Available from Dispatch Center
v) en route time	Available from Dispatch Center	Available from Dispatch Center	Available from Dispatch Center	Available from Dispatch Center
vi) travel time	Available from Dispatch Center	Available from Dispatch Center	Available from Dispatch Center	Available from Dispatch Center
vii) arrival time	Available from Dispatch Center	Available from Dispatch Center	Available from Dispatch Center	Available from Dispatch Center

Survey Component	Service Delivery and Performance – Observations			
	BVFD	CCEMS	CCFPD	SFD
Recommendations:				
<p><i>BVFD: All components of the Cascade of Events are necessary to calculate complete response time (NFIRS compliance). Work with the Chaffee County Communications Center to capture response data in a hours:minutes:seconds format. Complete, accurate response activity provides data for making staffing and apparatus deployment decisions based on response performance.</i></p> <p><i>CCEMS: All components of the Cascade of Events are necessary to calculate complete response time (NFIRS compliance). Work with the Chaffee County Communications Center to capture response data in a hours:minutes:seconds format. Complete, accurate response activity provides data for making staffing and apparatus deployment decisions based on response performance.</i></p> <p><i>CCFPD: All components of the Cascade of Events are necessary to calculate complete response time (NFIRS compliance). Work with the Chaffee County Communications Center to capture response data in a hours:minutes:seconds format. Complete, accurate response activity provides data for making staffing and apparatus deployment decisions based on response performance.</i></p> <p><i>SFD: All components of the Cascade of Events are necessary to calculate complete response time (NFIRS compliance). Work with the Chaffee County Communications Center to capture response data in a hours:minutes:seconds format. Complete, accurate response activity provides data for making staffing and apparatus deployment decisions based on response performance.</i></p>				
6. Mutual/Auto Aid				
A. Given/Received balance	Given: 1 Received: 1	N/A	Given: 38 Received: 5	Given: 16 Received: 11

Cascade of Events

The International Association of Fire Chiefs (IAFC) makes recommendations for response times and has established a “Cascade of Events” to assist responders in understanding response intervals for emergency operations. Irrespective of the standard used, system regulators establish an appropriate response time reporting method for their local communities. While call processing and dispatch functions are external for the study agencies, those dispatch functions should also be measured and monitored by the system and standards for dispatch should be established.

Figure 7: Cascade of Events



Survey Table 5: Support Programs – Emergency Services Training

Providing safe and effective fire and emergency medical services requires a well-trained workforce. Training and education of department personnel are critical functions for BVFD, CCEMS, CCFPD and SFD. Without a comprehensive training program, emergency outcomes are compromised, departmental personnel are at risk, and the cities, district and county may be exposed to liability for the actions of its members/employees. “One of the most important jobs in any department is the thorough training of personnel. The personnel have the right to demand good training and the department has the obligation to provide it.”⁸

Emergency personnel operate in a complex, dangerous, and dynamic environment, as demonstrated nationally by the fatalities and serious injuries that occur annually. Training is the single most important factor that prepares emergency personnel to meet the challenges of the situations and environments in which they work. The International Fire Service Training Association (IFSTA) states:

...regardless of the particular system used, an effective training program will include: (1) the continuous training of all levels of personnel in the organization; (2) a master outline or plan; (3) a system for evaluating the scope, depth, and effectiveness of the program; and (4) revising the program, as required, to include changing state and federal mandates, advances in equipment, products, and operational techniques.

The function of a training program is not merely imparting personal knowledge and technical skills to an individual, it is developing the self-confidence to perform correctly under stressful if not hostile conditions. Firefighting is inherently dangerous; it is important that firefighters practice working within the confines of calculated risk. With fire department training, individuals are exposed to emergency situations, where they will be required to interact with a number of realistic variables. Training gives firefighter’s situational awareness, a necessary tool in their arsenal.

In addition to firefighter training, emergency medical services (EMS) skills training is important. EMS responses make up the majority of the calls for service for most fire departments and all the calls for EMS agencies. EMS personnel must receive high quality initial and continuing education to ensure they are capable of providing appropriate patient care for a wide variety of medical

⁸ Klinoff, Robert. *Introduction to Fire Protection*, Delmar Publishers, 1997. New York, NY

and trauma situations. Studies have shown that while moving and lifting patients, EMS providers are more likely to sustain back injuries that lead to missed work than workers in most other workplaces. In addition to injuries suffered while handling patients, EMS providers are at risk from injury responding and transporting patients, operating in traffic, and from violent encounters. OSHA and other standards require annual training in bloodborne pathogens and communicable disease control. A training program must be systematic and must provide positive feedback to the trainee, firefighter/EMT, or fire officer/supervisor. The goals of training should always focus on performance, never merely on acquiring a certain number of training hours.

Today's industry standards outline certain areas that are considered integral to effective training programs. The program should include the following:

- General training competencies
- Training administration and scheduling
- Training facilities and resources
- Training procedures, manuals, and protocols
- Record keeping (records management system)
- Organizational priority to training
- Training program clerical support services

A training program that includes the above will help ensure that personnel have the capacity to respond effectively and safely to calls for service in their communities.

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Survey Component	Emergency Services Training – Observations			
	BVFD	CCEMS	CCFPD	SFD
1. General Training Competency				
A. Incident command system – certification levels defined?	Yes, NIMS100 and 700. 300 required of officers	Yes, follow recommended national standard	Yes, NIMS 100 and 700 are required. District is working to meet the recommended certification standard recommendations for all levels	Yes, follow National Standard Recommendations
Recommendations: <i>BVFD: Implement Hazardous Material-Incident Command certification as a requirement for command level officers.</i> <i>CCEMS: Implement Hazardous Material-Incident Command certification as a requirement for command level officers.</i> <i>CCFPD: Implement National Incident Management System guidelines in department training standards.</i> <i>SFD: Implement Hazardous Material-Incident Command certification as a requirement for command level officers.</i>				
B. Accountability procedures	PAR Tags	N/A	Yes, PAR Tags. Two sets of tags issued to each member, one for structure and wildland gear (S.O.G 500 – 7 Revised 09/22/2008).	Yes, TAG System
Recommendations: <i>BVFD: Establish a practice of consistently using PAR during training activities and on emergency scenes.</i> <i>CCFPD: Establish a practice of consistently using PAR during training activities and on emergency scenes.</i>				
C. Policy and procedures	Yes	Yes	Some SOPs in transition to SOGs. Remaining SOPs were adopted as SOGs by policy in 2005.	Yes
Recommendations: <i>BVFD: Develop a multi-year plan for training.</i> <i>CCEMS: Develop a multi-year plan for training.</i> <i>CCFPD: Develop a multi-year plan for training.</i> <i>SFD: Develop a multi-year plan for training.</i>				
D. Safety procedures	Yes	Yes	Yes, described in SOGs	Yes

Survey Component	Emergency Services Training – Observations			
	BVFD	CCEMS	CCFPD	SFD
<p>Recommendations: <i>BVFD: Provide incident safety officer training, develop safety SOPs/SOGs, and use safety officer at all emergency incidents of greater significance and risk exposure.</i> <i>CCFPD: Provide incident safety officer training, develop safety SOPs/SOGs, and use safety officer at all emergency incidents of greater significance and risk exposure.</i> <i>SFD: Provide incident safety officer training, develop safety SOPs/SOGs, and use safety officer at all emergency incidents of greater significance and risk exposure.</i></p>				
E. Recruit academy	In-house, 90-day probation period	In-house probation, ride as third person for at least 10 shifts; when “signed off” by mentor moved to regular status	In-house probationary training, 6 months, 75% of classes required to move to rookie status	No
<p>Recommendations: <i>BVFD: Evaluate a shared recruit training academy.</i> <i>CCFPD: Evaluate a shared recruit training academy.</i> <i>SFD: Evaluate a shared recruit training academy.</i></p>				
F. Special rescue (high angle, confined space, etc.)	Water rescue	Water rescue	Minimal rope rescue, 2 swiftwater rescue technicians, 20 awareness only, respond with full response, and low angle	Swiftwater, ice rescue, high and low angle, and collapse rescue
G. Hazardous materials	Yes, awareness in process	Yes, awareness	Yes, 10 Operational level, 15 awareness level	Yes, 4 technical level, ⁹ all other firefighters operational level, DERA for district and provide ESF 10 function in EOC
H. Wildland firefighting	Annual training for personnel to support of SEAT (Single Engine Air tanker) base and load aircraft with fire retardant	Yes, in process NWCG 130,190	Yes, 15-20 members NWCG red card certified	Yes, NWCG red card certified

⁹ Two certified, two personnel completed training and awaiting certification.

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Survey Component	Emergency Services Training – Observations			
	BVFD	CCEMS	CCFPD	SFD
Recommendations: <i>BVFD: Collaborate with other Chaffee County emergency service agencies for specialized training and for the provision of specialized emergency response (wildland, hazardous material, technical rescue [swiftwater, ice, high and low angle, collapse, and confined space].</i> <i>CCEMS: Collaborate with other Chaffee County emergency service agencies for specialized training and for the provision of specialized emergency response (wildland, hazardous material, technical rescue [swiftwater, ice, high and low angle, collapse, and confined space].</i> <i>CCFPD: Collaborate with other Chaffee County emergency service agencies for specialized training and for the provision of specialized emergency response (wildland, hazardous material, technical rescue [swiftwater, ice, high and low angle, collapse, and confined space].</i> <i>SFD: Collaborate with other Chaffee County emergency service agencies for specialized training and for the provision of specialized emergency response (wildland, hazardous material, technical rescue [swiftwater, ice, high and low angle, collapse, and confined space].</i>				
I. Vehicle extrication	Yes	No	Yes	Yes
Recommendation: <i>CCEMS: Train in EMS procedures during extrication training with fire agencies.</i>				
J. Defensive driving	In-house only, no formal program	Yes, formal program	Yes, during probationary and station training	Yes, utilize VFIS curriculum on an annual basis
Recommendations: <i>BVFD: Add a comprehensive vehicle driving program to training.</i> <i>CCFPD: Add a comprehensive vehicle driving program to training.</i>				
K. Use and care of small tools	Yes	Limited training	Limited training	Yes
Recommendations: <i>CCEMS: Should include use and care of small tools as part of basic training.</i> <i>CCFPD: Should include use and care of small tools as part of basic training.</i>				
L. Radio communications and dispatch protocols	Yes, annually	Yes	Yes	Yes
M. EMS skills and protocols	Yes	Yes	Yes	Yes
Recommendations: <i>BVFD: Develop and implement an EMS training program under the direction of the medical director.</i> <i>CCFPD: Develop and implement a plan to certify all personnel at First Responder level at a minimum.</i>				
2. Training Administration				
A. Director of training program	Training Coordinator, Jim Amster and Dan Vandivier (Suppression Chief) assists	Training Coordinator, Craig Dale	Training Coordinator, Andrew Fahrney	Training Coordinator, Kathy Rohrich

Survey Component	Emergency Services Training – Observations			
	BVFD	CCEMS	CCFPD	SFD
B. Education or background	Jim Amster, EMT-B,IV; 30 years Coast Guard;19 years combined fire service experience; B.A.; enrolled in Master degree program	EMT-P, 11 years in Navy as Seal, Working on B.A.	HS Degree, some Community College in Fire Science and currently enrolled in B.S. Emergency Services Administration with CSU	Associate Degree in Fire Science, fire instructor. Fire chief and captains also provide training
C. Goals and objectives identified	Yes, on annual basis	Yes, especially for recertification	Yes	Yes
<p>Recommendations: <i>BVFD: Develop short and long-term training goals and objectives.</i> <i>CCEMS: Develop short and long-term training goals and objectives.</i> <i>CCFPD: Develop short and long-term training goals and objectives.</i> <i>SFD: Develop short and long-term training goals and objectives.</i></p>				
D. Governing body support and concurrence	Yes	Yes	No	Yes
<p>Recommendation: <i>CCFPD: Develop governing body support for training program goals and objectives.</i></p>				
E. Personnel knowledge and understanding	Yes	Yes	In Process	Yes
3. Training Facilities and Resources				
A. Training facilities (tower, props, pits)	None	Yes, numerous manikins, props etc.	None, use other agencies' resources on occasion	None
<p>Recommendations: <i>BVFD: Develop a training needs assessment and budget plan for shared training facilities.</i> <i>CCFPD: Develop a training needs assessment and budget plan for shared training facilities.</i> <i>SFD: Develop a training needs assessment and budget plan for shared training facilities.</i></p>				
i) live fire prop	No facilities, offered personnel (COSFFA live propane burn training last year)	N/A	No	No, must travel and can use Westcliff's facility

Survey Component	Emergency Services Training – Observations			
	BVFD	CCEMS	CCFPD	SFD
Recommendations: <i>BVFD: Develop a plan and budget for annual live fire training.</i> <i>CCFPD: Develop a plan and budget for annual live fire training.</i> <i>SFD: Develop a plan and budget for annual live fire training.</i>				
ii) fire and driving grounds	Various parking lots	Utilize driving course	No	Various parking lots
Recommendations: <i>BVFD: Add a comprehensive emergency vehicle driving course for shared training.</i> <i>CCEMS: Add a comprehensive emergency vehicle driving course for shared training.</i> <i>CCFPD: Add a comprehensive emergency vehicle driving course for shared training.</i> <i>SFD: Add a comprehensive emergency vehicle driving course for shared training.</i>				
B. Classroom facilities	Yes	Yes	Yes at Fire Station Nos. 1, 4, and 15	Yes, City EOC (emergency operations center)
C. VCR, projectors, computer simulations	Yes	Yes	Yes, however no computer simulation	Yes
D. Books, magazines, instructional materials	Limited	Yes, JEMS, EMS World periodicals and numerous text books	Yes, IFSTA, some NFPA	Yes
Recommendations: <i>BVFD: Develop a plan and budget for shared instructional materials.</i> <i>CCFPD: Develop a plan and budget for shared instructional materials.</i> <i>SFD: Develop a plan and budget for shared instructional materials.</i>				
4. Training Procedures Manual				
A. Manual developed and used ¹⁰	In process	No	In process	No
Recommendations: <i>BVFD: Complete development of a training manual.</i> <i>CCEMS: Develop a training manual.</i> <i>CCFPD: Complete development of a training manual.</i> <i>SFD: Develop a training manual.</i>				

¹⁰ Development of a training manual should be considered a high priority. Doing so jointly is appropriate if the recommendation to develop shared training is implemented.

Survey Component	Emergency Services Training – Observations			
	BVFD	CCEMS	CCFPD	SFD
B. IFSTA, Jones and Bartlett, Delmar manuals used	Yes, IFSTA 1 st responder	Library with different text books	Yes	NWCG, IFSTA
5. Methodology Used for Training				
A. Manipulative	Yes	Yes	Yes	Yes
B. Task performances/frequency	Yes	Yes	Yes, JPRs with some; District training, same training/classes held North and South	Yes
C. Annual training hours	Annually 36 hours required, 2011 average per firefighter was 66.38 hours	Recertification (3 year cycle) required: EMT-P=50 hours; EMT-I=50 hours; EMT-B=36 hours	4,162.5 hours of training (Firehouse data).	1,173.8 total hours in 2011, average of 83.84 hours per employee
D. Use of lesson plans	Yes	Yes	Yes	Yes
E. Night drills	Yes, primarily in summer	N/A	Yes	Yes
Recommendations: <i>BVFD: Conduct joint night training for consistency.</i> <i>CCEMS: Conduct joint night training for consistency.</i> <i>CCFPD: Conduct joint night training for consistency.</i> <i>SFD: Conduct joint night training for consistency.</i>				
F. Multi-agency drills	Yes	Yes	Occasionally, primarily with Salida FD, some with Buena Vista	Yes
Recommendations: <i>BVFD: Assess effectiveness of current drills and pursue opportunities for improvement.</i> <i>CCEMS: Assess effectiveness of current drills and pursue opportunities for improvement.</i> <i>CCFPD: Assess effectiveness of current drills and pursue opportunities for improvement.</i> <i>SFD: Assess effectiveness of current drills and pursue opportunities for improvement.</i>				
G. Inter-station drills	N/A	N/A	Yes on district training nights, (Tuesday and Wednesday) monthly	N/A

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Survey Component	Emergency Services Training – Observations			
	BVFD	CCEMS	CCFPD	SFD
H. Physical standards or requirements	Planned	Yes	Yes, current standards under revision	Yes, annual pack test and bi-annual physicals
Recommendations: <i>BVFD: Continue process of implementing physical standards.</i> <i>CCFPD: Continue process of implementing physical standards.</i>				
I. Annual performance evaluation conducted	Planned	Yes	Full-time staff only, no formal goals or outcomes identified	Yes
Recommendations: <i>BVFD: Conduct a 360-degree feedback annual performance evaluation on all personnel.</i> <i>CCEMS: Conduct a 360-degree feedback annual performance evaluation on all personnel.</i> <i>CCFPD: Conduct a 360-degree feedback annual performance evaluation on all personnel.</i> <i>SFD: Conduct a 360-degree feedback annual performance evaluation on all personnel.</i>				
6. Operations and Performance				
A. Disaster drills conducted	Yes	Yes	Yes	Yes
Recommendations: <i>BVFD: Participate in countywide disaster drills and conduct interagency drills on a local level.</i> <i>CCEMS: Participate in countywide disaster drills and conduct interagency drills on a local level.</i> <i>CCFPD: Participate in countywide disaster drills and conduct interagency drills on a local level.</i> <i>SFD: Participate in countywide disaster drills and conduct interagency drills on a local level.</i>				
B. Attention to safety	Yes	Yes	Yes, 2 safety officers, all members operating on scene are reported to act as safety officer and can freeze any scene for any safety concern	Yes
Recommendations: <i>BVFD: Assess effectiveness of current safety procedures and pursue opportunities for improvement.</i> <i>CCEMS: Assess effectiveness of current safety procedures and pursue opportunities for improvement.</i> <i>CCFPD: Assess effectiveness of current safety procedures and pursue opportunities for improvement.</i> <i>SFD: Assess effectiveness of current safety procedures and pursue opportunities for improvement.</i>				
C. Post incident analysis	Yes, informal	Yes, ongoing and in QI/QA process	Occasional After Action Review and may be requested by any district member.	Yes, After Action Reviews, other jurisdictions invited

Survey Component	Emergency Services Training – Observations			
	BVFD	CCEMS	CCFPD	SFD
Recommendations: BVFD: Develop and implement a written QA/QI plan including post-incident analysis and after action reviews. CCFPD: Develop and implement a written QA/QI plan including post-incident analysis and after action reviews.				
D. Priority by management toward training	High	High	High	High, medium as supported by budget
7. Recordkeeping				
A. Individual training files maintained	Yes	Yes	Yes	Yes
B. Records and files computerized	Yes	Yes	Yes	Yes
Recommendations: BVFD: Use an integrated data base record management system (RMS) for training records. CCEMS: Use an integrated data base record management system (RMS) for training records. CCFPD: Use an integrated data base record management system (RMS) for training records. SFD: Use an integrated data base record management system (RMS) for training records.				
C. Daily training records	Yes	Not supplied	Yes	Yes, in Fire House©
D. Company training records	No	N/A	Individual fire stations, supported by district wide training	Yes
E. Training equipment inventoried	Yes	Yes	Yes, tools and firefighting equipment is used from apparatus, training equipment (CPR and other training aids is inventoried)	Yes
F. Lesson plans used	Yes	Yes	Yes	Yes
G. Pre-fire planning included in training	Yes	N/A	Very limited	Yes, IAP
Recommendation: CCFPD: Implement pre-fire planning in training.				
H. Check-out system on training materials	No	Yes	Yes	Yes
8. Personnel Trained				
A. Training objective (who, level, etc.)	Yes	Yes	In process of development	Yes

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Survey Component	Emergency Services Training – Observations			
	BVFD	CCEMS	CCFPD	SFD
Recommendation: <i>CCFPD: Develop and implement training objectives into training plans.</i>				
B. Employee development program used	No	Yes, informal	In process	No
Recommendations: <i>BVFD: Develop and implement personnel development planning for all organizational levels.</i> <i>CCEMS: Develop and implement personnel development planning for all organizational levels.</i> <i>CCFPD: Offer a comprehensive officer development program to develop future leadership.</i> <i>CCFPD: Enroll chief officers in the National Fire Academy Executive Fire Officer Program.</i> <i>SFD: Offer a comprehensive officer development program to develop future leadership.</i>				
C. Goals and objectives identified	Informal	Yes	Limited	Yes
Recommendations: <i>BVFD: Develop goals and objectives for training.</i> <i>CCFPD: Develop goals and objectives for training.</i>				
9. Administrative Priority				
A. Budget allocated to training	Training activities are included in overall budget	\$22,000, includes training equipment with a large percentage paid to outside instruction (traveling instructors and state EMS conference)	2011 \$20,000 2012 \$17,500	2011, City \$5,000, District \$5,000 2012, City \$6,000, District-\$5,000 Wildland training at Burn Camp is free via exchange of services
B. Education and training of training officer	Jim Amster, EMT-B,IV; 30 years Coast Guard;19 years combined fire service experience; B.A.; enrolled in master degree program	EMT-P, 11 years in Navy as Seal, working on B.A.	High school diploma, some community college in fire science, enrolled in B.S. Emergency Services Administration at Colorado State University	Associate degree in fire science, fire instructor.
C. Using certified instructors	Varies	Yes	Yes	Yes
D. Annual training report produced	Compiled data	Compiled data	Yes, statistics reported in annual report	Yes, statistics reported in annual report

Survey Component	Emergency Services Training – Observations			
	BVFD	CCEMS	CCFPD	SFD
Recommendations: <i>BVFD: Develop an annual training report as part of the department annual report.</i> <i>CCEMS: Develop an annual training report as part of the department annual report.</i> <i>CCFPD: Develop an annual training report as part of the department annual report.</i> <i>SFD: Develop an annual training report as part of the department annual report.</i>				
E. Adequate training space/facilities/equipment	No	Yes	No	No
Recommendations: <i>BVFD: Assess current training facilities and equipment and develop a budget plan for future needs.</i> <i>CCFPD: Assess current training facilities and equipment and develop a budget plan for future needs.</i> <i>SFD: Assess current training facilities and equipment and develop a budget plan for future needs.</i>				
F. Maintenance of training facilities	N/A	In-house	N/A	N/A
10. Training Program Clerical Support				
A. Support Staff	Yes, part-time administrative assistant	Administrative Assistant, Laura Smith	No	Statistics report only compiled by administrative assistant
Recommendation: <i>CCFPD: Assess current training clerical support needs and develop a plan and budget to meet future needs.</i>				
B. Records computerized software used	No	Yes	Yes, Fire House©	Yes, Fire House©
C. Adequate office space, equipment, and supplies	No	Yes	Yes	No
Recommendations: <i>BVFD: Assess current training office space, equipment, and supply needs and develop a plan and budget to meet future needs.</i> <i>SFD: Assess current training office space, equipment, and supply needs and develop a plan and budget to meet future needs.</i>				

Comments: Training program content is generally developed around the requirements for continuing education for emergency medical response certifications, as well as the coursework necessary to maintain firefighter, driver, incident command, and other certification levels. Creating the ongoing educational program around these requirements is appropriate and should be further developed in the form of establishing a training manual. A manual, if properly composed, serves as a reference for instructors to go

to when assigned to conduct a training session. It also accommodates standardization so that all members are trained to do things the same way.

When fire agencies are first beginning to consider the possibilities of working together, the training ground is the best place to start. As members work with each other in a learning environment, not only are skills developed but interpersonal relationships begin to grow, as well. In later sections of this report, training will be identified as one of the most important components of a cooperative service delivery plan.

Survey Table 6: EMS (Emergency Medical Services) Delivery and Performance

In Chaffee County, EMS is primarily delivered by Chaffee County EMS (CCEMS). CCEMS responds with the three fire agencies (BVFD, CCFPD, and SFD) in a tiered response and provides on-scene care and patient transport. In Chaffee County EMS tiered response is through the fire departments using engines as first responders providing basic life support (BLS) and CCEMS ambulances that are advanced life support (ALS). There are many other variations of EMS tiered systems.

It is important that the partnership between the CCEMS and the fire departments is a high priority to ensure that incident scene management and patient care is seamless. The provision of EMS (Emergency Medical Services) by the fire agencies has become the predominant service offered to their communities. It is common to find that 70 percent to 80 percent of emergency responses are to medical emergencies. The percentage of EMS responses as part of the overall workload for the three fire agencies is variable:

- Buena Vista Fire Department (BVFD), 73.40 percent
- Chaffee County Fire Protection District¹¹ (CCFPD), 31.36 percent
- Salida Fire Department (SFD), 70.00 percent
- South Arkansas Fire Protection District (SAFPD) 48.96 percent¹²

Background

In 1966, the National Academy of Sciences and the National Research Council published a landmark report on the State of Emergency Medical Services in the United States. That report, *Accidental Death and Disability, the Neglected Disease of Modern Society*, provided the initial framework around which a number of EMS systems were organized. Importantly, the report also provided the impetus for states and localities to begin to regulate EMS because, as the report suggested, mortuaries operated more than half of the ambulance services in the United States. The authors stated:

¹¹ The lower percent of responses for Chaffee County Fire Protection District is directly related to the District only responding to motor vehicle accidents and coronary events unless specifically requested by CCEMS.

¹² EMS first response in SAFPD is provided by SFD.

Adequate ambulance services are as much a municipal responsibility as firefighting and police services. If the community does not provide ambulance services directly, the quality of these services should be controlled by licensing procedures and by adequate surveillance of volunteer and commercial ambulance companies.¹³

Evidence from that report was so compelling that Congress passed the Highway Safety Act of 1966 that established the first organized EMS systems in the United States. Research compiled since the publication of that report makes it clear that EMS systems are much more than simply ambulance transport services and those problems continue to exist in EMS system design.

EMS is essentially an organized system that provides personnel, facilities, and equipment for the coordinated delivery of emergency medical services within a geographical area. An effective EMS system may involve many different agencies and organizations working together to provide rapid emergency medical response, treatment, and transport to those in need of immediate medical attention. Generally, most EMS systems include at least system access and dispatch components, first response, ambulance transport, and definitive hospital care. EMS systems structured and based on traditional paradigms are changing rapidly. Many people view EMS as simply ambulance transport or fire department response to medical events. However, those views are being challenged as insurance companies demand more accountability for ambulance transport and emergency treatment. EMS providers are challenged to incorporate evidence-based medicine and seek better use of resources to extend services to the communities they serve. EMS systems are therefore important considerations for regulators and elected officials. In most areas, a body of elected officials has overall responsibility for one or more components of the system, such as fire service first response or transport or for regulating for-profit ambulance service. In some cases, multiple local agencies exert some level of control over components.

Emergency Medical Event Sequence

Cardiac arrest is the most significant life threatening medical event. A victim of cardiac arrest has mere minutes in which to receive definitive lifesaving care if there is to be any hope for resuscitation. Recently, the American Heart Association (AHA) issued a new set of cardiopulmonary resuscitation guidelines designed to streamline emergency procedures for heart attack victims, and to increase the likelihood of survival. The AHA guidelines include new goals for the application of cardiac defibrillation to cardiac arrest

¹³ Prepared by The National Academy of Sciences National Research, Committee on Trauma and Shock, Division of Medical Sciences, National Academy of Sciences, National Research Council, 1966.

victims. Heart attack survival chances fall by seven to ten percent for every minute between collapse and defibrillation. Consequently, the AHA now recommends cardiac defibrillation within five minutes of cardiac arrest.

The percentage of opportunity for recovery from cardiac arrest drops quickly as time progresses. The stages of medical response are very similar to the components for a fire response. Recent research stresses the importance of rapid cardiac defibrillation and administration of certain drugs as a means of improving the opportunity for successful resuscitation and survival. An Oregon fire department recently studied the effect of time on cardiac arrest resuscitation and found that nearly all of its “saves” were within 1.5 miles of a fire station, underscoring the importance of quick response.

The EMS system should have measures in place to determine the effectiveness and performance of both personnel and procedures. Standardized performance levels allow the system regulators to not only evaluate performance but also take steps to improve performance and measure those improvements.

EMS Authority, Regulation, and Medical Direction

Essential to the delivery of EMS is effective system management, support and oversight, including the key components of logistical support, medical control and oversight, quality assurance, and appropriate credentialing of personnel. In Colorado the statutory authority for the regulation of emergency medical and trauma services rests with the Colorado Department of Public Health and Environment (CDPHE) granted in Colorado Revised Statutes (C.R.S. 25-3.5-102.). The Emergency Medical and Trauma Services Section of CDPHE certifies and administers the rules and regulations regarding EMTs (emergency medical technician) (Basic, Intermediate, and Paramedic). In order to practice, an EMT must be under the medical direction and license of a Colorado licensed medical director (physician advisor). As of January 2011, medical directors and the authorized medical acts of EMTs will also be administered by the Emergency Medical and Trauma Services Section, following recent passage of House Bill 1260. First Responders are regulated and certified by the Colorado Division of Fire Safety.

All four agencies operate their EMS programs with appropriate certification and approval of state authorities. All first responders and EMTs are certified through the state.

Emergency room physicians experienced in emergency medicine and EMS from Heart of the Rockies Regional Medical Center (HRRMC) serve as the medical directors (physician advisors) for the agencies. Under terms of an agreement, the physicians provide medical oversight of fire department personnel for two of the fire agencies and Chaffee County EMS. Buena Vista Fire Department is in the process of contracting with a medical director. The medical directors and EMS staff have enacted training and competency requirements for first responders and EMT personnel as per state requirements.

The EMS program is managed for all four agencies by their training coordinator. The four coordinators recently began working together to provide oversight and support of EMS operations. Medical control is provided by the medical directors. CCEMS is approved by the State of Colorado and has a certified training group for EMTs. CCEMS's training group is officially the Chaffee County Emergency Services Training Group. Continuing medical education (CME) is available to each fire department's EMS personnel on a monthly basis by the training group. Qualified in-house EMS instructors also provide training in each fire department. Additionally, Heart of the Rockies Regional Medical Center's physicians, nurses, and outside paramedics periodically provide training.

Each agency's EMS staff is responsible for:

- EMS program delivery
- Quality assurance/improvement
- First Responder, EMT basic/intermediate/paramedic training and continuing medical education
- Emerging issues in medical treatments and systems
- Serve as the liaison with the medical community

As one aspect of the agreement with the medical directors, the directors are responsible for case reviews (quality improvement), liaison with the medical community at large, the hospital, narcotics control, and EMS oversight.

EMS Deployment Platform

CCEMS staffs two ALS ambulances 24/7 with career personnel responding from two strategically located stations. BVFD operates from one fire station, with some volunteers certified as first responders. CCFPD operates from six fire stations with volunteer personnel trained to a minimum of advanced first aid and CPR. CCFPD responds on motor vehicle accidents, cardiac events, and other EMS calls for service upon request. All SFD field personnel hold EMS certification at the EMT/IV level (EMT-Basic with intravenous certification) or higher and respond from the station that serves Salida and SAFPD.

Ambulances are staffed with two medically trained personnel. All personnel are trained at a minimum basic life support level (EMT-B) with IV certification. Advanced Life Support (ALS) is delivered by department personnel certified as intermediates or paramedics. The ALS ambulances have a minimum of one certified intermediate or paramedic. ALS care is delivered in two ways: Standing Field Treatment Protocols (SFTP); and for those patients not meeting SFTP criteria, ALS services proceed under direct online medical control. Online medical control involves voice communication between the EMT-I/P at the scene and medical control with Heart of the Rockies Regional Medical Center (HRRMC).

As previously stated the EMS program includes transportation of the sick and injured to the local hospital, HRRMC. The system depends on mutual aid from other jurisdictions at those times when additional EMS transport units are required during peak activity or at larger medical incidents. At the regional level, EMS resource support system is available from surrounding fire/EMS agencies. This mutual and automatic aid system supplies additional resources for major incidents without incident commander intervention.

Training drills are conducted periodically in the handling and management of mass casualty incidents. Triage procedures and supplies are adequate and available, as is hospital coordination—a critical component of the EMS system. When needed, a medical transport helicopter may be called to the scene of a medical emergency to assure rapid transport of patients, especially patients that require specialized treatment outside of the sphere of care provided locally.

The Chaffee County Communications Center uses the Medical Priority Dispatch System (MPDS). This system is controlled by National Academy of Emergency Medical Dispatch (EMD) and is a comprehensive emergency medical dispatch system. It is

designed to provide standardized, methodical call classification, and triage emergency medical dispatch. Each communications specialist receives comprehensive training and certification on MPDS, a recognized standard of care in the industry. EMD allows the dispatch center to triage and allocate the proper resource by medical event type, dispatch the proper resources, and assist the caller to initiate treatment while the fire department is en route. EMD supports the triage of incoming calls, and provides expert interrogation of the caller with a medical script in order to determine the severity of the patient's illness or injury. The system assures the most appropriate type of response resources are sent, with all calls sorted by medical profile and acuity. The EMS staff is satisfied with the call processing time and the quality of EMD of the Chaffee County Combined Communication Center.

There is no formally established or adopted EMS response time goal for CCEMS, although there is an informal target of 60 seconds for turnout. Turnout time is defined as the time between receipt of dispatch information and response of the emergency unit to the scene of the incident.

Recommendations:

BVFD: Develop a standardized definition of turnout time and turnout time standard.

CCEMS: Develop a standardized definition of turnout time and turnout time standard.

CCEMS: Develop a standardized definition of turnout time and turnout time standard.

CCEMS: Develop a standardized definition of turnout time and turnout time standard.

EMS Training

EMS personnel respond to many different types of calls and must be adequately trained to properly treat a diverse set of medical and trauma situations. High quality initial training is essential to adequately prepare providers for an EMS agency. The agency should have a thorough orientation program for new personnel. This orientation program should include agency policies and procedures as well as mentorship for the new provider to transition to providing care for patients in real-life situations.

EMS providers need continuing education to maintain their certifications. Continuing education (CE) should not only provide the required certification hours but should also continually challenge providers to improve their ability to provide care and prevent skill degradation. High-acuity skills such as intubation should be practiced regularly to ensure providers are prepared for these low-frequency events. Providers' skills should be assessed periodically to provide the EMS personnel and supervisors the confidence in their capacity to perform in critical situations. Additionally, the training program should be strongly linked to the agency's Quality Assurance/Quality Improvement (QA/QI) program. The QA/QI program will recognize the providers' strengths as well as opportunities for improvement.

A survey of 1,300 National Association of EMT members found that 47 percent of respondents had sustained a back injury while performing EMS duties.¹⁴ Another study of 90 EMS providers found that 39 percent of participants had sustained a back injury performing EMS duties; 13 percent of the injuries led to work absenteeism and 52 percent interfered with daily activity.¹⁵ According to data compiled by the Bureau of Labor Statistics, injuries resulting in lost work occur at a higher rate for EMS providers than for the national average. In addition to injuries suffered while moving and lifting patients, EMS providers are at risk from injury while responding and transporting patients, operating in traffic, and from violent encounters with patients and by-standers. Studies of emergency service workers in the USA reported that 61 percent had been assaulted in the field and 25 percent had sustained an injury from violence.^{16,17} OSHA and other standards require annual training in bloodborne pathogens and communicable disease control.

Providers should receive regular training in safe patient lifting and moving techniques. Fitness training has been shown to reduce the incidence of injuries to providers as well. Safety training should include safe driving practices and safe operations while in a moving

¹⁴ National Association of Emergency Medical Technicians. *Four in Five EMS Workers Injured on the Job*. 2006, www.naemt.org/forTheMedia/HarrisSurvey05.htm.

¹⁵ Caldwell, E. Emergency responders at high risk to miss work because of injuries. <http://researchnews.osu.edu/archive/emt.htm>.

¹⁶ Corbett, S.W., et.al. *Exposure of Prehospital Care Providers to Violence*. *Pre-hospital Emergency Care* 1998;2:127–31

¹⁷ Mechem, C.C., et.al. *Injuries From Assaults on Paramedics and Firefighters in an Urban Emergency Medical Services System*. *Pre-hospital Emergency Care* 2002;6:396–401.

ambulance. Courses such as the *Emergency Vehicle Operations Course* are an example of how this training is provided in many agencies. EMS providers should also receive regular training on how to operate safely while in traffic.

It is recommended that EMS providers receive training in recognizing and avoiding potentially violent encounters. Training in the course *Escaping Violent Encounters Safely* is becoming more common nationally. These courses use techniques including “verbal judo” to help providers to safely extricate themselves when faced with violent patients and bystanders.

A high quality training program that includes patient care skills as well as responder safety will help ensure that agencies have the capacity to safely and effectively respond to calls for service in their communities.

Survey Component	Emergency Medical Services Support and Oversight			
	BVFD	CCEMS	CCFPD	SFD
1. Logistical Support				
A. Staff				
i) administrative/management	Training Coordinator Jim Amster	Manager Josh Hadley	Yes, fire chief	Training Coordinator Kathy Rohrich
Recommendations: <i>BVFD: Assess current EMS administrative support effectiveness and develop a plan and budget to meet future needs.</i> <i>CCEMS: Assess current EMS administrative support effectiveness and develop a plan and budget to meet future needs.</i> <i>CCFPD: Assess current EMS administrative support effectiveness and develop a plan and budget to meet future needs.</i> <i>SFD: Assess current EMS administrative support effectiveness and develop a plan and budget to meet future needs.</i>				
ii) field-supervisor	No	3	Yes, 3 volunteer battalion chiefs, each supervising 2 fire stations	No
Recommendation: <i>CCEMS: Assess current EMS field supervisor effectiveness and develop a plan and budget to meet future needs.</i>				
iii) clerical support	Yes	Yes	yes, administrative assistant	Yes
iv) billing/collections/AP support	N/A	Business Options located in Montrose, Co.	yes, administrative assistant	In house by administrative assistant, city finance for collection
v) inventory management	No	Yes	Yes, assistant fire chief	Yes

Survey Component	Emergency Medical Services Support and Oversight			
	BVFD	CCEMS	CCFPD	SFD
<p>Recommendations: <i>BVFD: Assess current clerical support effectiveness and develop a plan and budget to meet future needs. Develop and implement an inventory management process.</i> <i>CCEMS: Evaluate current collection rate and seek opportunities for improvement.</i> <i>CCEMS: Assess impact of implementation or non-implementation of the Affordable Care Act on Collections.</i> <i>CCFPD: Assess current clerical support effectiveness and develop a plan and budget to meet future needs.</i></p>				
2. Medical Control				
A. Written protocols adopted	Yes	Yes	Yes, to EMT-Basic level	Yes
B. MPD (medical program director) case reviews conducted regularly	In process	Yes	Yes, not routinely, only when issues are identified	Yes, once a month along with case reviews. Provides training 12 hours per year per FF
<p>Recommendations: <i>BVFD: Continue efforts to contract with a medical director.</i> <i>BVFD: Integrate case reviews with QA/QI process.</i> <i>CCFPD: Establish regular medical reviews.</i> <i>CCFPD: Integrate case reviews with QA/QI process.</i></p>				
C. MPD conducts in-service training	Not currently	Yes	No, in-service training is in-house or by CCEMS	Yes
<p>Recommendations: <i>BVFD: Include in-service training requirement in MPD contract.</i> <i>CCFPD: Include in-service training requirement in MPD contract.</i></p>				
3. Q.A./Q.I.				
A. Internal committee	No	Brian Behn	No	PA Dr. Ruiter and Dave McCann EMT-I
B. Lessons learned are shared	Yes	Yes, especially in case review	Yes	Yes
C. MPD participates	Not currently	Yes	Infrequently	Yes
<p>Recommendations: <i>BVFD: Develop and implement a formal QA/QI plan with MPD participation.</i> <i>CCFPD: Develop and implement a formal QA/QI plan with MPD participation.</i></p>				
D. Charts spot evaluated for accuracy	N/A	All charts are reviewed	N/A	Yes

Survey Component	Emergency Medical Services Support and Oversight			
	BVFD	CCEMS	CCFPD	SFD
4. Certification/ Recertification				
A. OTEP (Ongoing training and evaluation program), system in place	Yes	Yes	Yes	Yes
<p>Recommendations:</p> <p><i>BVFD: Establish Safety Classes and attend monthly training offered by the Chaffee County Regional Training Group.</i></p> <p><i>BVFD: Link OTEP to QA/QI process.</i></p> <p><i>BVFD: Include responder safety training in OTEP.</i></p> <p><i>CCEMS: Establish Safety Classes and attend monthly training offered by the Chaffee County Regional Training Group.</i></p> <p><i>CCEMS: Link OTEP to QA/QI process.</i></p> <p><i>CCEMS: Include responder safety training in OTEP.</i></p> <p><i>CCFPD: Establish minimum standards of First Responder level or higher.</i></p> <p><i>CCFPD: Establish Safety Classes and attend monthly training offered by the Chaffee County Regional Training Group.</i></p> <p><i>CCFPD: Link OTEP to QA/QI process.</i></p> <p><i>CCFPD: Include responder safety training in OTEP.</i></p> <p><i>SFD: Establish Safety Classes and attend monthly training offered by the Chaffee County Regional Training Group.</i></p> <p><i>SFD: Link OTEP to QA/QI process.</i></p> <p><i>SFD: Include responder safety training in OTEP.</i></p>				
B. Skills Assessment performed by qualified evaluators	Yes	Yes	Yes	Yes
C. Recertification examinations (if required) administered by qualified testing center	Yes	Yes	Yes	Yes

Comments: None noted.

Kudos: 1: *CCEMS has a strong EMS training program for personnel at all EMS levels to remain current with mandatory and supplemental certification and educational requirements.*

Kudos: 2: *CCEMS has an EMS system that is on the forefront of technology and quality patient care.*

Survey Table 7: Capital Improvement and Replacement Programs

Three basic resources are required to successfully carry out the emergency mission of a fire department — trained personnel, firefighting equipment, and fire stations. Because firefighting is an extremely physical task, the training and capacity of personnel resources is a vital concern. However, no matter how competent or numerous the firefighters, the department will fail to execute its mission if it lacks sufficient fire equipment deployed in an efficient and effective manner.

Fire Stations

Fire stations play an integral role in the delivery of emergency services for a number of reasons. A station's location will dictate, to a large degree, response times to emergencies. A poorly located station can mean the difference between confining a fire to a single room and losing the structure. The location of a station can even make the difference between saving and losing a life.

Fire stations need to be designed to adequately house equipment and apparatus, as well as meet the needs of the organization, its workers, and/or its members. It is essential to research need based on call volume, response time, types of emergencies, and projected growth prior to making a station placement commitment. Locating fire stations is also a matter of the greater community (region) need.

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

- The housing and cleaning of apparatus and equipment
- Residential living space for on-duty crew members (male and female)
- Administrative or management office(s)
- Training, classroom, and library areas
- Firefighter fitness area

While this list may seem elementary, the lack of dedicated space compromises the ability of the facility to support all of these functions and can detract from its primary purpose.

Apparatus

Other than the firefighters assigned to stations, response vehicles are probably the next most important resource of the emergency response system. If emergency personnel cannot arrive quickly due to unreliable transport, or if the equipment does not function properly, then the delivery of emergency service is likely compromised.

Fire apparatus are unique and expensive pieces of equipment, customized to operate efficiently for a narrowly defined mission. An engine may be designed such that the compartments fit specific equipment and tools, with virtually every space on the vehicle designed for function. This same vehicle, with its specialized design, cannot be expected to operate in a completely different capacity, such as a hazardous materials unit or a rescue squad. For this reason, fire apparatus are very expensive and offer little flexibility in use and reassignment. As a result, communities across the country have sought to achieve the longest life span possible for these vehicles.

Unfortunately, no piece of mechanical equipment can be expected to last forever. As a vehicle ages, repairs tend to become more frequent, parts are more difficult to obtain, and downtime for repair increases. Given the emergency mission that is so critical to the community, downtime is one of the most frequently identified reasons for apparatus replacement.

Because of the expense of fire apparatus, most communities develop replacement plans. To enable such planning, communities often turn to the accepted practice of establishing a life cycle for the apparatus that results in an anticipated replacement date for each vehicle.

The reality is that it may be best to establish a life cycle for use in the development of replacement funding for various types of apparatus; yet, apply a different method (such as a maintenance and performance review) for actually determining the replacement date in real life, thereby achieving greater cost efficiency when possible.

There is a concern about the age of the fleet and the current replacement schedule. As the frontline units are aging, the fleet will experience higher costs and more down time associated with necessary repairs and routine maintenance.

Survey Component	Capital Improvement and Replacement Programs			
	BVFD	CCEMS	CCFPD	SFD
1. Fire Stations/Structures				
A. Plan Maintained	Town of Buena Vista has Capital Improvement Plan (CIP)	No	Yes, in master plan	City of Salida is developing 10-year plan, fire department budgets annually for capital improvement, yes, SAFPD
i) period of plan (from – to)	2012-2021	N/A	Yes, 5 year plan, needs to be updated	City and SAFPD, annual review
ii) funding mechanism	Grants-General Fund	County budget	Capital budget included with fire station development	City general fund, SAFPD budget allocation
2. Apparatus				
A. Plan maintained	As part of town CIP	As needed, in process of establishing a rotation	Capital Improvement Plan for apparatus	City and SAFPD Capital Improvement Plan for apparatus
i) period of plan (from – to)	2012-2021	N/A	25 years, reviewed annually	City and SAFPD, reviewed annually
ii) funding mechanism	Grants, town general fund	N/A	Capital budget	Annual budget
B. Purchase or refurbishment schedule	None reported	None reported	Yes	Yes, city and SAFPD
i) 2011, adopted	N/A	N/A	1 fire chiefs' command, 1 battalion chief, and 2 staff units	N/A, city and SAFPD
ii) 2012, recommended	N/A	N/A	Approval for water tender, engine scheduled for replacement but not approved	Replace Car 11
iii) 2013, recommended	N/A	N/A	N/A	Replace Engine 11

Buena Vista and Salida FDs, Chaffee CO and South Arkansas FPDs, and Chaffee CO EMS, CO
Agency Evaluation and Feasibility Study

Survey Component	Capital Improvement and Replacement Programs			
	BVFD	CCEMS	CCFPD	SFD
iv) 2014, recommended	N/A	N/A	N/A	Replace Engine 114, Rescue 11 (2018)
v) 2015, recommended	N/A	N/A	Replace Engine 3	Replace Tower 11 (2023)
3. Support Equipment				
A. Plan maintained	None documented	As needed, in process of establishing a rotation	None documented	Yes for facilities
i) period of plan (from – to)	N/A	Reviewed annually	N/A	City and SAFPD, reviewed annually
ii) funding mechanism	N/A	General fund with subsidy of PILT (Payment In lieu of Taxes) funding	N/A	City general fund, SAFPD budget allocation
B. Purchase interval planned for by type:	No	As needed basis	N/A	Yes
i) planned purchase	N/A	As needed basis	N/A	2012 – new sink in reserve room, seal floor in Engine 11 bay and reserve room, repair/remodel downstairs and basement 2013 – paint upstairs, ceiling tiles, dayroom furniture, add additional shower/remodel bathrooms(dayroom) 2014 – remodel kitchen: cabinets, sink, counters, kitchen floor 2015 – replace window blinds 2016 – replace dishwasher, replace washer/dryer, replace kitchen chairs

Survey Component	Capital Improvement and Replacement Programs			
	BVFD	CCEMS	CCFPD	SFD
4. Methods of Financing				
A. General revenue	Yes	Yes	Yes	Yes, city and SAFPD
B. Reserve fund(s)	N/A		Yes	Yes, city and SAFPD
C. Revenue fund(s)	N/A		Yes	Yes, city and SAFPD
D. General obligation bond	N/A	No	N/A	Yes, city and SAFPD
E. Lease-Purchase	N/A	No	Yes	Yes, city and SAFPD
F. Grants or gifting	Yes	Some	Yes	Yes, city and SAFPD
G. Special fees	No	No	Yes	Yes, service contract with SAFPD, no for SAFPD

Comments: The apparatus and fiscal discussion surrounding capital replacement programs appear in the financial section of this report.

Figure 8: BVFD Fire Station No. 1
111 Linderman Avenue, Buena Vista



Survey Components	
1. Structure	
A. Construction type	Single story, block construction
B. Date	Not determined
C. Seismic protection/energy audits	None documented
D. Auxiliary power	No
E. Condition	Building is in fair to good condition-interior and exterior appear well maintained
F. Special considerations (ADA, mixed gender appropriate, storage, etc.)	There are no living quarters at this station. Storage is adequate, but at capacity for current use.
2. Square Footage	
Approximately 4,000 square feet	
3. Facilities Available	
A. Exercise/workout	None
B. Kitchen/dormitory	None
C. Lockers/showers	Restrooms and showers available
D. Training/meetings	Small training meeting room
E. Washer/dryer	None
4. Protection Systems	
A. Sprinkler system	None
B. Smoke detection	Smoke detectors in offices and meeting room
C. Security	Building is secured with key code locks
D. Apparatus exhaust system	None

**Figure 9: CCEMS Station No. 1 (Administration)
 10364 County Road 120, Poncha Springs**



Survey Components	
1. Structure	
A. Construction type	Metal pole building with metal siding, office spaces and living quarters are conventional framing
B. Date	2005
C. Seismic protection/energy audits	None Documented
D. Auxiliary power	Wired for auxiliary power but no generator
E. Condition	Both the interior and exterior of the building appear in good condition and well maintained.
F. Special considerations (ADA, mixed gender appropriate, storage, etc.)	Down stairs office area is ADA compliant. Living quarters are mixed gender appropriate. There is adequate storage.
2. Square Footage	
Approximately 4,800 square feet	
3. Facilities Available	
A. Exercise/workout	No formal area-equipment in the bays
B. Kitchen/dormitory	Modern well equipped kitchen, two separate sleeping rooms for crews with room for personal storage
C. Lockers/showers	Separate restroom and shower facilities are available.
D. Training/meetings	Second story of station above living quarters is used for training and meeting room, space to accommodate approximately 20 to 25 people.
E. Washer/dryer	Yes
4. Protection Systems	
A. Sprinkler system	None
B. Smoke detection	Smoke detectors are present.
C. Security	Building is secured with key code locks.
D. Apparatus exhaust system	None

**Figure 10: CCEMS Station No. 2
499 Antero Circle, Buena Vista**



Survey Components	
1. Structure	
A. Construction type	Metal pole building with framed offices and administrative area.
B. Date	2010
C. Seismic protection/energy audits	None documented
D. Auxiliary power	None
E. Condition	New construction-the interior and exterior of the building appear to be well maintained
F. Special considerations (ADA, mixed gender appropriate, storage, etc.)	No reception area for EMS. There is adequate storage. There are no living quarters at this station. CCEMS crews use a two-bedroom apartment one block from the station for living quarters. (Not available for tour during site visit)
2. Square Footage	Approximately 12,500 square feet. This facility is jointly operated by CCFPD, CCEMS, and CC Sheriff's Department. CCEMS uses two bays, which house two vehicles. Of the 12,500 square feet CCEMS is allocated 1,800 square feet for bay, workout, equipment storage, and north end supply.
3. Facilities Available	
A. Exercise/workout	None-Some exercise equipment in apparatus bays
B. Kitchen/dormitory	Kitchen facilities and separate sleeping areas in apartment
C. Lockers/showers	Personal storage and showers available in apartment
D. Training/meetings	Training room available near the apparatus bays (room unavailable to CCEMS for use)
E. Washer/dryer	Commercial and personal available in facility. CCEMS personnel have access to a residential washer/dryer in apartment.
4. Protection Systems	
A. Sprinkler system	None
B. Smoke detection	Smoke detectors throughout office area
C. Security	Building is secured with key code locks
D. Apparatus exhaust system	None

**Figure 11: CCFPD Fire Station No. 1
 499 Antero Circle, Buena Vista**



Survey Components	
1. Structure	
A. Construction type	Metal pole building with framed offices and administrative area.
B. Date	2010
C. Seismic protection/energy audits	None documented
D. Auxiliary power	None
E. Condition	New construction-the interior and exterior of the building appear to be well maintained
F. Special considerations (ADA, mixed gender appropriate, storage, etc.)	Reception area and offices are ADA compliant. There is adequate storage. There are no living quarters at this station.
2. Square Footage	
12,500	
3. Facilities Available	
A. Exercise/workout	None-Some exercise equipment in apparatus bays
B. Kitchen/dormitory	There is a kitchen/eating area in the meeting room. There is no dormitory area.
C. Lockers/showers	Separate restrooms are available. There is a separate locker area for turnouts.
D. Training/meetings	Office area consists of separate offices for administrative staff and chief officers. Meeting room for board meetings in office area. Training area partially closed off from apparatus bays.
E. Washer/dryer	An extractor/washer is available for PPE decontamination
4. Protection Systems	
A. Sprinkler system	None
B. Smoke detection	Smoke detectors in the office/administrative area
C. Security	Building is secured with key code locks
D. Apparatus exhaust system	None

**Figure 12: CCFPD Fire Station No. 15
15326 County Road 306, Buena Vista**



Survey Components	
1. Structure	
A. Construction type	Single story block construction
B. Date	Late 1970's
C. Seismic protection/energy audits	None documented
D. Auxiliary power	None
E. Condition	Good. Building appears well maintained
F. Special considerations (ADA, mixed gender appropriate, storage, etc.)	Building is not ADA compliant. There are no living quarters or public areas. Some additional storage over the meeting/dayroom area
2. Square Footage	
Approximately 4,000 square feet	
3. Facilities Available	
A. Exercise/workout	None
B. Kitchen/dormitory	Refrigerator and sink in meeting area, No living quarters
C. Lockers/showers	N/A
D. Training/meetings	Meeting/training room
E. Washer/dryer	Commercial washer
4. Protection Systems	
A. Sprinkler system	None
B. Smoke detection	Smoke detector in meeting room
C. Security	Building is secured with key code locks
D. Apparatus exhaust system	None

**Figure 13: CCFPD Fire Station No. 2
 22575 Highway 285, Nathrop**



Survey Components	
1. Structure	
A. Construction type	Single story block construction with metal roof
B. Date	Late 1970's
C. Seismic protection/energy audits	None documented
D. Auxiliary power	None
E. Condition	Fair to good. Building appears to be in good repair
F. Special considerations (ADA, mixed gender appropriate, storage, etc.)	Structure is not ADA compliant. There are no living quarters or public areas. Storage is adequate for current use.
2. Square Footage	
Approximately 2,200 square feet	
3. Facilities Available	
A. Exercise/workout	None
B. Kitchen/dormitory	None
C. Lockers/showers	None
D. Training/meetings	None
E. Washer/dryer	None
4. Protection Systems	
A. Sprinkler system	None
B. Smoke detection	None
C. Security	Building is secured with key code locks.
D. Apparatus exhaust system	None

**Figure 14: CCFPD Fire Station No. 3
37451 Highway 24, Buena Vista**



Survey Components	
1. Structure	
A. Construction type	Single story block construction with composition roof
B. Date	Late 1970's
C. Seismic protection/energy audits	None documented
D. Auxiliary power	None
E. Condition	Fair to good. Composition roof may be in need of replacement
F. Special considerations (ADA, mixed gender appropriate, storage, etc.)	Structure is not ADA compliant. There are no living quarters or public areas. Storage is adequate for current use.
2. Square Footage	
Approximately 2,200 square feet	
3. Facilities Available	
A. Exercise/workout	None
B. Kitchen/dormitory	None
C. Lockers/showers	None
D. Training/meetings	None
E. Washer/dryer	None
4. Protection Systems	
A. Sprinkler system	None
B. Smoke detection	None
C. Security	Building is secured with key code locks.
D. Apparatus exhaust system	None

**Figure 15: CCFPD Fire Station No. 4
 50 La Platta Street, Poncha Springs**



Survey Components	
1. Structure	
A. Construction type	Block construction with wood siding, second floor over meeting/day room area
B. Date	Late 1970's
C. Seismic protection/energy audits	None documented
D. Auxiliary power	None
E. Condition	Good. Building appears to be in good repair
F. Special considerations (ADA, mixed gender appropriate, storage, etc.)	Building is not ADA compliant. There are no living quarters or public areas. Storage is adequate for current use but at capacity.
2. Square Footage	Approximately 3,000 square feet
3. Facilities Available	
A. Exercise/workout	None
B. Kitchen/dormitory	Small kitchen area in meeting room, no living quarters
C. Lockers/showers	Single restroom with a shower, no lockers for personal gear
D. Training/meetings	There is a meeting/training area and also a small office.
E. Washer/dryer	Extractor style washer for decontamination of PPE
4. Protection Systems	
A. Sprinkler system	None
B. Smoke detection	Smoke detectors is
C. Security	Building is secured with key code locks
D. Apparatus exhaust system	None

**Figure 16: CCFPD Fire Station No. 5
16280 County Road 220, Maysville**



Survey Components	
1. Structure	
A. Construction type	Metal pole building with metal siding
B. Date	2009
C. Seismic protection/energy audits	None Documented
D. Auxiliary power	None
E. Condition	Good to excellent. Building is nearly new and appears well maintained
F. Special considerations (ADA, mixed gender appropriate, storage, etc.)	There is ADA compliant access to the meeting/training room. There are no living quarters. Storage is adequate.
2. Square Footage	Approximately 3,700 square feet
3. Facilities Available	
A. Exercise/workout	None
B. Kitchen/dormitory	Small kitchen area in meeting/training room area
C. Lockers/showers	Single restroom with shower, no lockers for personal use
D. Training/meetings	Training/meeting room available
E. Washer/dryer	None
4. Protection Systems	
A. Sprinkler system	None
B. Smoke detection	Smoke detector in meeting/training area
C. Security	Building is secured with key code locks
D. Apparatus exhaust system	None

**Figure 17: SFD/SAFPD Fire Station No. 11
120 E Street, Salida**



Survey Components	
1. Structure	
A. Construction type	Unreinforced masonry construction, two stories
B. Date	Original structure built in 1892, remodeled over the years, SFD moved administrative offices into building in 2010
C. Seismic protection/energy audits	None Documented
D. Auxiliary power	None
E. Condition	Antiquated steam heat system, pipes corroded and failing. Similar issue with antiquated cast iron plumbing. Foundation is 120 years old with noticeable structural cracking and settling. Modern heating system installed when city hall portion remodeled. Building appears well maintained given age and condition. Fits well with downtown architecture.
F. Special considerations (ADA, mixed gender appropriate, storage, etc.)	Administrative offices and reception area are ADA compliant. Living quarters are utilized by mixed gender crews, but require remodeling to be considered mixed gender appropriate. Storage space is at capacity in apparatus bays. There are safety and clearance issues in the apparatus bays, due to the number and size of the apparatus stored in the facility.
2. Square Footage	
Approximately 15,000 square feet	
3. Facilities Available	
A. Exercise/workout	Well-equipped exercise area is available
B. Kitchen/dormitory	Kitchen area/eating area is adequate for current staffing, three separate sleeping areas with 2-3 beds per area and room for personal storage
C. Lockers/showers	Restrooms and a single shower/locker room
D. Training/meetings	Meeting room, office space, and public reception area in downstairs administrative area, large training room with A/V equipment upstairs
E. Washer/dryer	Extractor type washer has been purchased, but is not installed at this time
4. Protection Systems	
A. Sprinkler system	None
B. Smoke detection	Smoke detectors present in administrative and living areas.
C. Security	Building is secured with key code locks
D. Apparatus exhaust system	First out apparatus equipped with negative pressure exhaust system

A brief review of each of the agencies' apparatus is presented in the next set of figures.

BVFD Apparatus

The BVFD apparatus appears well maintained and clean, but is beginning to show signs of the age of the apparatus. Three of the apparatus (E8, E9, and R7) have exceeded their expected service life. BVFD capital purchases are included in the Town of Buena Vista capital improvement plan; there are currently no projected apparatus purchases in the plan.

Figure 18: BVFD Apparatus Table

Apparatus Designation	Type	Year	Make/Model	Hours	Miles	Condition
E-7	Structural Engine	2001	Pierce	851	8,340	Good
E-8	Structural Engine	1975	Ford/Darley	1,008	16,115	Fair (Dated)
E-9	Structural Engine	1973	American La France	2,163	20,042	Fair (Dated)
R-7	Rescue	1979	GMC		30,787	Fair

CCEMS Apparatus

The average age of the CCEMS fleet is 4.8 years. The vehicles and equipment appear in good condition and well maintained. One ambulance is approaching 200,000 miles and 12 years of service and should be evaluated for replacement.

Figure 19: CCEMS Apparatus Table

Apparatus Designation	Type	Year	Make/Model	Hours	Miles	Condition
520	ALS Ambulance	2010	Ford McCoy - Miller		28,116	Excellent
530	ALS Ambulance	2008	GMC McCoy-Miller		76,209	Good
540	ALS Ambulance	2008	GMC McCoy-Miller		100,665	Fair (High Miles)
550	ALS Ambulance	2000	Ford Wheeled Coach		197,416	Fair (High Miles)
560	Quick response vehicle	2008	GMC Yukon		11,558	Excellent
570	Quick response vehicle	2009	Chevy Blazer		6,625	Excellent

CCFPD Apparatus

With six stations, CCFPD owns and maintains a large fleet of fire apparatus and staff vehicles. The average age of the CCFPD apparatus is 9.1 years. This does not include the heavy brush

apparatus leased from the State of Colorado. Some structural apparatus are approaching; or have exceeded their maximum expected service life.

Figure 20: CCFPD Apparatus Table

Apparatus Designation	Type	Year	Make/Model	Hours	Miles	Condition
R-1	Rescue	2007	International	939	11,047	Good-Excellent
E-1	Structural Engine	1996	Pierce	1,904	25,366	Good
Tower 1	Aerial Ladder	1995	Nova Quintech	4,506	31,867 km	Good
T-1	Tender	2003	International	870	10,752	Good
B-1	Brush Engine	2002	Ford 4x4	N/A	N/A	Fair-Good
AL-1	Air-Light Unit	2009	Eagle	N/A	N/A	Excellent
F-1	Heavy Brush	1993	AM General 6x6	638	10,921	Fair
B-2	Brush Engine	2009	Dodge 4x4	N/A	17,199	Good
E-2	Structural Engine	1992	Pierce 4x4	6,000	74,024	Fair
T-2	Tender	1996	Ford	N/A	24,880	Fair
E-3	Structural Engine	1995	Pierce	3,709	46,112	Good
T -3	Tender	2003	International	383	2,851	Good
F-3	Heavy Brush	1977	Reo 6x6	N/A	N/A	Poor-Fair
R-4	Rescue	2007	International	578	7,803	Good-Excellent
E-4	Structural Engine	1996	Pierce	376	24,417	Good
T-4	Tender	2004	International	489	6,170	Good
B-4	Brush Engine	2003	Ford 4x4	N/A	11,734	Good
HZT-4	Trailer	2001	12x6 Trailer	N/A	N/A	Good
B-41	Brush Engine	2004	Ford 4x4	N/A	N/A	Good
E-5	Structural Engine	1979	Ford	N/A	11,928	Poor-Fair (Dated)
F-4	Heavy Brush	1968	Kauser 6x6	1,059	6,482	Poor-Fair
B-15	Brush Engine	2002	Dodge 4x4	N/A	108,732	Fair to Good
HZT-1	Trailer	2001	12x6 Trailer	N/A	N/A	Good
F-15	Heavy Brush	1977	AM General 6x6	N/A	N/A	Fair
D-1	Investigation	2011	Chevy 4x4	N/A	N/A	Excellent
D-2	Command	2008	Ford 4x4	N/A	N/A	Good
D-7	Personal	2003	Dodge 4x4	N/A	N/A	Good
M-1	Maintenance	2004	N/A	N/A	N/A	N/A
BC-1	Brush/Command	2008	Ford 4x4	N/A	N/A	Good
BC-3	Brush/Command	2011	Chevy 4x4	N/A	N/A	Excellent
BC-4	Command	2008	Ford 4x4	N/A	N/A	Good
D-8	Inspection	2011	Chevy 4x4	N/A	N/A	Excellent
D-9	Training	2011	Chevy 4x4	N/A	N/A	Excellent

SAFPD Apparatus

SAFPD apparatus are operated and maintained by Salida Fire Department personnel. The average age of SAFPD apparatus is 6.8 years. SFD personnel utilize SAFPD apparatus for responses in SAFPD that require apparatus not routinely needed in a municipal jurisdiction such as SFD.

Figure 21: SAFPD Apparatus Table

Apparatus Designation	Type	Year	Make/Model	Hours	Miles	Condition
E-111	Brush Engine	2002	Dodge Ram 3500	N/A	8,719	Excellent
E-114	Brush Engine	2004	Ford F550	N/A	17,819	Good
T-11	Tender	2009	International Navistar	323	3,971	Excellent
T-12	Tender	2009	International Navistar	158	2,280	Excellent
HZT-11	Hazmat Trailer	2008	Interstate	N/A	N/A	Excellent
U-11	Personnel Transport	1999	Ford Explorer	N/A	N/A	Fair

The average age of the SFD apparatus is 13.2 years. Engine 12 has exceeded the expected service life for structural engines. SFD and SAFPD apparatus staffed by SFD personnel appear clean and well maintained.

Figure 22: SFD Apparatus Table

Apparatus Designation	Type	Year	Make/Model	Hours	Miles	Condition
E-11	Structural Engine	1995	Pierce	8,640	61,205	Good
E-12	Structural Engine	1986	Pierce	N/A	38,082	Good
Tower 11	Elevated Platform	1997	Sutphen	1,555	15,097	Excellent
R-11	Rescue	2001	International	4,377	37,730	Excellent
C-11	Command	2005	Chevy Silverado	N/A	84,170	Good

Overall, BVFD, CCEMS, CCFPD, SAFPD, and SFD have done an admirable job of acquiring and maintaining apparatus that meet the needs of their jurisdictions. As mentioned earlier, a more detailed discussion of apparatus replacement plans and finances is presented in the Fiscal Analysis section of this report.

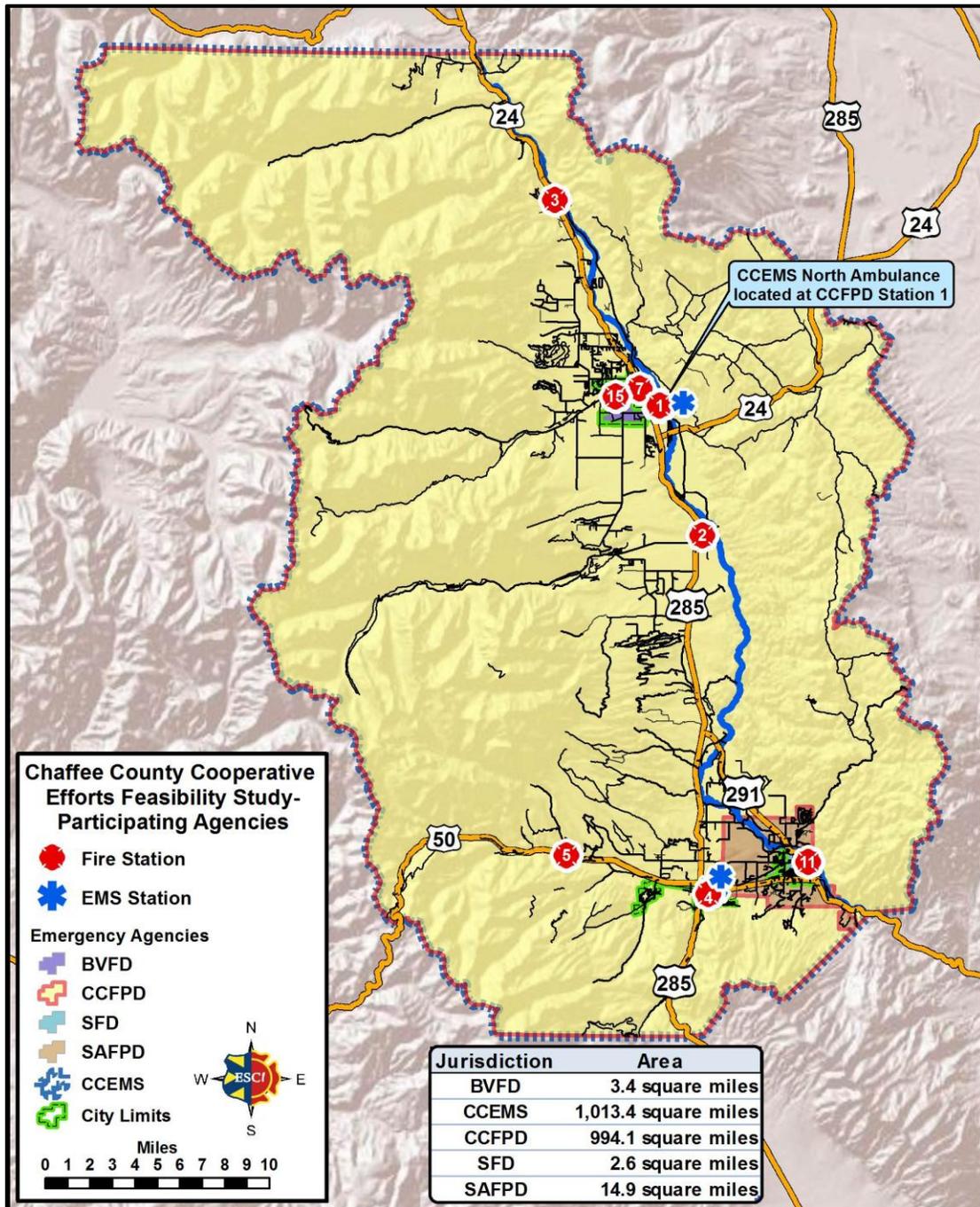
Analysis of Emergency Service Delivery and Performance

In this section, an analysis of current conditions as they relate to BVFD, SFD, CCFPD, SAFPD, and CCEMS's facility resources, service demand, and performance is presented. ESCI reviewed and made observations in areas specifically involved in or affecting service levels and performance of the districts, city, and towns in concert with one another in the study area (the collective jurisdiction of the districts, city, and towns included in the study). To the level that response data was available, individual agency response criteria was reviewed and analyzed.

Distribution Study

The distribution study provides an overview of current facility locations and apparatus placement within the Chaffee County study area. The following map displays the study area and the service areas inside of Chaffee County for each of the participating agencies.

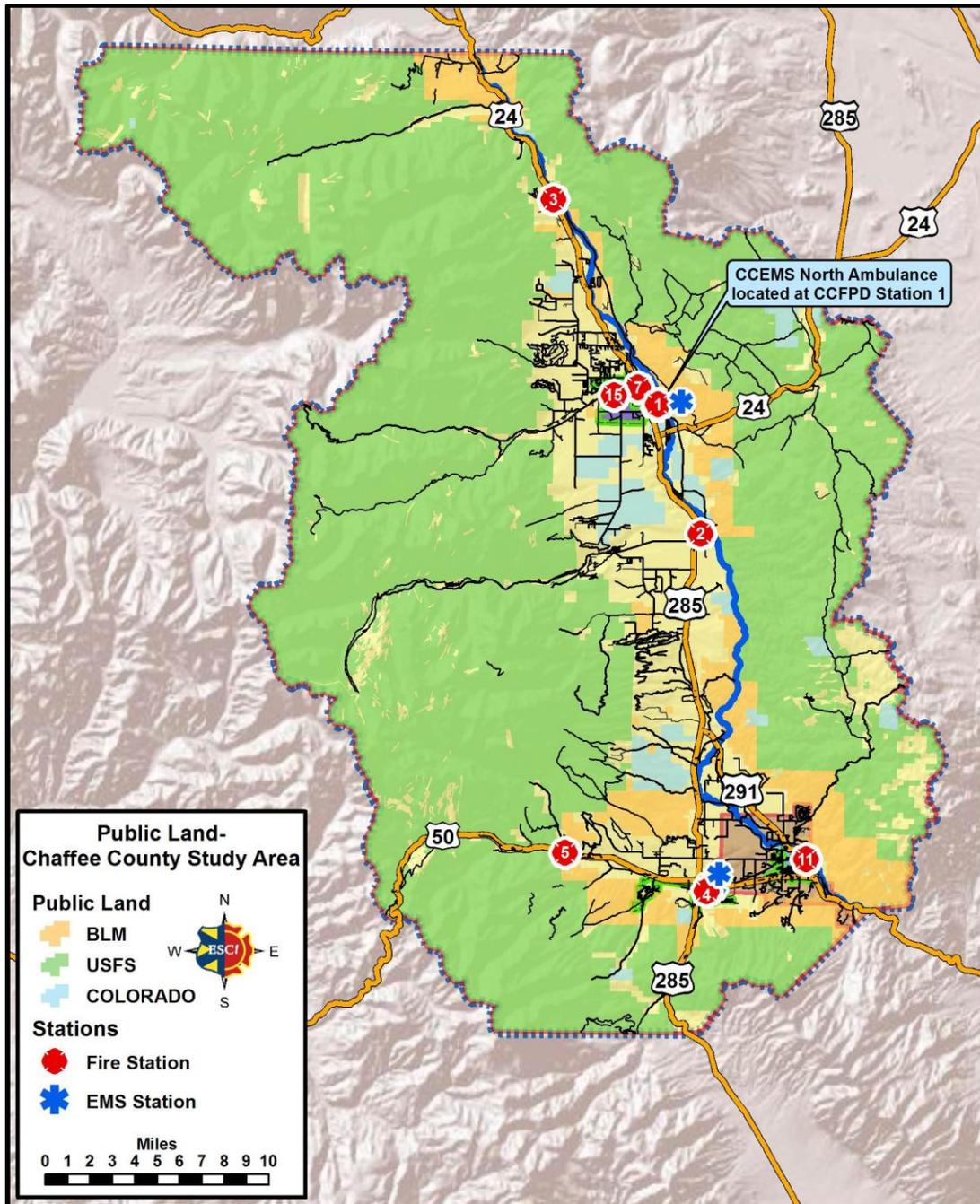
Figure 23: Chaffee County Feasibility Study Area



Chaffee County is a large rural county with a total area of approximately 1,013 square miles. The square miles within each of the participating agencies is listed in Figure 23. Although Chaffee County encompasses a large area, much of the county is undeveloped, publically owned land.

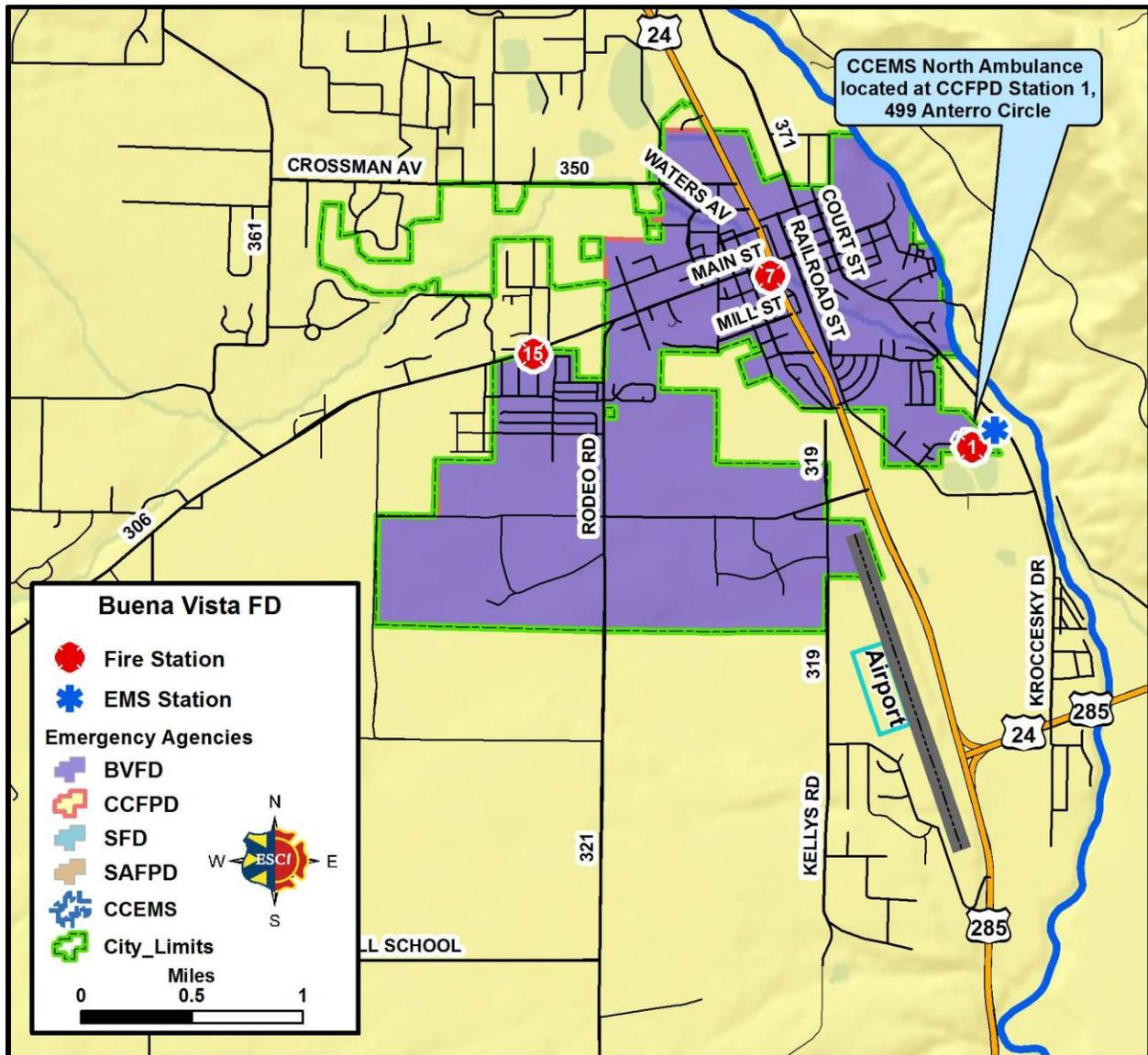
Figure 24 demonstrates the amount of publically managed land in Chaffee County. Over 800 square miles (80 percent) of the land in Chaffee County is controlled by federal (USFS or BLM) or state agencies.

Figure 24: Public Land Ownership, Chaffee County Study Area



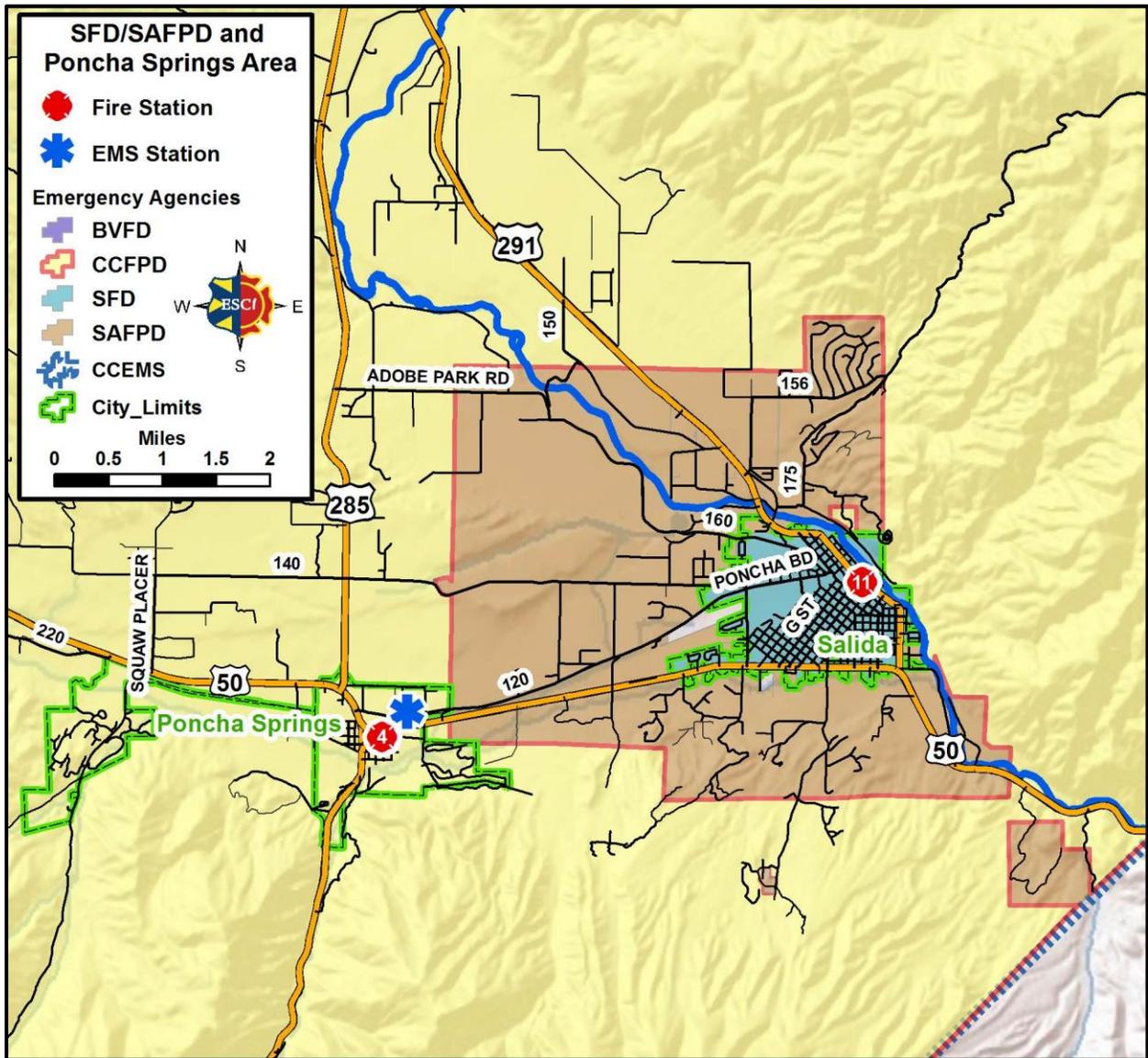
The next two figures (Figure 25 and Figure 26) provide a closer view of Buena Vista and the Salida-Poncha Springs service areas.

Figure 25: Town of Buena Vista Service Area



Fire Station No. 7 is the Buena Vista Fire Department's only station. Fire Station Nos. 1 and 15 are located in Buena Vista but are owned and operated by CCFPD. Fire Station No. 1 also houses a CCEMS ambulance. The administrative offices of CCFPD and a Chaffee County Sheriff's substation are also located at this station.

Figure 26: Salida/South Arkansas FPD and Poncha Springs Service Area



Fire Station No. 11 is staffed by SFD personnel and houses apparatus owned by both Salida Fire Department and South Arkansas Fire Protection District. Fire Station No. 4 is a CCFPD station located in the Town of Poncha Springs and serves as CCFPD's primary response station in the southern portion of its service area. CCEMS's facility (above) primarily serves the area around Salida and Poncha Springs. CCEMS's administrative offices are located in this facility, which it shares with Chaffee County Search and Rescue (SAR).

In the figure below, ESCI used 2010 U.S. Census data to display the distribution of stations in comparison to population density in the study area.

Figure 27: 2010 U.S. Census Data Population Density, Chaffee County

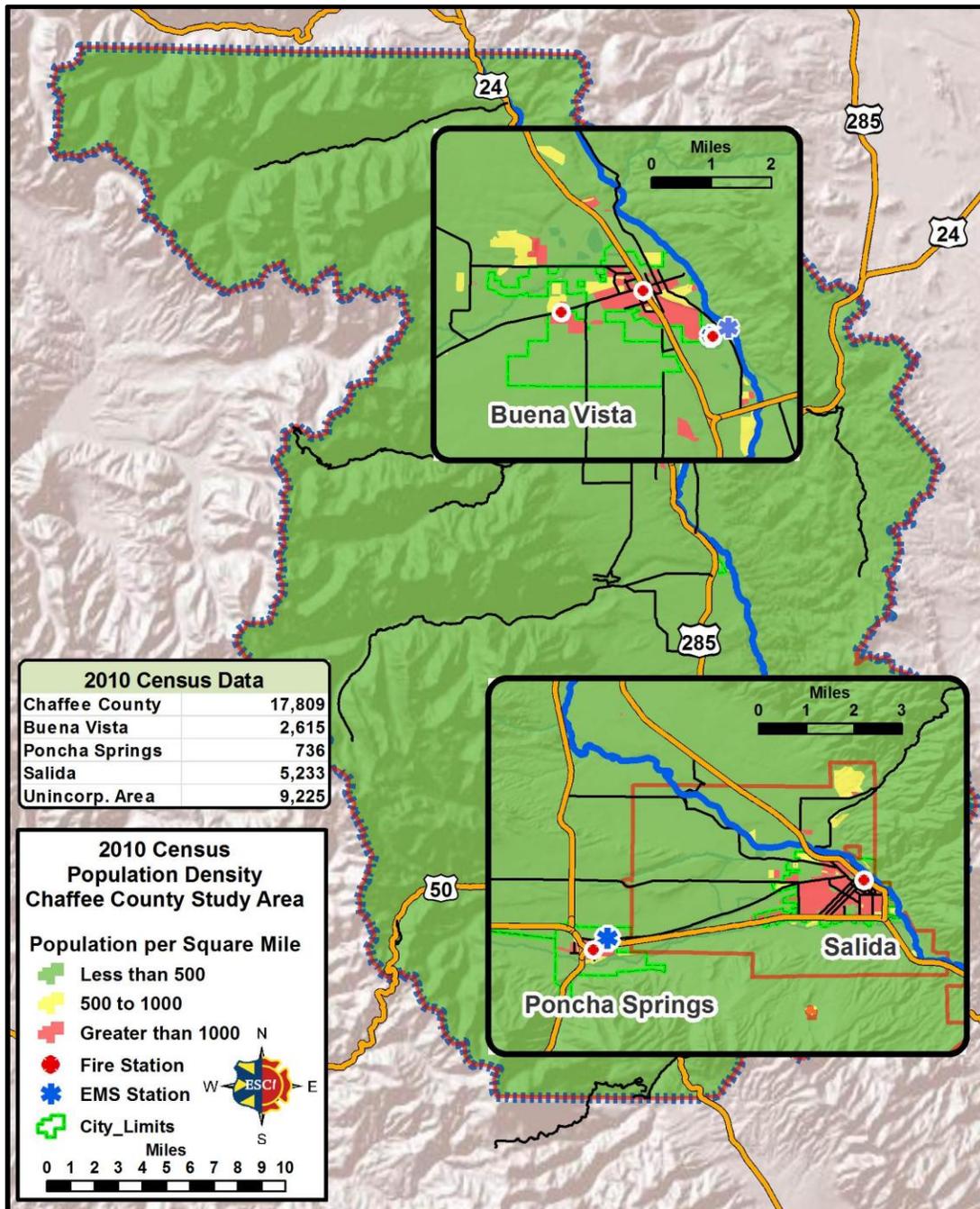
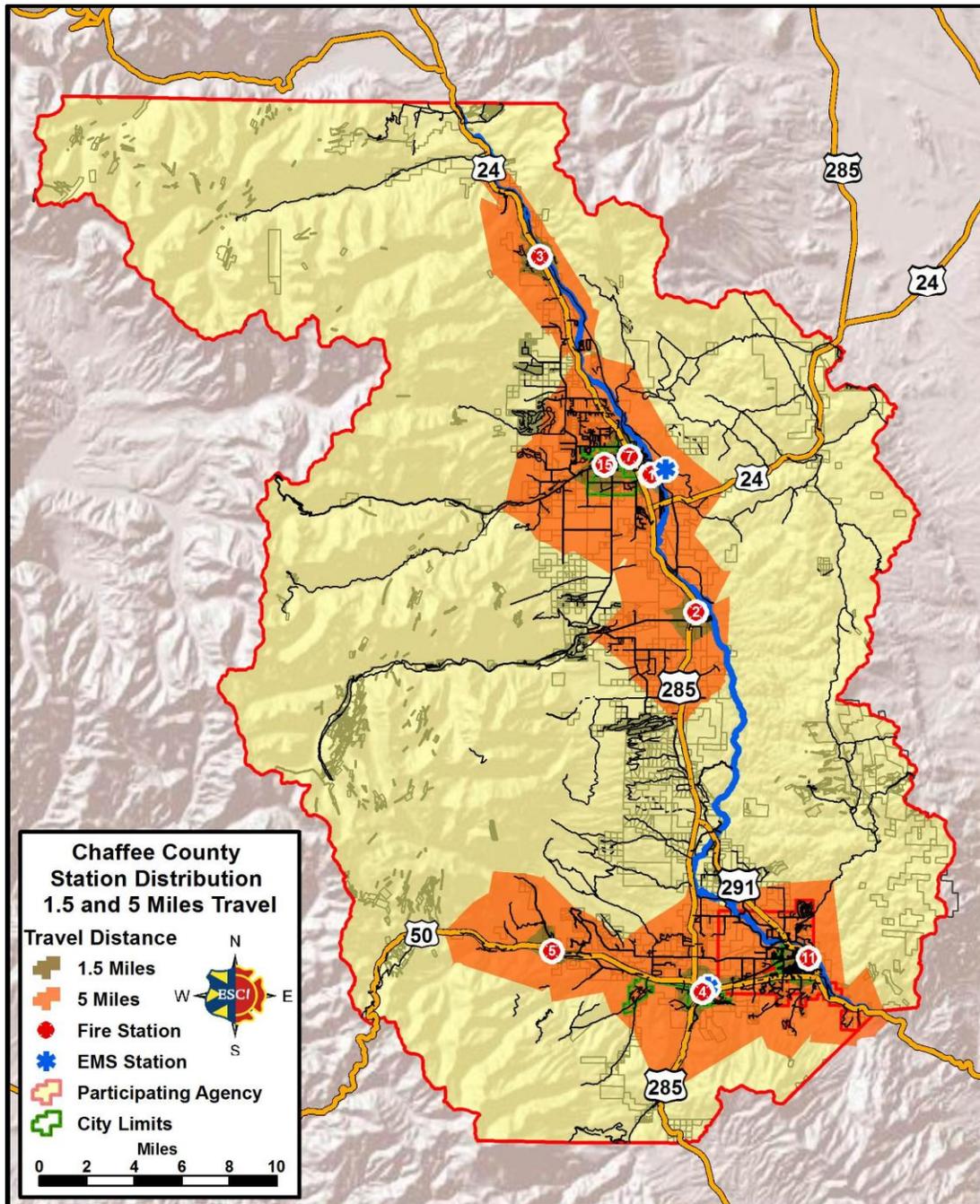


Figure 27 demonstrates that the population of Chaffee County is concentrated in Salida/Poncha Springs and the area around Buena Vista.

The Insurance Services Organization (ISO) is a national organization that evaluates fire protection for communities across the country. A jurisdiction's ISO rating is an important factor when considering fire station and apparatus deployment since it can affect the cost of fire insurance for individuals and businesses. To receive maximum credit for station and apparatus distribution, ISO recommends that all "built upon" areas in a community be within 1.5 road miles of an engine company. Additionally, ISO states that a structure must be within five miles of a fire station to receive any fire protection rating for insurance purposes.

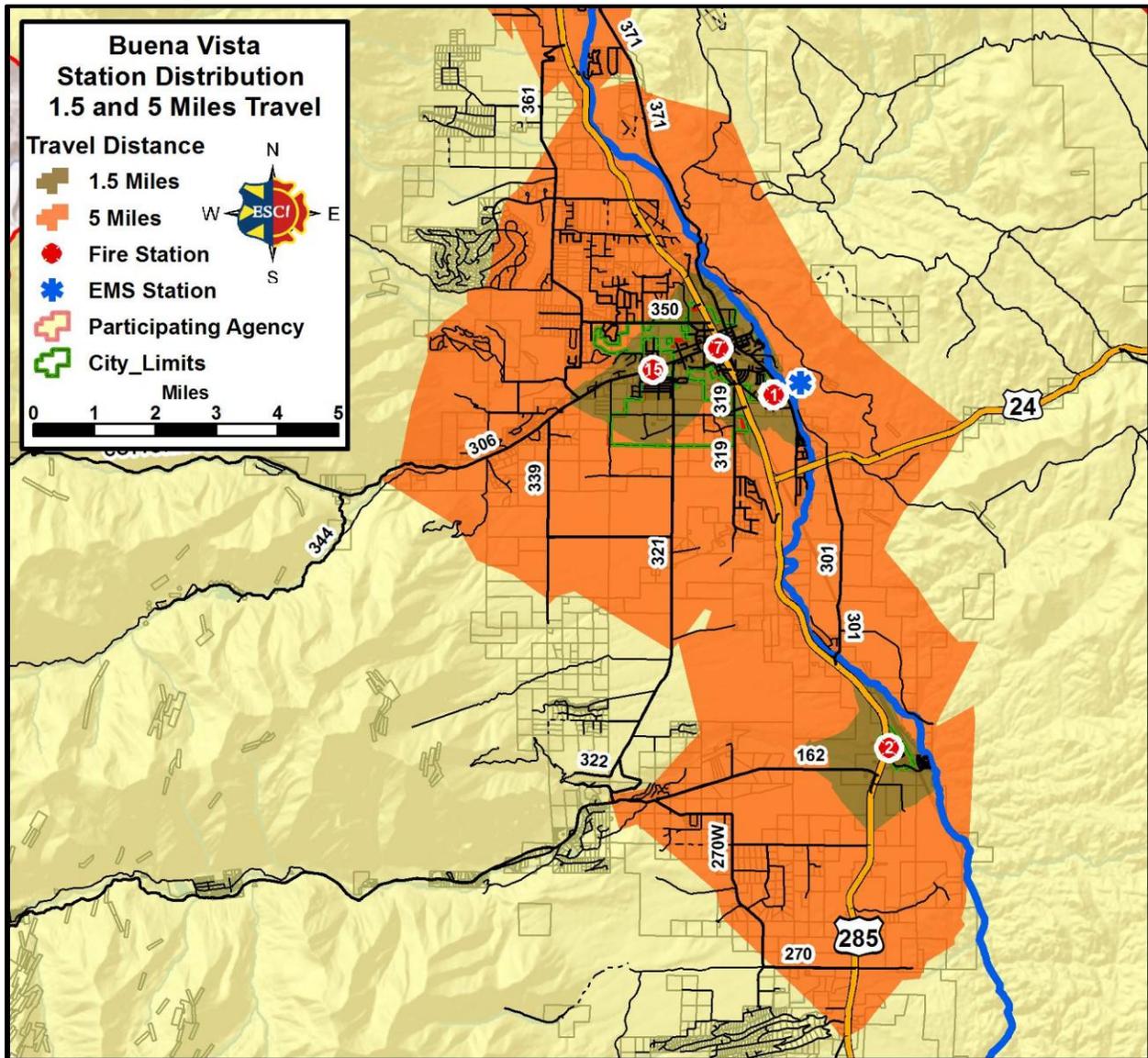
The next set of figures examines travel distance from current station locations over the existing road network within the study area.

Figure 28: Chaffee County Study Area, 1.5 and 5-Mile Travel from Current Stations



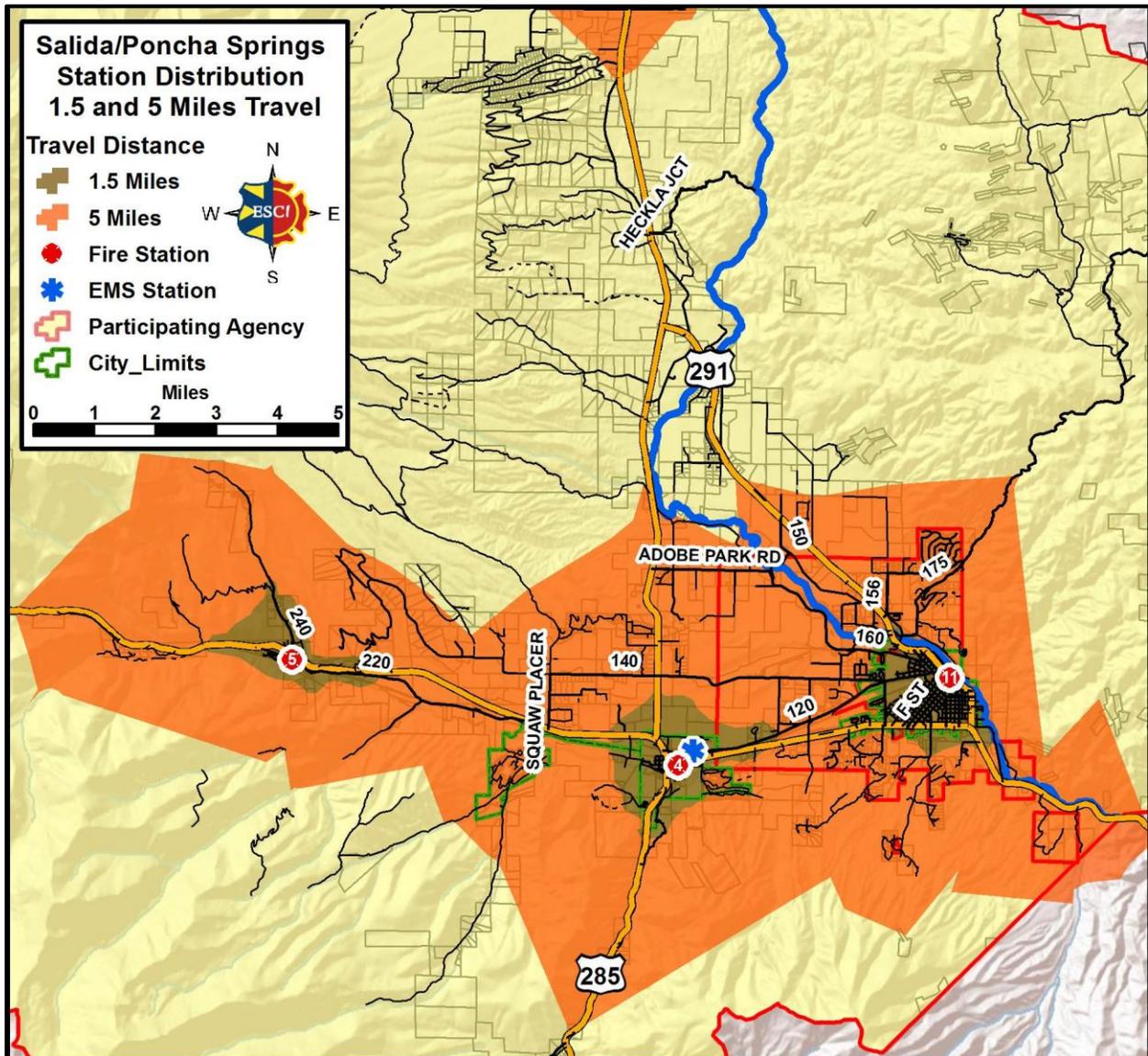
CCFPD's fire stations are distributed along the main transportation routes through Chaffee County. ESCI used GIS software to calculate that approximately 80 percent of the developed property along Highways 285 and 50 is within five miles of a CCFPD fire station. Figure 29 provides a more detailed view of the Buena Vista area.

Figure 29: Buena Vista Area, 1.5 and 5-Mile Travel from Current Stations



With three fire stations located in the Town of Buena Vista; ESCI believes there are opportunities for cooperative efforts to enhance service delivery and for future cost avoidance.

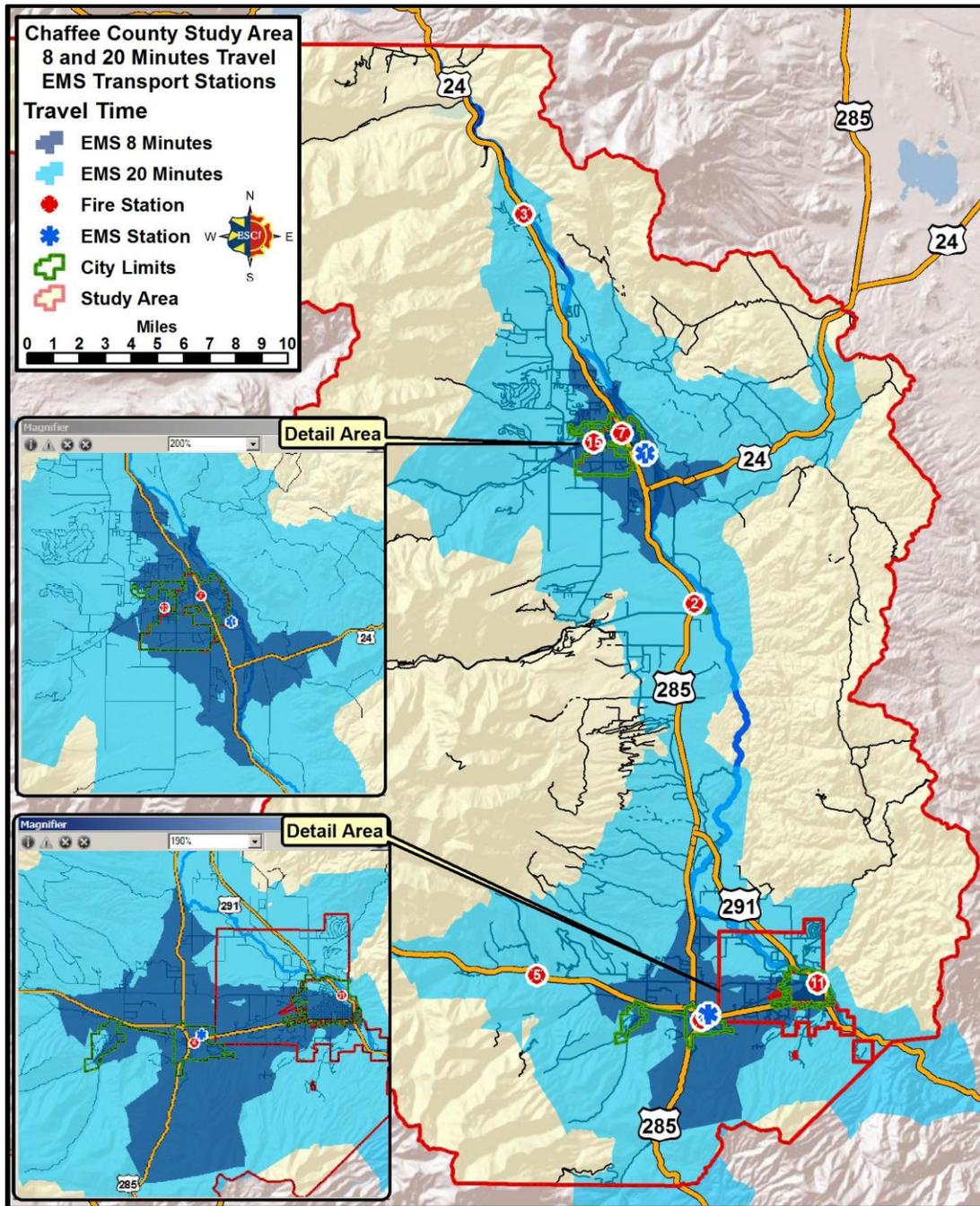
Figure 30: Salida and Poncha Springs Area, 1.5 and 5-Mile Travel from Current Stations



The SFD fire station in Salida provides coverage at 1.5 miles travel in the City of Salida and at five miles of SAFPD. The two CCFPD fire stations on Highway 50 deliver service to the Town of Poncha Springs and the developed areas west of Salida and SAFPD. Note that there is an area along Highway 285 and north of the Highway 291 junction that is not within five miles of a fire station.

The final analysis of facility placement and apparatus distribution displays the location and travel time models of CCEMS Advanced Life Support (ALS) transport units.

Figure 31: CCEMS Transport Distribution and Travel Time



CCEMS provides ALS transport service from two locations in Chaffee County. The CCEMS headquarters station located in Poncha Springs, primarily serves the Salida and Poncha Springs areas. The other CCEMS ALS transport ambulance is located at CCFPD Fire Station No 1. This ambulance serves the Buena Vista area and the northern portions of Chaffee County. As evidenced in the figure above, the ambulances are well located to provide EMS service to the most densely populated areas of the county within eight minutes of travel. The

majority of the primary transportation routes through Chaffee County are within 20 minutes of travel of a CCEMS ALS ambulance.

Demand Study

In the demand study, ESCI reviews current and historical service demand by incident type and temporal variation. GIS software provides a geographic display of demand within the overall study area. The software is used to geocode incident locations within the study area. National Fire Incident Reporting System (NFIRS) data for 2011 is used for this analysis. Figure 32 displays the distribution and incident density for within the study area in 2011.

Figure 32: Chaffee County Study Area, 2011 Incident Density

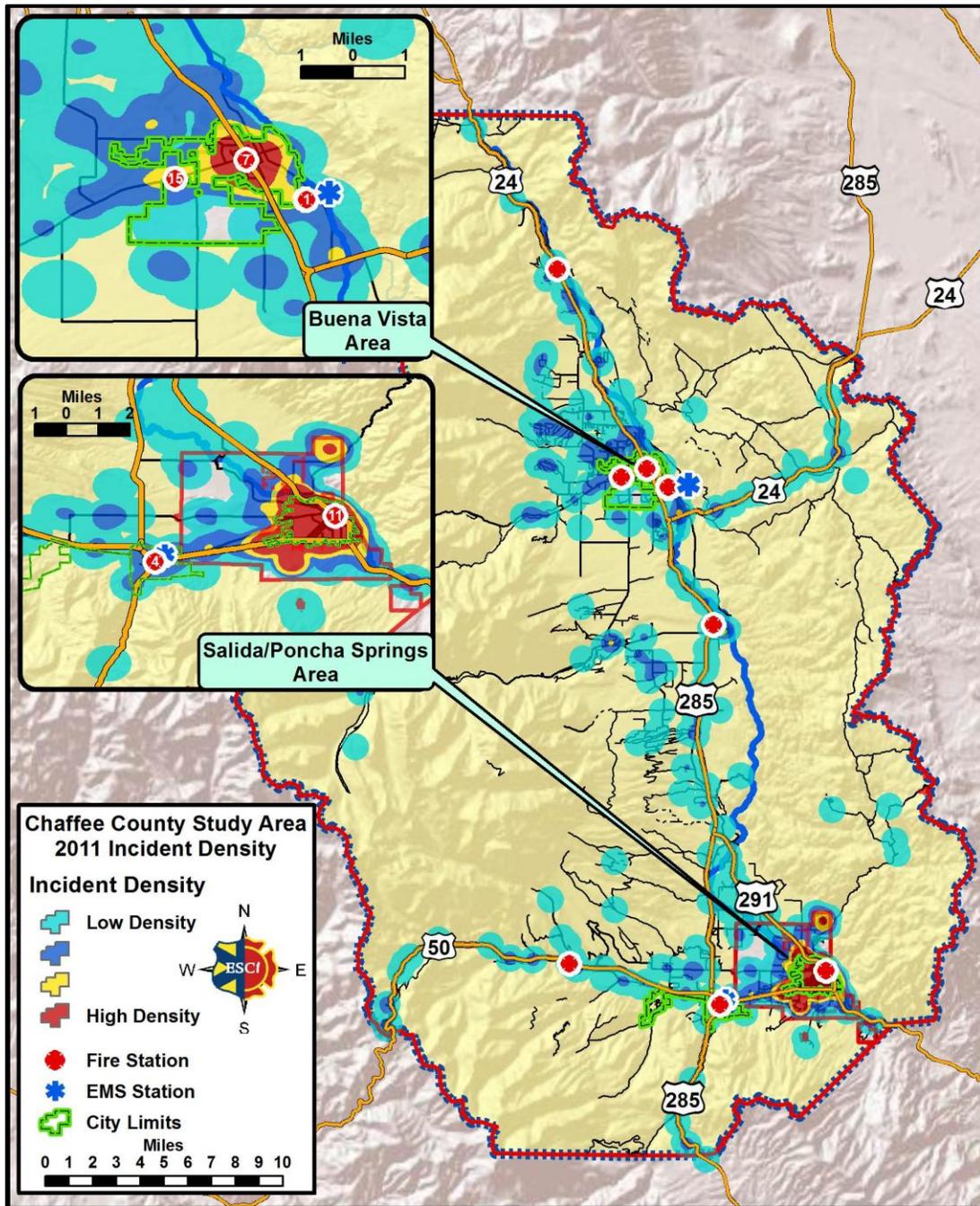
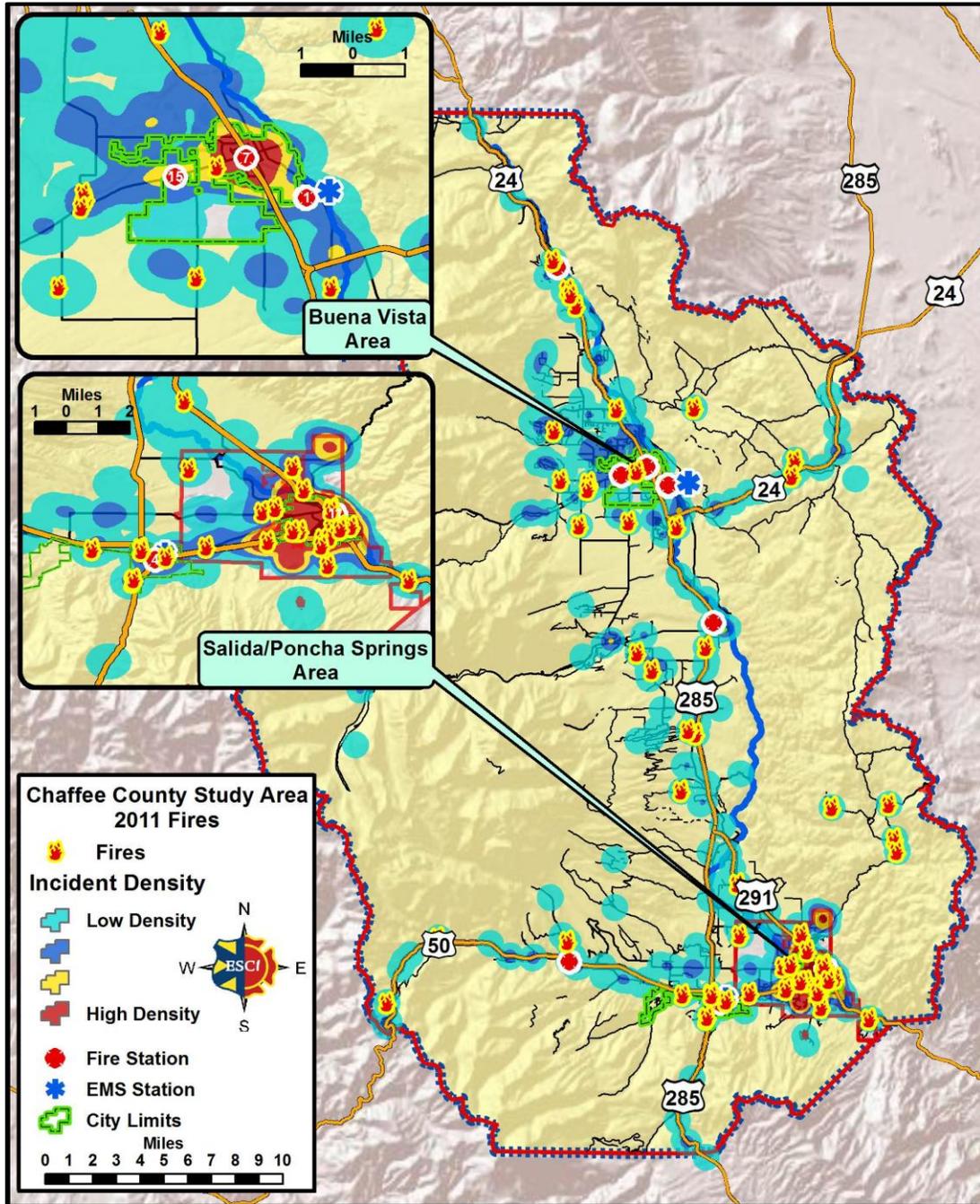


Figure 32 demonstrates that service demand is highest in the more densely populated areas in and around the incorporated communities in the study area; and also along the transportation routes through the County.

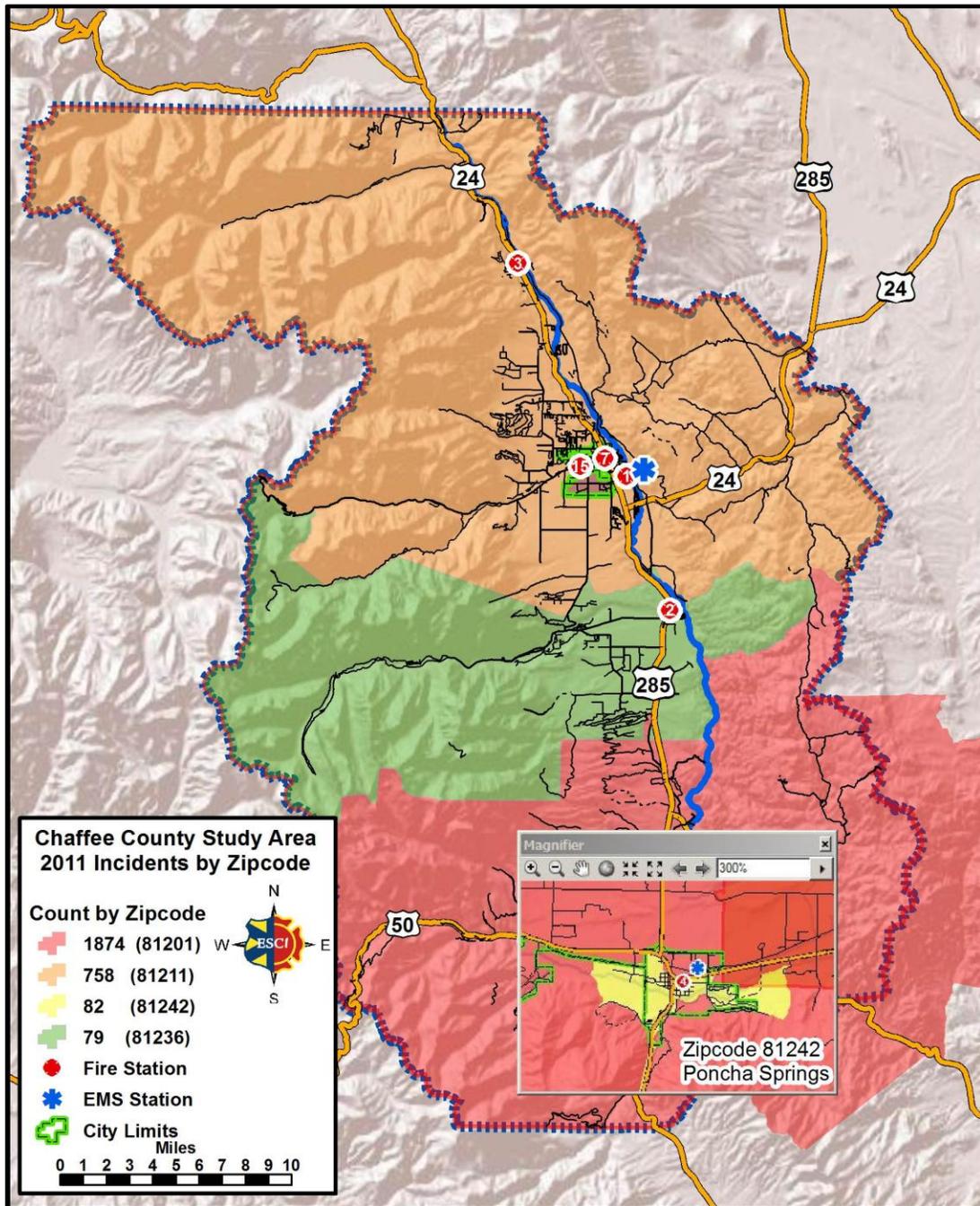
In the next figure, ESCI displays incidents coded as “Fire” in the NFIRS data; this includes structure fires, wildland fires, and vehicle fires. Although much less densely grouped, structure fires follow the same general pattern of distribution as does overall service demand.

Figure 33: Chaffee County Study Area, 2011 Fire Incidents



In the figure below, ESCI displays service demand for the study area summarized by zip code.

Figure 34: Chaffee County Study Area, 2011 Service Demand by Zip Code



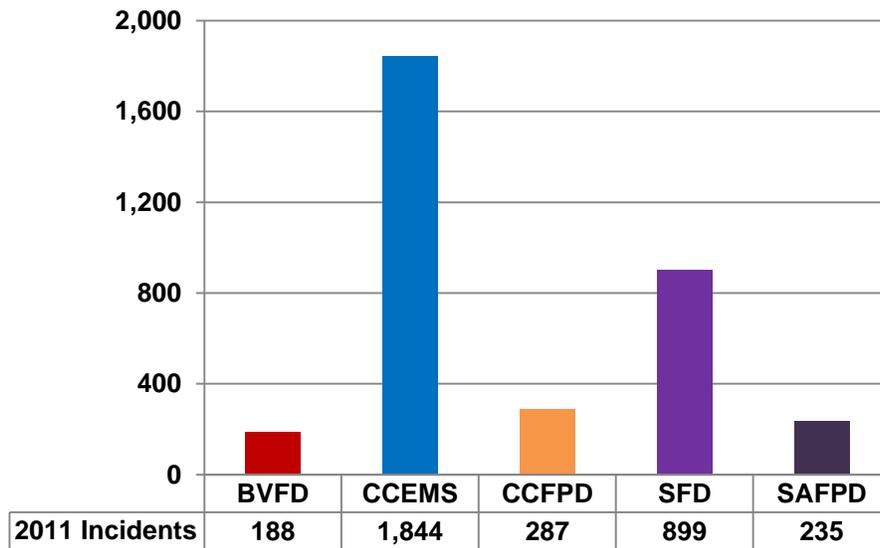
The view of service demand presented above, provides a broad generalized examination of overall service demand throughout the study area. Due to incomplete or missing address information, ESCI was unable to geocode actual incident locations to the degree normally

expected.¹⁸ The methodology used in Figure 27 insures that the maximum number of incidents is included in the demand study. ESCI encourages all Chaffee County emergency service providers to develop a methodology to accurately capture and report incident locations.

Current Service Demand and Temporal Variation

ESCI continues the demand study by examining current service demand by incident type and temporal variation within the Chaffee County Study Area. Figure 35 demonstrates total service demand for each participating agency in 2011.

Figure 35: Chaffee County Study Area Total Service Demand by Agency, 2011

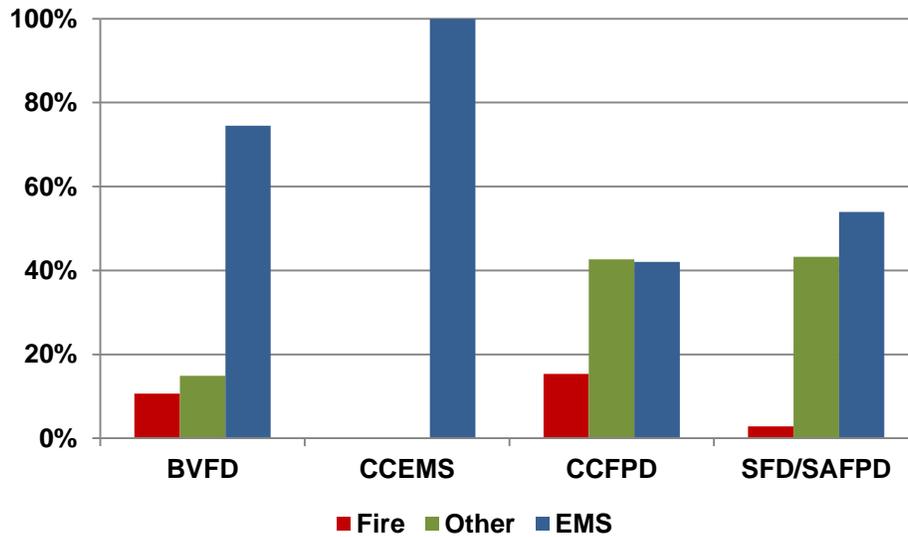


There were a total of 3,453 incidents in 2011. An undetermined number of the incidents are reported more than once as each agency independently tallies responses.

In the next figure (Figure 36), 2011 response data is categorized by incident type.

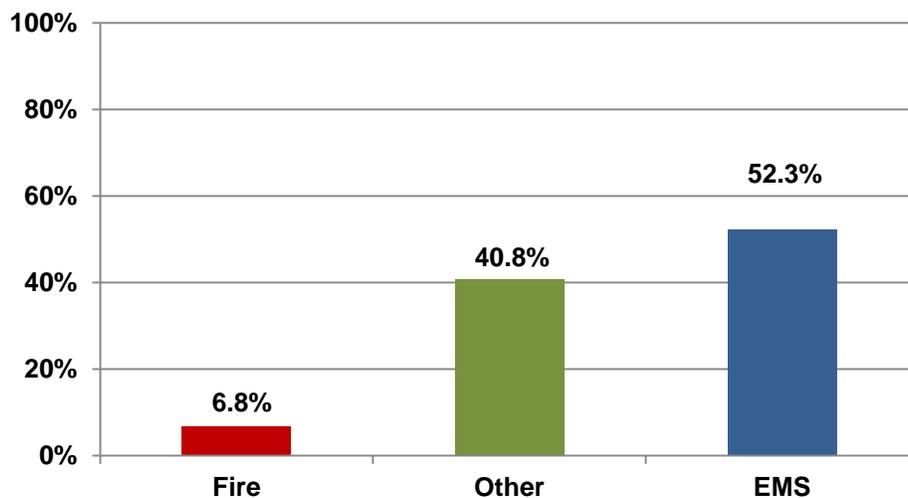
¹⁸ Data issues include: no incident location data for BVFD, incomplete data from CCEMS (change in RMS), incomplete or missing address data from CCFPD and SFD/SAFPD, no data from Chaffee County 911.

Figure 36: Chaffee County Study Area Service Demand by Incident Type, 2011



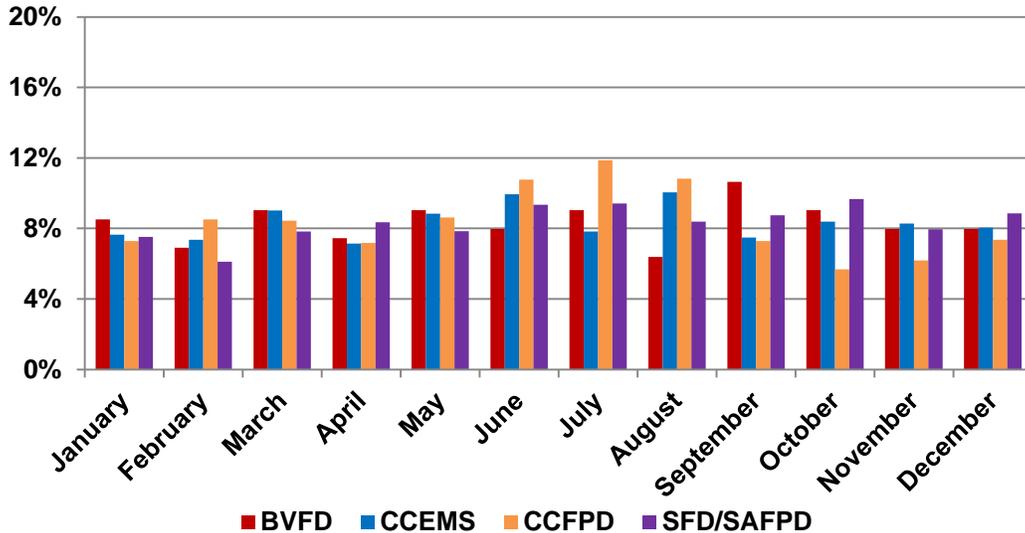
In 2011, Chaffee County fire departments responded to over 1,600 calls for service (1,609). CCEMS responded to 1,844 requests for EMS service. In Figure 36, “Fire” refers to any incident coded as a fire in the NFIRS data. The “EMS” category includes all calls for medical service including MVAs (motor vehicle accidents) and rescues; and the “Other” category refers to incidents such as hazardous materials, false alarms, service calls, or weather related incidents. The above figure summarizes service demand by incident type for each agency with Figure 37 aggregating the same data for the fire jurisdictions as a whole.

Figure 37: BVFD, CCFPD, and SFD/SAFPD Service Demand by Incident Type, 2011



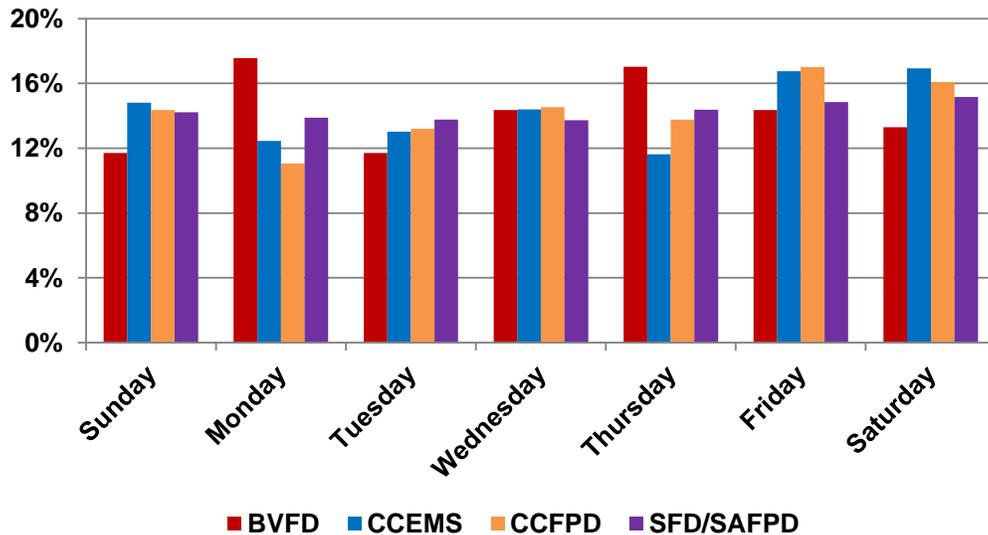
A review of incidents by time of occurrence reveals when the greatest response demand is occurring. The following charts show how activity and demand changes in Chaffee County based on various measures of time. ESCI begins by breaking down yearly workload into monthly increments.

Figure 38: Chaffee County Study Area Service Demand by Month, 2010 – 2011



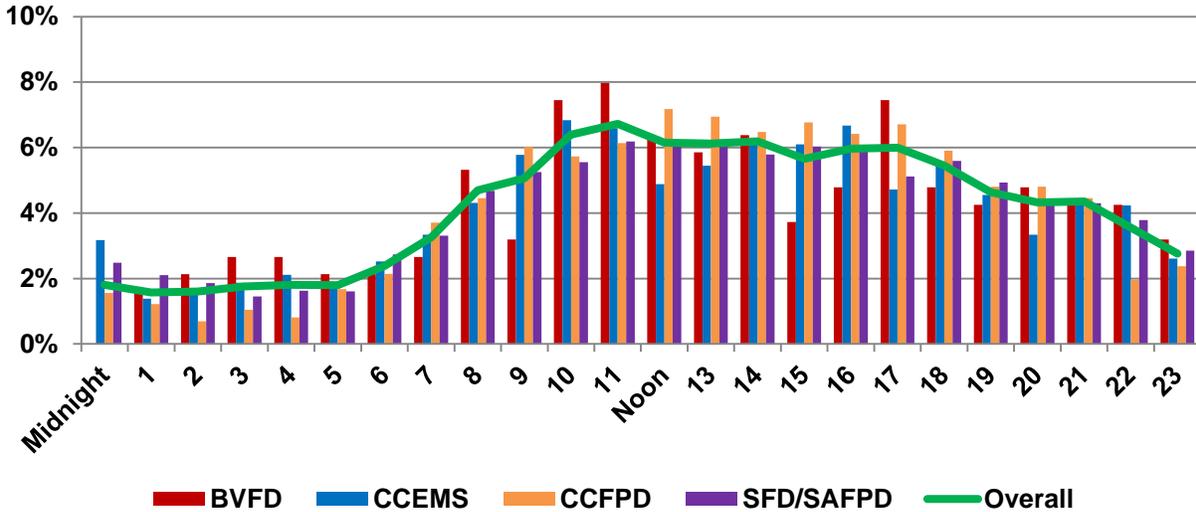
Service demand by month varies throughout the study area by agency. June through August displays the highest overall demand, with November and February showing the lowest service demand. The next figure demonstrates service demand by day of the week.

Figure 39: Chaffee County Study Area Service Demand by Day of the Week, 2010 – 2011



Service demand fluctuates throughout the week, with Friday and Saturday displaying the highest requests for service. The last temporal measure of workload is an examination service demand by hour of the day.

Figure 40: Chaffee County Study Area Service Demand by Hour of the Day, 2010 – 2011



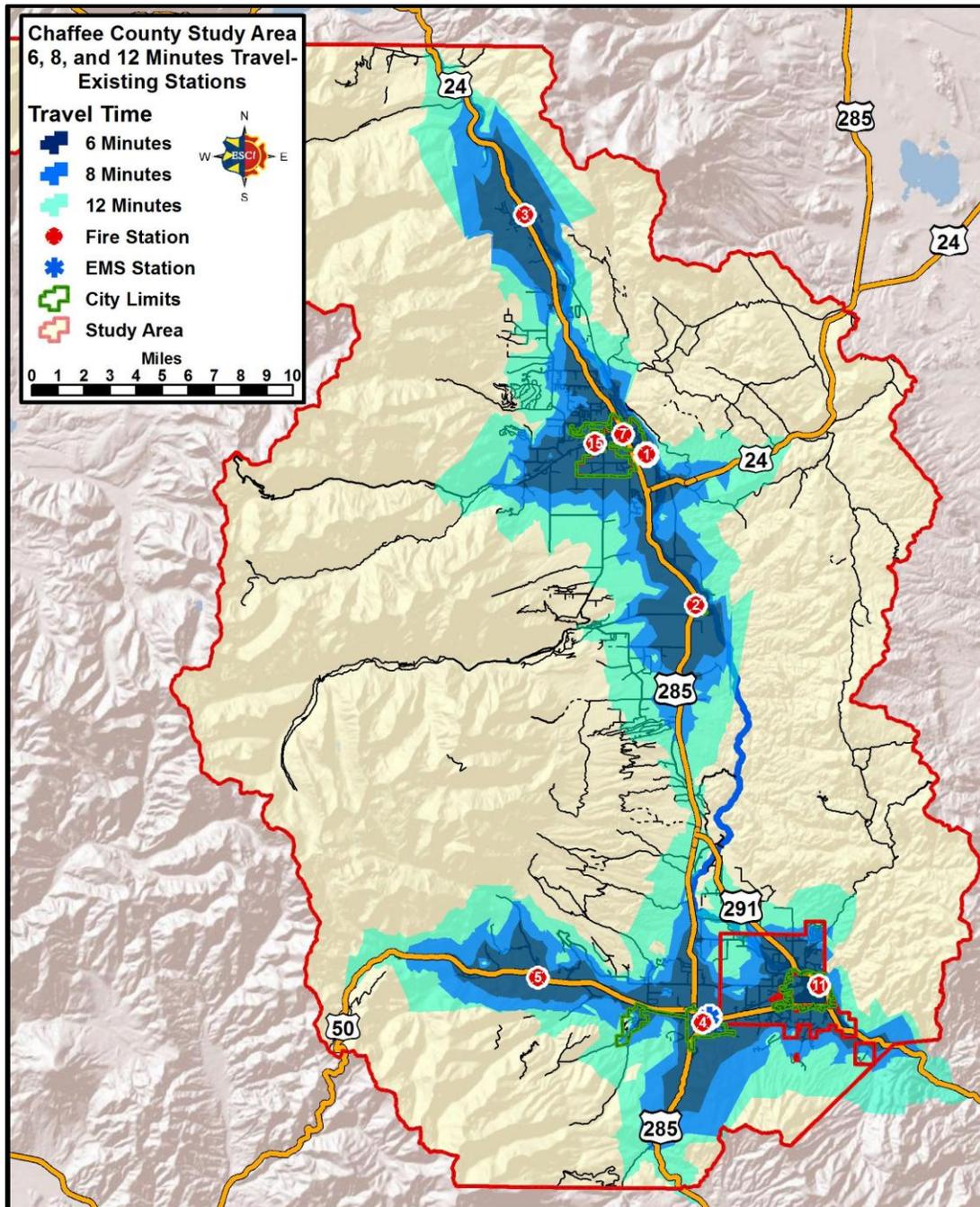
A primary driver for service demand is population activity. Figure 40 demonstrates how increased activity during the day affects demand for emergency services. Approximately 68 percent of the service demand occurs in the time period between 7:00 a.m. and 7:00 p.m.

Concentration Study

Standard 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. This is to ensure that enough people and equipment arrive soon enough to safely control a fire or mitigate any emergency before there is substantial damage or injury.

In the next set of figures, ESCI demonstrates the travel time needed for an effective response force to arrive at an emergency incident. Travel time is modeled from the current station locations and over the existing road network.

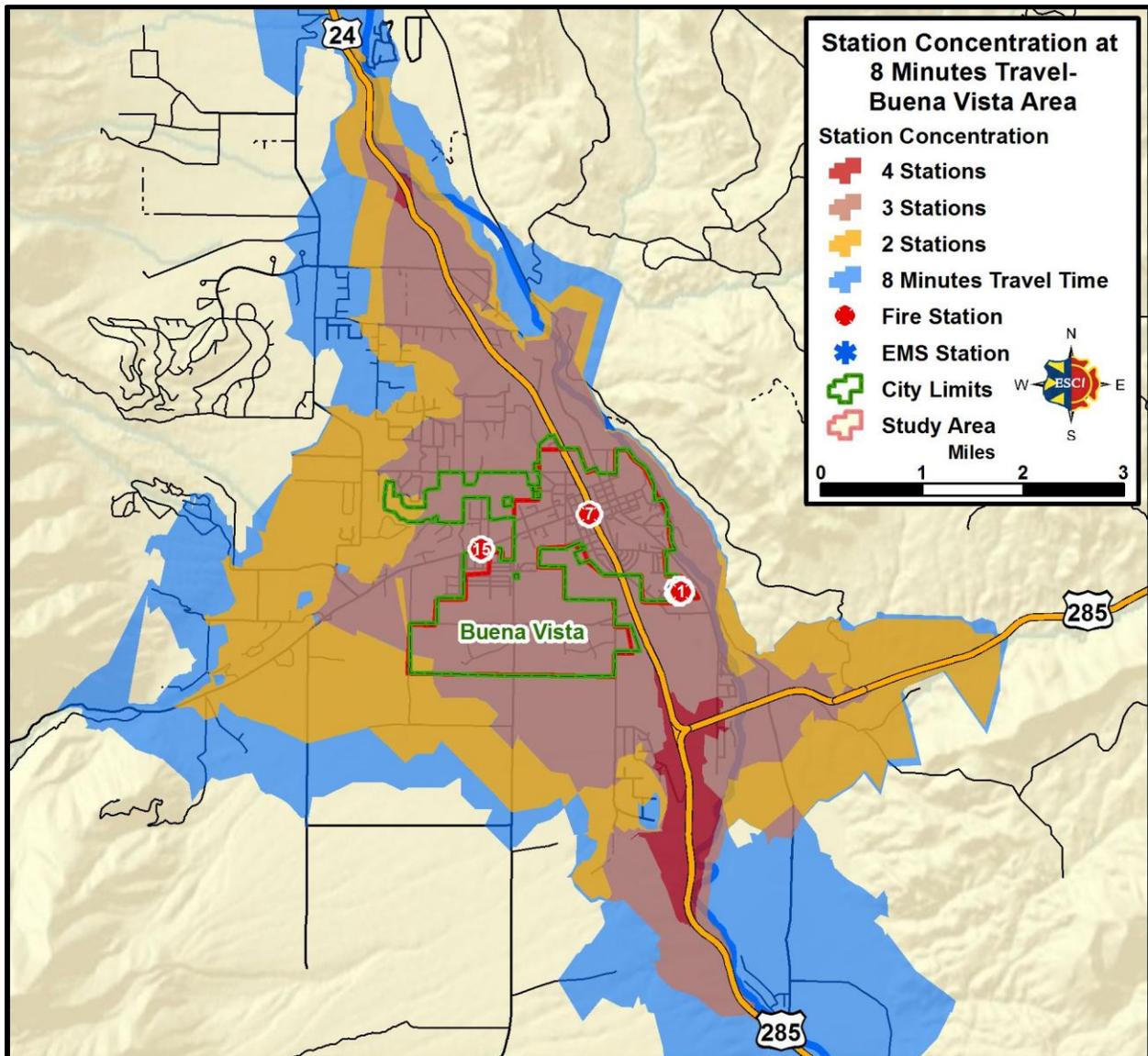
Figure 41: Chaffee County Study Area Travel Time



The standard initial response for any emergency response varies across the departments serving Chaffee County. Therefore, ESCI models travel time at 6, 8, and 12-minute travel from the current station locations. As seen in Figure 41, the communities of Buena Vista, Poncha Springs, and Salida are within eight minutes travel of one or more fire stations. The majority of the primary transportation routes and the adjacent developed property are within 12 minutes travel of a station.

The next two figures detail the eight-minute response areas and concentration of stations in and around Buena Vista; and then in the vicinity of Poncha Springs and Salida.

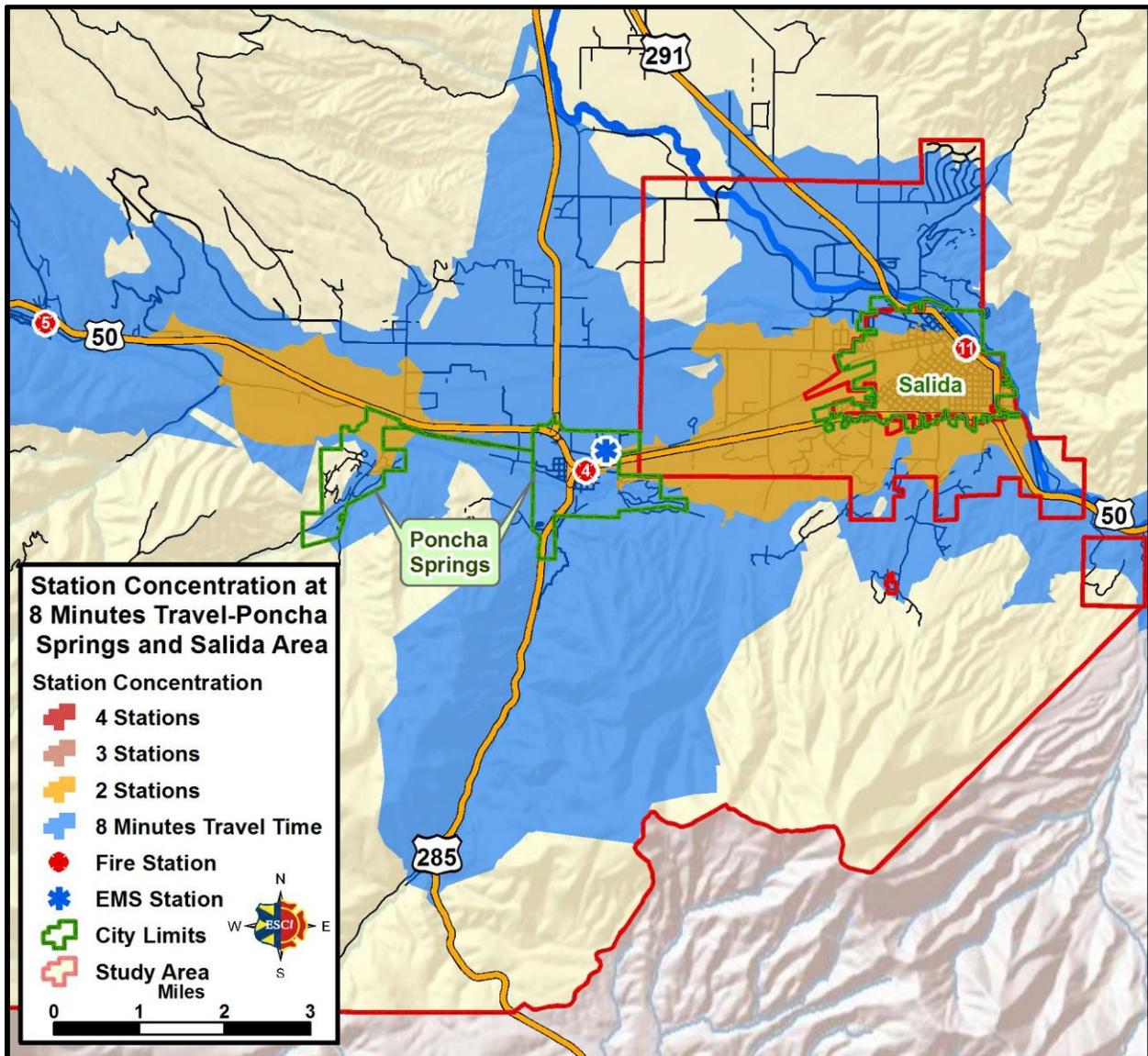
Figure 42: Eight-Minute Travel and Station Concentration, Buena Vista



Due to the location of the two CCFPD fire stations and the BVFD fire station the entire community of Buena Vista is within eight minutes of three fire facilities.

Figure 43 models eight minutes travel and station concentration in the area of Poncha Springs and Salida.

Figure 43: Eight-Minute Travel and Station Concentration, Poncha Springs and Salida



Approximately 90 percent of the road network in the City of Salida is within eight minutes travel of SFD Fire Station No. 11 and CCFPD Fire Station No. 4; 43 percent of SAFPD is within eight minutes of the same two stations. A portion of Poncha Springs along Highway 50 west of CCFPD Fire Station No. 4 is within eight minutes travel of CCFPD Fire Station Nos. 4 and 5.

Reliability Study

The workload of emergency response units can be a factor in response time performance. Simultaneous incidents and the number of resources assigned to an incident can affect a jurisdiction's ability to muster sufficient resources to respond to an additional emergency. Figure 44 displays the percentage of simultaneous incidents (concurrent incidents) for each of the study area jurisdictions in 2011.

Figure 44: Chaffee County Study Area Concurrent Incidents, 2011

	Single Incident	2	3	4	5
BVFD	99.50%	0.50%	0	0	0
CCEMS	60.26%	29.51%	6.89%	2.36%	0.98%
CCFPD	94.00%	4.80%	1.20%	0	0
SFD/SAFPD	93.35%	6.65%	0	0	0

The three participating fire agencies display a low percentage of concurrent incidents. The higher percentage of concurrent incidents experienced by CCEMS is not unusual for EMS transport agencies; and can be attributed to factors such as transport times or time committed to long distance transfers.

Another technique of looking at workload is a count of the number of resources committed to emergency incidents. Figure 45 examines the count of apparatus per incident by agency in 2011.

Figure 45: Chaffee County Study Area Resource Drawdown, 2011

Apparatus	Single	2	3	4	5	>5
BVFD	Insufficient Data					
CCEMS	Insufficient Data					
CCFPD	77.14%	1.43%	3.81%	4.76%	2.86%	10.00%
SFD/SAFPD	94.34%	4.94%	0.72%			

The data provided to ESCI by BVFD and CCEMS did not provide adequate information to include definitive percentages in this table, but examination of the data leads ESCI to believe that the majority of responses in BVFD and CCEMS are handled by a single apparatus or ambulance. The standard response within SFD/SAFPD is a single engine or rescue company from the single station in Salida; thus the high number of single apparatus responses. The higher number of multiple unit responses in CCFPD is not uncommon for volunteer agencies that dispatch multiple apparatus to ensure adequate resources on emergency scenes.

Unit hour utilization (UHU) analysis evaluates the total committed time of units for incidents and compares that against the total time the unit would normally be available. The next series of figures exhibits UHU for apparatus within the study area to the extent possible with the available data.

Figure 46: CCFPD Apparatus Unit Hour Utilization, 2011

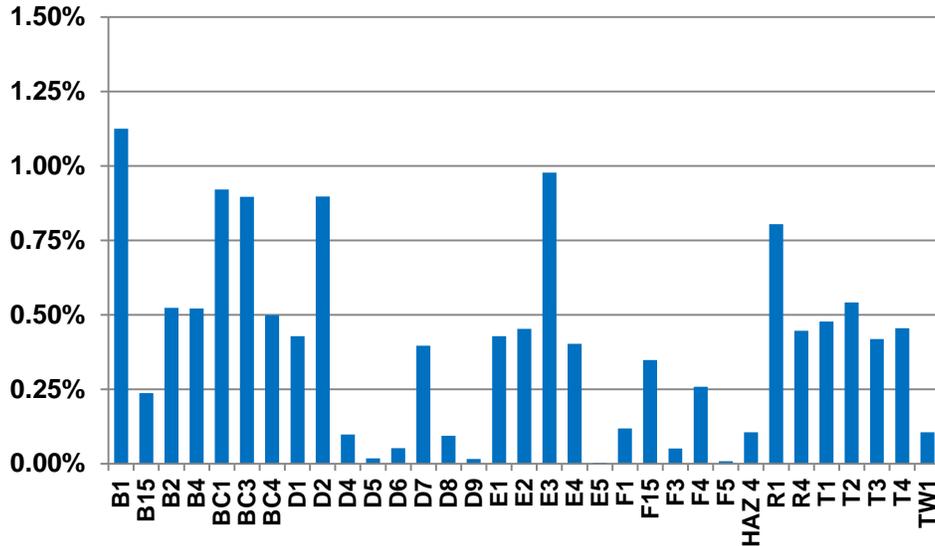
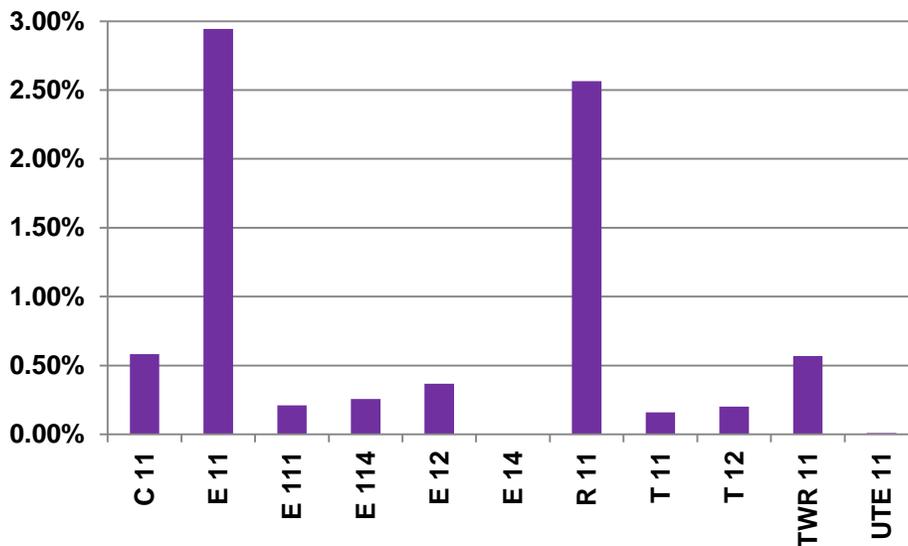


Figure 47: SFD/SAFPD Apparatus Unit Hour Utilization, 2011



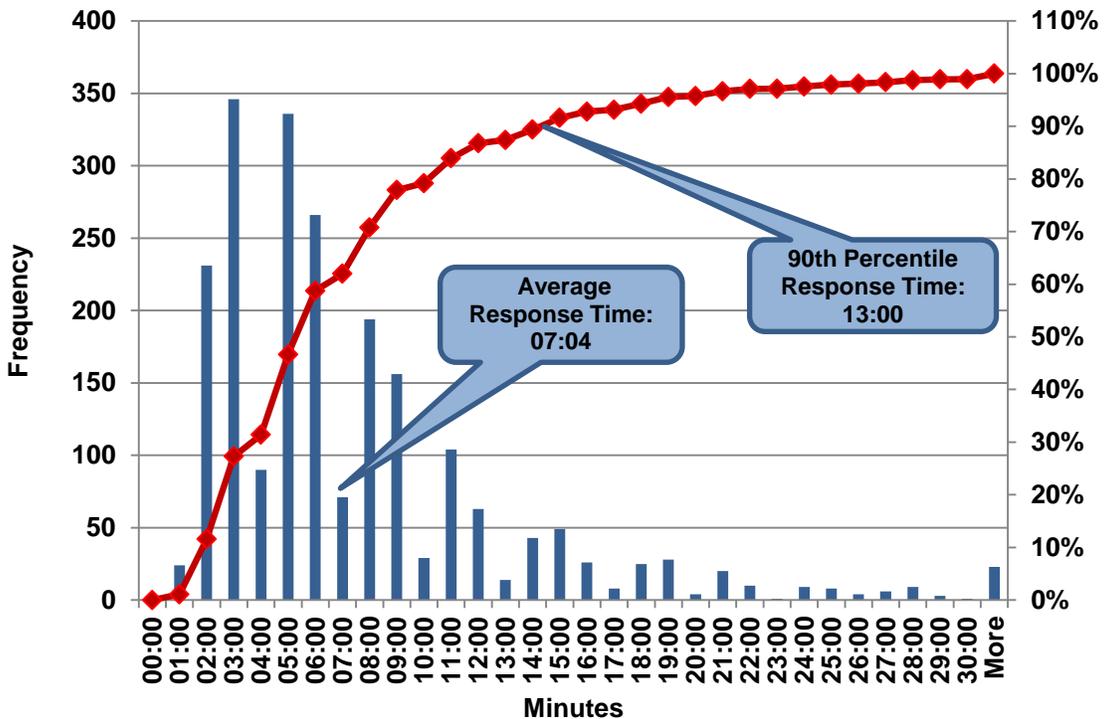
In ESCI’s experience, UHU rates above 25 percent for any single apparatus can negatively affect response performance and lead to personnel “burnout” issues. Neither CCFPD nor

SFD/SAFPD is approaching UHU rates that cause concern. BVFD and CCEMS data were not sufficient to analyze UHU by individual units. The total UHU for BVFD was less than 1 percent (0.97 percent). The total UHU rate for CCEMS in 2011 was 17.2 percent. Given that CCEMS staffs two ambulances on regular basis, UHU rates for EMS units do not appear to be high enough to adversely affect response performance.

Performance Summary

In the performance summary, ESCI examined emergency incident response time performance for the Chaffee County study area as a whole and for the individual agencies as data was available. ESCI used incident data from 2011 provided by all of the participating jurisdictions. Non-emergency incidents, mutual or auto aid incidents, data outliers, and invalid data have been removed from the data set whenever possible. Response time is defined as the interval from the fire department’s notification of the emergency to when the first fire apparatus arrives on the scene of the emergency. The first figure in this section of the report displays overall response time frequency throughout the study area.

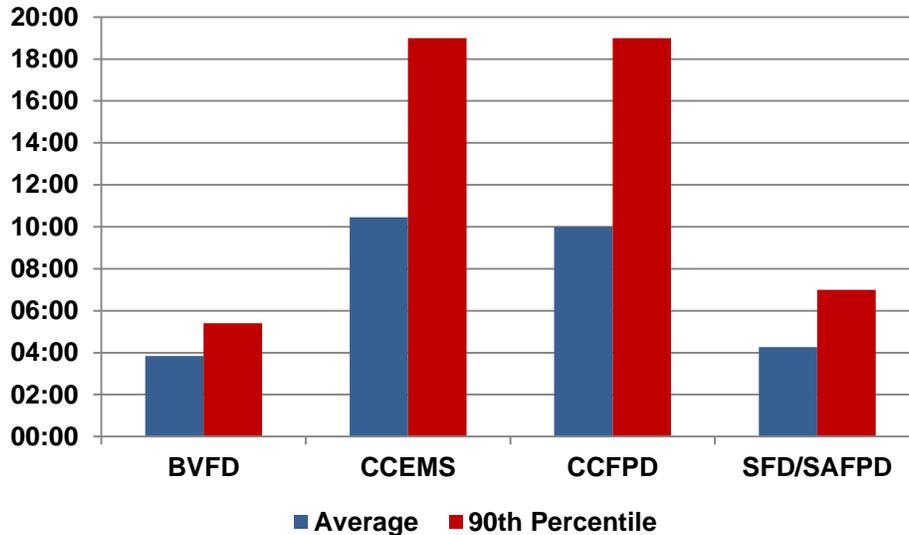
Figure 48: Chaffee County Study Area Response Time Frequency, 2011



The most frequently recorded response time in the overall study area was in the three to four-minute range. The average response time in 2011 was seven minutes four seconds with 90 percent of all emergency incidents answered in 14 minutes or less.

The figure below illustrates average and 90th percentile emergency response times for each of the jurisdictions involved in the feasibility study.

Figure 49: Overall Response Performance Participating Agencies, 2011



Response time performance varies throughout Chaffee County. The two agencies (CCEMS and CCFPD) that provide service to the largest geographic area in the County display the longest response times. BVFD¹⁹ and SFD have much smaller and densely populated service areas; the shorter travel time necessary to arrive at an incident is reflected in the response time data.

Response times may vary depending on the type of incident reported. The following figures summarize average and 90th percentile response times by incident type for each agency in the study area. CCEMS data is not included in these figures as the agency's primary mission is the provision of EMS services. Figure 50 displays average response time performance.

¹⁹ BVFD records response time from Time En Route to Time on Scene; all other agencies record response time from Alarm Time (time agency is notified of incident by the dispatch center) to Time on Scene. The BVFD methodology does not meet National Fire Incident Reporting System (NFIRS) standards for reporting of response time.

Figure 50: Response Performance By Incident Type (Average), 2011

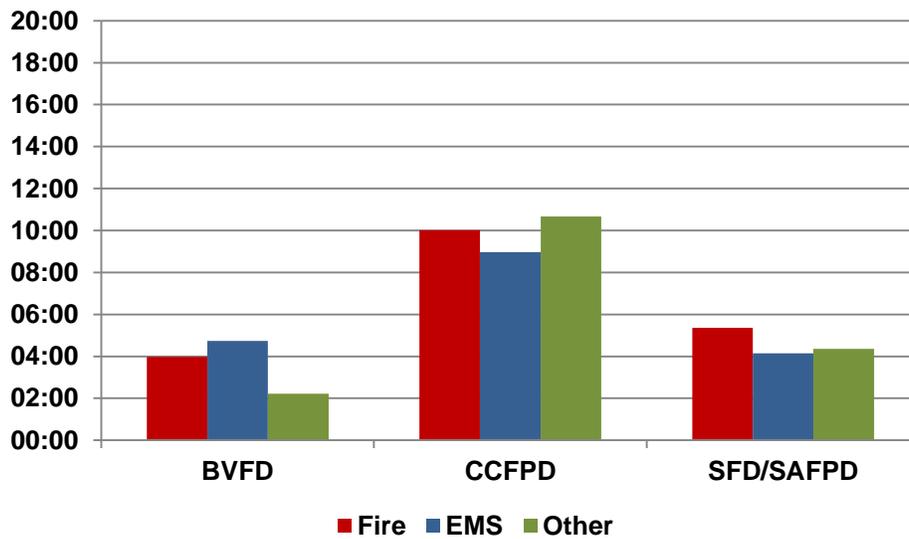
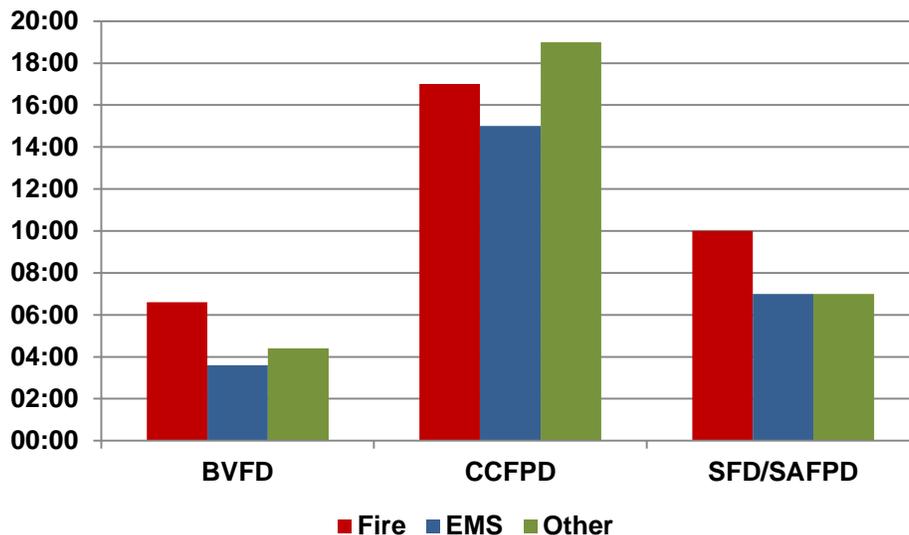


Figure 51 displays 90th percentile response time performance for all agencies.

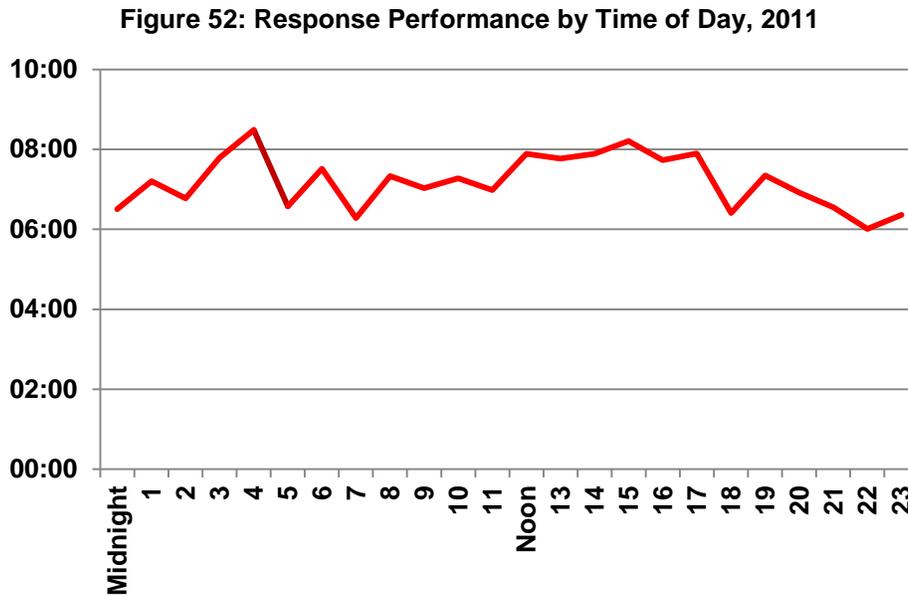
Figure 51: Response Performance By Incident Type (90th Percentile), 2011



Response time performance varied throughout the study area and to a degree by incident category. This can be caused by factors such as donning protective equipment prior to leaving the station for fire responses, waiting for specialized equipment for a particular incident, or waiting for qualified personnel to staff a particular apparatus.

Variations in response time by time of day are a reflection of service demand workload, traffic congestion, weather, and distance to the call from a fire station, and availability of personnel.

The following chart illustrates how the average response time performance varied by the hour of day in the Chaffee County study area.



This analysis indicates that response time performance varies through a range of approximately two minutes throughout the day. It is common to see response performance lengthen during the early morning hours due to volunteers responding from home after being awakened, career personnel navigating stations from sleeping quarters to the apparatus bay, or any other number of factors. A more rapid response is expected in the evening hours when the number of volunteer personnel is often highest.

There are several factors that affect overall response time, including but not limited to weather, distance, construction, and traffic congestion. However, one element of the overall response time performance that emergency personnel can control is the turnout time interval. Turnout time represents the time between the radio dispatch of an incident and the time the unit actually begins moving toward the incident. ESCI is unable to provide an analysis of turnout time in the Chaffee County study area. None of the participating jurisdictions provided ESCI with the necessary incident time stamps for a meaningful analysis of turnout time as a part of response performance. ESCI encourages the Chaffee County jurisdictions to capture all the components of the “*Cascade of Events*” referred to in Survey Table 4-Service Delivery and Performance.

Incident Control and Management Methods

Fire departments must have systems in place to manage incidents and resources. This is also true of emergency medical services and law enforcement agencies. Preparation begins with the establishment of pre-incident plans on higher risk structures or mass casualty incidents, along with development of resource management systems in the event of large-scale or concurrent incidents. Location mapping, standardized response protocols, mutual and automatic assistance and water supply planning also help prepare an agency for efficient and effective emergency response.

The participating fire agencies in this study train to IS-100 and IS-700 at a minimum except Chaffee County Fire District, who recommends this certification but does not require it.

Recommendations:

BVFD: Establish as a minimum standard for ICS Certification as follows: IS-100, IS-200 and IS-700 for all line personnel, and additionally require IS-300, IS-400 and IS-800b for all command officers and chief officers.

CCFPD: Establish as a minimum standard for ICS Certification as follows: IS-100, IS-200 and IS-700 for all line personnel, and additionally require IS-300, IS-400 and IS-800b for all command officers and chief officers.

SFD: Establish as a minimum standard for ICS Certification as follows: IS-100, IS-200 and IS-700 for all line personnel, and additionally require IS-300, IS-400 and IS-800b for all command officers and chief officers.

Once a call is dispatched, management of the incident itself begins. Emergency response agencies should utilize incident command structures compliant with the National Incident Management System (NIMS).

Finally, OSHA regulations provide standards and good practices for worker safety. Safe work practices related to operating in a hazardous atmosphere or around hazardous materials should be enforced through department procedures and training. This includes requiring firefighters to operate in teams of two, with a minimum of two persons, response-ready, remaining outside the hazard area whenever a team of two is operating inside the hazard area. This is commonly referred to as the “two-in, two-out” regulation.

In review of the participating agencies, one significant finding was the lack of personnel trained to the “Operations” level. Of primary concern here is that each agency should have firm procedures in place to limit any personnel from performing tasks and functions that would be

considered above their level of training and certification at incidents involving hazardous materials release. Personnel not trained beyond the “Awareness” level should not be permitted to enter into hazardous materials incident “hot zones”, but rather should be directed to remain in an off-site support mode.

The Awareness level of training is intended to enable an individual to “...discover a hazardous substance release and... initiate an emergency response sequence by notifying the proper authorities” but nothing else. Obviously, once an incident has been reported, such as a fuel leak from a vehicle called in to 9-1-1, the incident has already been recognized and moved beyond the Awareness level. The act of dispatching a fire engine presumes action on the part of the responding crew involving size-up, containment, decontamination, or clean-up. Any of these tasks would exceed the training level certified under Awareness and are actions specifically described in the “First Responder Operations Level”. Written procedures should prohibit response by personnel certified by their department at less than Operations level to any incident with a known, suspected, or likely release of a hazardous substance, including fuels and gases.

Recommendations:

BVFD: Implement Hazardous Material-Incident Command certification as a requirement for command level officers.

CCFPD: Implement Hazardous Material-Incident Command certification as a requirement for command level officers.

SFD: Implement Hazardous Material-Incident Command certification as a requirement for command level officers.

Mutual and Automatic Aid Systems

All of the participating agencies are parties to a master mutual assistance agreement. Mutual aid is typically employed on an “as needed” basis where units are called for and specified one by one through an Incident Commander. There are some conditions under which the departments have agreed to “dual response”, wherein units from more than one department are dispatched on certain types of calls. The figure below displays mutual or automatic aid activity for Chaffee County fire agencies in 2011.

Figure 53: Chaffee County Study Area-Mutual/Automatic Aid, 2011

Mutual/Auto Aid	Received	Given
BVFD	1	1
CCFPD	5	38
SFD/SAFPD	5	16

While automatic aid is a term used in the master mutual aid agreement, it does not describe circumstances where automatic aid is rendered. If automatic aid is not provided in natural alliances (such as Buena Vista Fire Department and Chaffee County Fire District), it prevents expedient use of a closest force response. This represents a gap in the system in that residents of Chaffee County undoubtedly travel in and through all of the public safety jurisdictions in Chaffee County and should benefit from the closest emergency vehicle response without regard to political boundaries.

According to interviews, multi-agency training is sporadic. For the most effective mutual and automatic aid programs, as well as maximum credit in the ISO Fire Protection Rating system, multi-agency drills should be scheduled regularly. Ideally, these should occur at least once per quarter and be recorded as multi-agency training in all agency records. In addition to the ISO credit, these trainings will naturally lead to enhanced working relationships, more regional thinking, and perhaps cooperative planning, policy, and procedural development.

Recommendations:

BVFD: Implement a “closest force” response by all emergency response agencies to all incidents in Chaffee County without regard to political jurisdictional boundaries through an automatic aid agreement.

CCFPD: Implement a “closest force” response by all emergency response agencies to all incidents in Chaffee County without regard to political jurisdictional boundaries through an automatic aid agreement.

SFD: Implement a “closest force” response by all emergency response agencies to all incidents in Chaffee County without regard to political jurisdictional boundaries through an automatic aid agreement.

BVFD: Implement joint training activities to improve cross-agency coordination during multi-agency responses.

CCEMS: Implement joint training activities to improve cross-agency coordination during multi-agency responses.

CCFPD: Implement joint training activities to improve cross-agency coordination during multi-agency responses.

SFD: Implement joint training activities to improve cross-agency coordination during multi-agency responses.

Evaluation of Emergency System Interoperability

Mutual and Automatic Aid Agreements

As noted, the current mutual aid agreement includes language describing automatic aid but that language is not implemented. Closest force language should be added to the master agreement to ensure the highest level of service available to the residents of Chaffee County, regardless of the jurisdiction they in which they reside. An additional benefit to agencies receiving automatic aid (meeting the established criteria and as outlined above) is that they are eligible for ISO credit for the automatic aid units responding to these incidents.

The obstacle which makes this process difficult is the dispatch center protocols. Chaffee County Communications dispatches by agency not by unit or by station. This type of dispatching leaves the response up to the individual agencies to determine what specific resources should be sent to an incident, making a closest force dispatch exceedingly difficult to implement. Agencies must develop and employ a pre-determined response plan for assigning specific responder types, resources, and response modes. It avoids making crisis decisions in the heat of the moment with no time to consider the best options, often relying on relatively inexperienced personnel to make those split-second decisions.

Training

Like any other activity, training should be conducted under a comprehensive plan. The plan should include a clear definition of the goals and objectives of the training program and a schedule of training activities to achieve them. The training officer(s) should ensure that lesson plans are developed, approved, and easily accessible; training objectives and measurements are clearly defined; and record keeping and documentation is seamless within the agencies. Frequent monitoring and mentoring of all members during training sessions by the training officer(s) is important for continuity among personnel.

Each agency currently conducts its own training, using its own resources and its own schedule. None of the agencies makes a concerted effort to develop joint drills or coordinate training methods, calendars, personnel, or recruit academies. A tremendous amount of duplication and overlap likely exists, but the agencies are likely unaware of any duplication.

The agencies must share information with each other, identify commonalities and differences, join in an effort to partner with one another to leverage the precious few resources each agency has toward a training program that exceeds what any one of the agencies could do alone.

Recommendations:

BVFD: Establish a combined training plan with the participating agencies.

CCEMS: Establish a combined training plan with the participating agencies.

CCFPD: Establish a combined training plan with the participating agencies.

SFD: Establish a combined training plan with the participating agencies.

BVFD: Establish a multi-year training calendar, providing ample opportunity for personnel to attend training at a neighboring agency.

CCEMS: Establish a multi-year training calendar, providing ample opportunity for personnel to attend training at a neighboring agency.

CCFPD: Establish a multi-year training calendar, providing ample opportunity for personnel to attend training at a neighboring agency.

SFD: Establish a multi-year training calendar, providing ample opportunity for personnel to attend training at a neighboring agency.

The training plan should, at a minimum, provide the following elements:

- Identification of performance standards for all personnel using Colorado State Certification Program and JPRs (Job Performance Requirements)
- Schedule training to prevent skills degradation using a three-year certification program
- Schedule skills improvement training when necessary
- Comprehensive training objectives for each training session presented with state certification programs
- Process for evaluating the amount of learning that occurred in certification programs.
- Scheduling outside training opportunities, announced at meetings and posted on bulletin boards.

To ensure quality emergency scene performance, training should be based on established standards of practice. Competency-based training requires that skills (e.g. hose evolutions, ladder raises, ventilation, and rescue) are identified, taught, practiced, and evaluated. Evaluation and certification of firefighters are an important component of the training process and can be used to identify where further skill development is needed. A good evaluation process lends credence to certification and allows firefighters to demonstrate competency and ensure that minimum performance standards are met. Certification may also be used as criteria/recommendation for selection as an officer, helping maintain credibility with the community and reducing each agency's liability exposure.

Competency is demonstrated ability to perform a defined skill successfully according to an established standard. Competency-based (performance-based) training ensures that firefighters will be capable of responding and providing service to the community in an effective

and safe fashion. Document sources for skill-based training should include NFPA, IFSTA, Colorado Division of Fire Safety, Department of Homeland Security, and medical protocols.

Recruit Training

Each agency handles new recruits in varying degrees:

- BVFD recruits serve a 90-day probation and are managed internally
- CCEMS recruits perform ride-alongs, essentially learning on the job (of course, they have already received medical certification)
- CCFPD recruits are managed with an in-house system, where they serve a six-month probationary period.
- SFD has no established recruit academy

It is clear that a single recruit academy can be offered on an annual or semi-annual basis with all of the agencies participating (using the training resources of each agency) and the result would be of higher quality, lower cost, less disruptive end product with an additional by-product of recruits that have alliances across jurisdictions.

ESCI recommends that firefighters complete a six-month probationary period that covers the requirements for basic firefighter, Colorado State Certified Fire Fighter I, Hazardous Material Operations, and Advanced First Aid and CPR. During initial training, recruits should be assigned to an ambulance for a few shifts to experience that aspect of emergency services and appreciate the role of the medics on these incidents. Once allowed to respond to incidents, personnel should be provided with ongoing and refresher training to avoid a degradation of basic skills.

New firefighters should complete a task book during their first six months. The task book should be modeled after ICS position specific task books, altered to reflect recruit firefighting skills and competencies. Performance goals should describe and list measures for completing each task accurately, safely, and in a timely manner. Successful completion requires a signature by the supervising officer and a review by a first line supervisor, a training officer, and a chief officer. Recruit training documents should be updated as needed and should be accessible in electronic and hard copy format.

Recommendations:

BVFD: Establish a joint recruit academy annually or semi-annually, as the need dictates.

CCEMS: Establish a joint recruit academy annually or semi-annually, as the need dictates.

CCFPD: Establish a joint recruit academy annually or semi-annually, as the need dictates.

SFD: Establish a joint recruit academy annually or semi-annually, as the need dictates.

BVFD: Establish a common recruit task book, with standardized goals and objectives, and signature check-offs at three superior levels in the organization.

CCEMS: Establish a common recruit task book, with standardized goals and objectives, and signature check-offs at three superior levels in the organization.

CCFPD: Establish a common recruit task book, with standardized goals and objectives, and signature check-offs at three superior levels in the organization.

SFD: Establish a common recruit task book, with standardized goals and objectives, and signature check-offs at three superior levels in the organization.

Ongoing Training

The agencies should not stop at the sharing of recruit academy training, but should continue to move toward a common training division, providing centralized training administration, training support, and resource supply. A common training manual should be created, which should reflect a standardized approach to emergency scene operations.

Training records should be stored on a common software database for ease of access by all agencies. The program should, at a minimum, be capable of producing reports showing the training received by each individual (employee/member), category (or type of training), and number of hours. There is no dedicated staff support for the Training Officer at any of the agencies; the training officers input their own data, and share staff support with other functions.

Training facilities are lacking throughout the entire county. None of the participating agencies have training facilities other than classroom space. Props are not readily available to each of the agencies, and they make do with borrowed facilities and borrowed props. A combined training facility, funded by all of the participating agencies on a shared basis, would strengthen the training effort throughout the county.

Recommendations:

BVFD: Establish a joint training manual for ongoing training.

CCEMS: Establish a joint training manual for ongoing training.

CCFPD: Establish a joint training manual for ongoing training.

SFD: Establish a joint training manual for ongoing training.

BVFD: Establish a shared training facility plan and seek funding collectively.

CCEMS: Establish a shared training facility plan and seek funding collectively.

CCFPD: Establish a shared training facility plan and seek funding collectively.

SFD: Establish a shared training facility plan and seek funding collectively.

Communications Center (9-1-1)

The communication system in Chaffee County is on Digital Trunked Radio network (DTR) except for Chaffee County Fire, which uses VHF (Very High Frequency). Although there are inherent challenges with communicating via two different radio frequencies, but there are terrain-related reasons for Chaffee County Fire to use VHF radios. The Chaffee County Combined Communications Center (CCCCC) is the only Public Safety Answering Point (PSAP) in Chaffee County and handles all dispatches for emergency services in the county (police, fire and medical).

The dispatch center shares space in the Chaffee County Detention Center. The Computer-Aided Dispatch Center uses Positron Enhanced 9-1-1 software. Dispatchers are certified in Emergency Medical Dispatch (EMD) techniques and are trained in CPR. They are also certified in the National Incident Management System (NIMS), IS-100 and IS-700. There are ten full-time dispatchers employed at the center and one manager. The dispatchers' work schedules provide two dispatchers scheduled from 0600 to 0300. Between 0300 and 0600, staffing is down to one dispatcher on duty.

It is clear that law enforcement enjoys the service it receives from the CCCCC. Management of the communication center is within the Chaffee County Sheriff's area of responsibility. As of the writing of this report, the agencies who are party to the communication center agreement are charged for dispatch services they receive. While this fee for service is appropriate in the opinion of ESCI, it is also fitting that these agencies have influence over the dispatch policies and procedures, service level standards, and service delivery activities of CCCCC. A User Group should be formed, that consists of the end users of the service. This user group must have legitimate authority and the ability to set consensus standards and service adjustments to

fit their collective needs. These needs should also be balanced by the user group against the costs associated with adjustments, since they will likely bear the costs for these changes.

With a small dispatch center staff, it is difficult to accommodate the unique needs of multiple agencies and manage incidents differently depending on incident location. However, if dispatches were pre-programmed by agency and Computer Aided Dispatch (CAD) terminals provided dispatchers with the specific units needed for a response, it would remove much of the confusion potential from the dispatcher and the responding agencies. In fact, NENA (National Emergency Number Association – a professional communications association) developed protocols for professional dispatch centers which states:

*Agencies must develop and employ a pre-determined response plan for assigning **specific responder types, resources, and response modes** (hot or cold), based on the prioritization levels determined by the agency's call-taking protocols. Development of such a plan will involve input, oversight, and approval from all department heads of affected public safety agencies. Agencies will need to evaluate the impact of any change in response plans on costs, response times, status of available resources, and service-level provided. (Emphasis added)*

-- NENA Emergency Call Processing
Protocol Standard, NENA 56-006
June 7, 2008

While the dispatchers perform an important task under stressful conditions at times, there are additional essential components that the fire service and EMS providers need from a communications center. First, dispatch should auto-record all telephonic and radio transmissions for legal purposes as well as to be able to recall such transmissions in the event of confusion during an emergency incident. Further, the recorded information should be retained for a period of at least 90 days to provide for incident review by any requesting agency.

The International Association of Fire Chiefs (IAFC) makes recommendations for response times and has established a "Cascade of Events" to assist responders in understanding response intervals for emergency operations. Irrespective of the standard used, system regulators establish an appropriate response time reporting method for their local communities. Pre-response, response and post-response elements (see Figure 7: Cascade of Events on page 58 for definitions) should be time-stamped at least to the nearest whole second for later data retrieval by the response agencies. This information should be accessible to the response agencies for preferably automated retrieval for the convenience of both the response agency and the dispatch personnel. While call processing and dispatch functions are external for the

study agencies, those dispatch functions should also be measured and monitored by the system and standards for dispatch should be established.

Recommendations for CCCCC:

- *Facilitate transition to a run card system for each agency, accommodating the needs of each agency in a pre-programmed fashion through CAD.*
- *Auto-record all telephonic and radio transmissions and keep on file for at least 90 days.*
- *Time stamp all pre-response, response, and post response elements to the nearest whole second. Make data available to customer agencies via an automated, web-based system.*
- *Establish a User Group consisting of agency representatives to recommend standards, service adjustments, and improvements in dispatch infrastructure.*

Accountability

Personnel accountability systems should be established in all department procedures, and should be implemented on all multi-unit or multi-agency incidents. Currently, all agencies but CCEMS use PAR (Personnel Accountability Report) Tags to track the personnel on scene of a multi-unit incident. Given the CCEMS crew size, it isn't surprising that an accountability system is not used. However, at large scale events with multiple agencies, it is possible that the EMS crews will be incorporated into that large scale event; it will be critical to the Incident Commander to know who is on the incident, where they are assigned, and what their responsibilities are. Thus, it is important that CCEMS use PAR Tags or something similar so all Chaffee County emergency service agencies use a common accountability system.

The fire service agencies in Chaffee County should also reinforce the use of an accountability system in training activities and emergency incidents. During emergency operations, agencies revert to training and habit. Integration of an accountability system during training on smaller incidents, will more likely be used on large scale events, when pressure and stress is highest.

Recommendations:

CCEMS: Provide training and require participation in a countywide personal accountability system.

Response Criteria

As stated in the Communications section, the agencies included in this study do not use run cards or pre-programmed response criteria based on critical task analysis. Instead, they are simply notified by the dispatch center that their agency has an incident and it is the agency's responsibility to determine who or what should respond.

Each agency should work with the Chaffee County Combined Communications Center to develop response criteria by call type, by geographic area, by unit designator, and by risk type. These agency-by-agency decisions should be loaded into a CAD system capable of such dispatching, and the dispatch center should dispatch according to the pre-programmed response.

Fiscal Analysis

This section of the report will provide a comparative snapshot of historical financial results and provide a projection of what each organization will look like assuming that the organization structure and working conditions remain unchanged (status quo). The objective is to focus on the financial position of the agencies, including historical, current, and future revenue and cost. We calculate the likely financial outcomes of cooperative service proposals to help judge the fiscal viability of alternatives now and in the future. To conduct this analysis, ESCI uses the financial documentation provided by the organizations. Additionally, sources such as the Chaffee County Assessor are consulted to secure agency background for taxable assessed valuation. Before exploring possible options, the methodology employed for the analysis is described.

Financial analysis is an important part of the evaluation and feasibility of cooperative efforts. To this end, we develop a computer-driven model budget for each of the agencies. A modeled budget is designed to fairly represent the monetary policies of each agency equally, to neutralize the normal differences usually found in unilateral fiscal practices, and to account for any financial peculiarities (such as budgetary back loading). The modeling technique assures that an “apples to apples” comparison is made of the agencies, which allows an estimation of the public cost of each emergency agency’s operation and provides a means for financial evaluation of the outcome of integration. The modeled budget yields a baseline estimate of the public cost of service; in addition, the methodology also provides the ability to project the outcome of the consolidation into the future. In this case, we establish a financial baseline for 2012.

Operating Budget, Funding, Fees, Taxation, and Financial Resources

Budgeting for cities, municipalities, and special districts in the United States has become a challenging undertaking. Many public entities are experiencing a flattening or downturn in their revenue. There are a number of factors influencing governmental revenues. The current housing crisis and the reduction in appraised taxable value have caused a general slowing of or reduction in property tax revenue. Other factors are property tax limitation measures, lack of economic growth, and a flattening of revenue from fees for service that are often a significant basis of revenue for fire departments.

In addition to the current economic conditions, the State of Colorado constitution includes in Article 10 Section 20 revenue limitations called the Taxpayers Bill of Rights (TABOR). These

limitations can be removed with a vote of the taxpayers. In May 1994 Chaffee County Fire Protection District held an election to remove the revenue growth limitation imposed by TABOR. The District is still required to seek voter approval to raise taxes or incur debt and must comply with the requirement to retain a three percent emergency or contingency reserve.

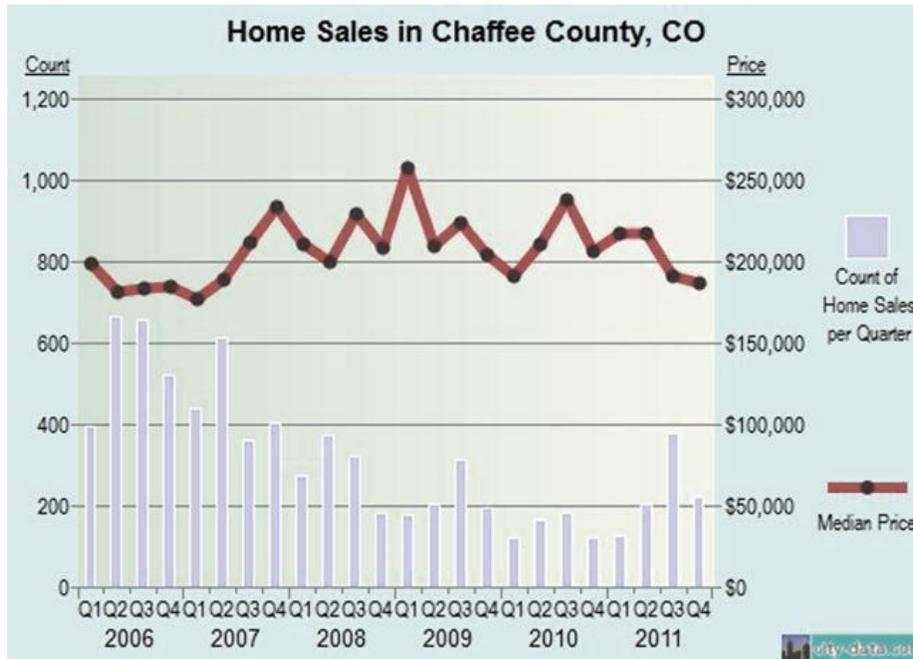
Economic Indicators

Historic Residential Property Sales

The assessor's office uses recent residential home sales to establish new appraised values. In the following figures the number of existing home sales and the median value by quarter for Chaffee County are listed for January 2006 through December 2011. The number of the retail home sales peaked in 2006 and 2007 and has steadily declined through 2011.

In Chaffee County, the average sale price of existing homes has been relatively consistent fluctuating around \$200,000 in each of the six years.²⁰

Figure 54: Chaffee County Median Value and Home Sales, 2006 – 2011



²⁰http://www.city-data.com/county/Chaffee_County-CO.html

Historic Unemployment Rate

The level of employment in the region can potentially impact the number of homes being sold and the ultimate sale price. In the following table, the historic unemployment rates are shown for Chaffee County.²¹

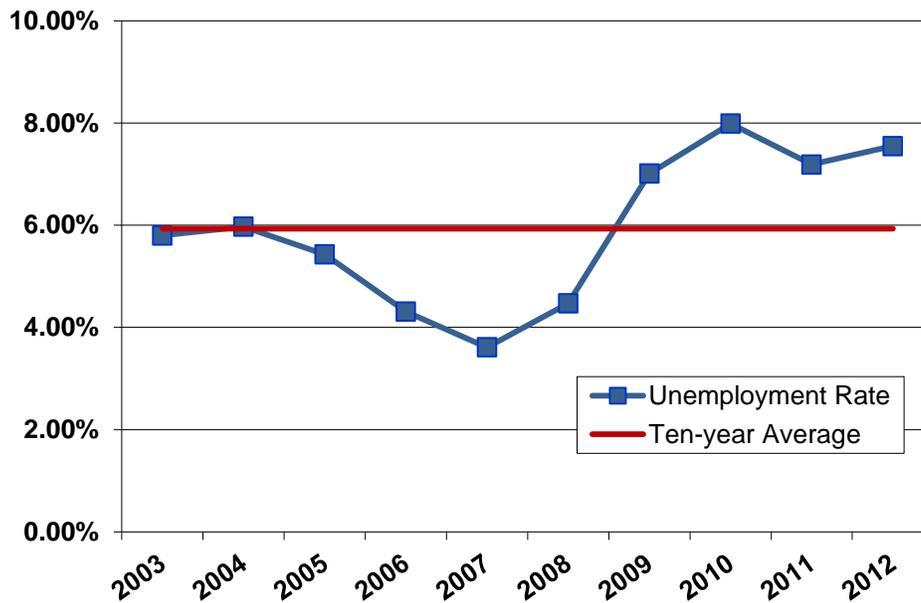
Figure 55: Unemployment, 2002 – March 2012

Year	Unemployment Rate	Ten-year Average
2002	5.15%	
2003	5.80%	
2004	5.97%	
2005	5.43%	
2006	4.31%	
2007	3.61%	
2008	4.47%	
2009	7.01%	
2010	7.99%	
2011	7.19%	
2012	7.55%	

Another way to visualize the unemployment picture in Chaffee County is in graphical format (depicted below).

²¹ bls.gov, local area unemployment statistics LAUCN080115003, LAUCN08015004, LAUCN08015005, LAUCN08015006

Figure 56: Graphical Unemployment, 2002 – March 2012



The growth in the unemployment rate from 2007 through 2012 doesn't provide any encouragement that the housing market will improve dramatically in the next few years. As can be seen in the figure, the current unemployment rate would need to see improvement to reach the ten-year average in the near term. Based on the information provided, any increase in Taxable Assessed Valuation (TAV) is expected to be slow and may flatten property tax revenue for the years to come.

Annual Inflation Rate

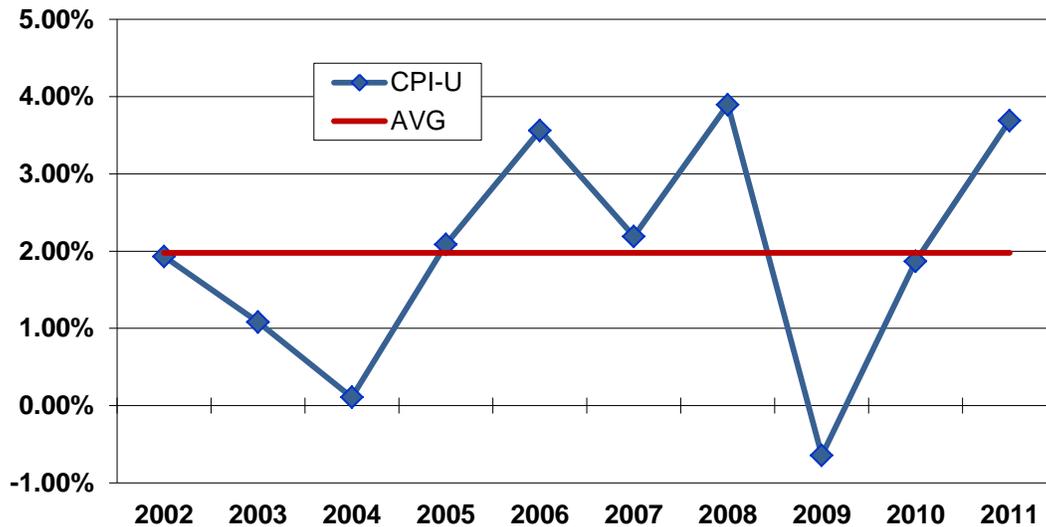
Inflation is also an important consideration when forecasting cost. For the purpose of this analysis, ESCI will use the average Consumer Price Index for all urban consumers (CPI-U) reported for the 2001 through 2011 for the Denver-Boulder-Greeley, CO Statistical Area as compiled by the U.S. Department of Labor.²² The information is displayed in both table and graphical format (Figure 57 and Figure 58).

²² U.S. Department of Labor, Bureau of Labor Statistics, Consumer Price Index—All Urban Consumers, Series Id: CUUSA425SA0 Not Seasonally Adjusted, Denver-Boulder-Greeley Statistical Area.

Figure 57: Average CPI-U History, 2001 – 2011

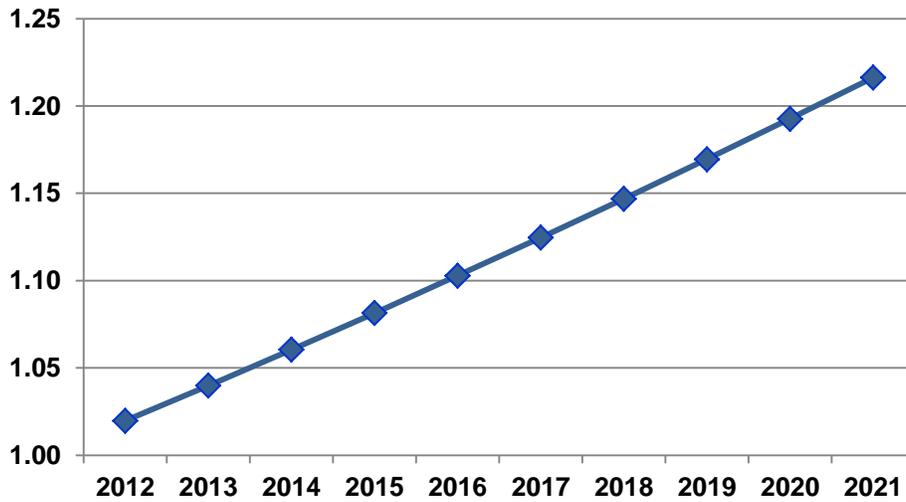
Year	CPI-U	Average
2001	0.00%	1.98%
2002	1.93%	
2003	1.08%	
2004	0.11%	
2005	2.09%	
2006	3.56%	
2007	2.19%	
2008	3.90%	
2009	-0.65%	
2010	1.87%	
2011	3.69%	

Figure 58: Historic and Average CPI-U Graphic, 2002 – 2011



A historic review of the ten-year average Consumer Price Index – Urban (CPI-U) was 1.98 percent per year. This rate is used for analytical purposes during this financial review. The use of this value is an estimate to project potential cost trends in future years. However, the actual CPI-U for a given year could be higher or lower. Historic data was used to develop an inflation index for the years 2013 through 2021 (Figure 59). The CPI-U average increase will be applied to other revenue and expense categories of the 2012 budget to develop the financial forecast for each agency. Expenditures in 2021 are projected to be approximately \$1.216 for each of today’s dollars.

Figure 59: CPI-U Forecast Budget Impact Graphic, 2012 – 2021



Taxable Assessed Valuation (TAV)

The figure below summarizes the 2012 TAV and levy rates for the agencies included in this study. The City of Salida does not collect property taxes but receives some funds from sales tax receipts and a contract for service with SAFPD.

Figure 60: 2012 TAV and Levy Rates

Description	Valuation	Levy Rate	2012 Projected Tax Revenue
Buena Vista	46,795,851	6.685	312,830
Chaffee County Fire District	194,531,839	3.936	765,677
City of Salida	95,423,207	0.000	0
South Arkansas Fire District	37,884,746	3.615	136,953
Total	374,635,643		1,215,460

BVFD Financial Overview

BVFD operates as a department of the Town of Buena Vista and is funded by the town. Information included in the analysis relates only to the fire department operations and will not include an examination of the Town's finances.

BVFD Debt

BVFD does not have any bonded debt or capital leases.

BVFD Revenue History

The Town of Buena Vista does not budget revenue for the fire department but does consider the fire department operating costs in the total revenue required to operate the Town.

BVFD Expenditures History

Figure 61 depicts the historical spending for BVFD from 2009 through 2012.

Figure 61: BVFD Expenditures History, 2009 – 2012

Description	2009 Actual	2010 Actual	2011 Projected Actual	2012 Budget
Personnel Costs				
Wages	16,039	15,119	21,924	25,891
FICA	1,207	1,146	1,696	1,981
Unemployment	24	30	67	78
Retirement	74	0	0	0
Medical, Vision, Dental	193	0	0	0
FPPA Pension	12,000	22,821	22,821	22,821
Workers Compensation	9,087	0	0	0
Total Personnel Costs	38,624	39,116	46,508	50,771
Operating Expenses				
Postage	45	40	102	102
Personal Awards	0	319	0	0
Medical Supplies	666	2,070	710	710
Office Supplies	550	342	277	277
Operating Supplies	1,202	444	398	398
Computer Supplies	670	189	213	213
Vehicle Fuel	1,091	884	2,211	2,211
Vehicle Maintenance	1,782	97	543	600
Equipment Maintenance		1,523	1,555	1,600
Equipment Fuel	0	562	349	349
Office Equipment Maintenance	0	50	0	0
Fire Protection Supplies	2,398	2,438	1,228	1,260
Safety Precautions	49	60	0	0
Uniforms	1,993	1,228	1,438	1,450
Meeting Food	532	512	698	700
Cell Phone Service	0	151	555	555
Legal Counsel	0	0	2,466	0
Advertising, P/R	34	83	0	50
Equipment Repair	614	3,950	2,076	2,400
Office Equipment Repair	0	90	0	0
Equipment Maintenance Service	4,396	6	1,008	1,200
Printing	0	1	48	100
Membership Fees	499	390	410	410
Travel & Training	3,793	1,673	2,450	1,650
Training Meals	0	0	216	216
Conferences	0	0	7,557	0
Computer Purchase & Parts	0	0	1,404	1,500
Printers	0	0	500	0
Communications Equipment	0	0	0	2,000
Office Furniture	0	0	0	0
Light Equipment Purchases	0	391	1,028	500
Tools < \$3,000	1,233	0	0	950
Total Operating Expenses	21,547	17,493	29,440	21,401
Total Expenditures	60,171	56,609	75,948	72,172

Total expenditures have increased 19.9 percent from 2009 to the 2012 budget. FPPA pension costs account for 90.2 percent of the increase.

BVFD Projected Capital Costs

ESCI recommends that the equipment reserve fund be used for the funding of a vehicle replacement plan. ESCI developed a vehicle replacement plan for the BVFD projecting the useful life of vehicles and scheduling the replacement date for these vehicles based on the remaining useful life. The replacement date assumes that all vehicles will be placed in reserve status for five years prior to disposal. Replacement dates/average lives are projected based on vehicle type and run volume. Displayed below are useful life expectancies for active and reserve status vehicles with an estimated replacement cost.

Figure 62: BVFD Apparatus Life Expectancy (Active Service)

Apparatus Type	Average Life	Replacement Cost
Custom Pumper/Engine	20	450,000
Commercial Pumper/Engine	20	250,000
Rescue	20	50,000
Command Vehicles	15	30,000

Figure 63: BVFD Apparatus Life Expectancy (Reserve Service)

Apparatus Type	Average Life
Custom Pumper/Engine	5
Commercial Pumper/Engine	5
Rescue	5

The replacement plan calculates an annual amount of required funding based on estimated replacement cost divided by the useful life of the vehicle. Implementing this plan and encumbering the funds would ensure that when vehicles need to be replaced, funds would be available. This would avoid incurring debt or creating a budget shortfall.

BVFD Vehicle Replacement

The vehicle replacement plan summary identifies the annual reserve requirement necessary to fully fund apparatus replacement at the appropriate conclusion of its useful lifetime. Figure 64 below shows a vehicle replacement plan summary for BVFD.

Figure 64: BVFD Vehicle Replacement Plan Summary

Apparatus Designation	Station	Make	Year	Replace-ment Year	Useful Life	Remaining Useful Life	Replace-ment Cost	Required Reserve	Annual Reserve Amount
E-7	Engine	Pierce	2001	2026	25	14	450,000	198,000	18,000
E-8	Engine	Ford/Darley	1975	2000	25	0	450,000	450,000	18,000
E-9	Engine	American La France	1973	1998	25	0	450,000	450,000	18,000
R-7	Rescue	GMC	1979	1991	12	0	50,000	50,000	4,167
Total Cost							1,400,000	1,148,000	58,167

Implementation of the vehicle replacement plan would require a fund balance of \$1,148,000 on December 31, 2011, and an annual accrual/budget of \$58,167 adjusted for inflation. A large infusion to capital replacement is not a viable option for the BVFD. An alternative would be to increase the capital fund over a 20-year period.

BVFD Unfunded Liabilities

As of June 30, 2012, BVFD does not have any unfunded liabilities.

BVFD Status Quo Financial Forecast 2012 – 2017

Using the assumptions outlined in the section entitled Economic Indicators financial forecast projections were created for BVFD. Future financial forecasts use the 2012 budget as the beginning point for all calculations. Any changes made to the base data are identified in the section being reviewed.

BVFD Forecast Expenditures

Salary, wages, and benefit expenses are increased 2.5 percent annually. FICA and unemployment taxes are calculated using the actual rate included in the 2012 budget for each subsequent year and all other expense categories are inflated at the ten-year average CPI-U of 1.98 percent. Figure 65 reflects forecast expenses through 2017.

Figure 65: BVFD Expenditure Forecast 2012 – 2017

Description	2012 Budget	2013	2014	2015	2016	2017
Personnel Costs						
Wages	25,891	26,538	27,202	27,882	28,579	29,293
FICA	1,981	2,030	2,081	2,133	2,186	2,241
Unemployment	78	80	82	84	86	88
Retirement	0	0	0	0	0	0
Medical, Vision, Dental	0	0	0	0	0	0
FPPA Pension	22,821	23,392	23,976	24,576	25,190	25,820
Workers Compensation	0					
Total Personnel Costs	50,771	52,040	53,341	54,674	56,041	57,442
Operating Expenses						
Postage	102	104	106	108	110	113
Personal Awards	0	0	0	0	0	0
Medical Supplies	710	724	738	753	768	783
Office Supplies	277	282	288	294	300	306
Operating Supplies	398	406	414	422	430	439
Computer Supplies	213	217	222	226	230	235
Vehicle Fuel	2,211	2,255	2,299	2,345	2,391	2,439
Vehicle Maintenance	600	612	624	636	649	662
Equipment Maintenance	1,600	1,632	1,664	1,697	1,731	1,765
Equipment Fuel	349	356	363	370	377	385
Office Equipment Maintenance	0	0	0	0	0	0
Fire Protection Supplies	1,260	1,285	1,310	1,336	1,363	1,390
Safety Precautions	0	0	0	0	0	0
Uniforms	1,450	1,479	1,508	1,538	1,568	1,599
Meeting Food	700	714	728	742	757	772
Cell Phone Service	555	566	577	589	600	612
Legal Counsel	0	0	0	0	0	0
Advertising, P/R	50	51	52	53	54	55
Equipment Repair	2,400	2,448	2,496	2,545	2,596	2,647
Office Equipment Repair	0	0	0	0	0	0
Equipment Maintenance Service	1,200	1,224	1,248	1,273	1,298	1,324
Printing	100	102	104	106	108	110
Membership Fees	410	418	426	435	443	452
Travel and Training	1,650	1,683	1,716	1,750	1,785	1,820
Training Meals	216	220	225	229	234	238
Conferences	0	0	0	0	0	0
Computer Purchase & Parts	1,500	1,530	1,560	1,591	1,622	1,654
Printers	0	0	0	0	0	0
Communications Equipment	2,000	2,040	2,080	2,121	2,163	2,206
Office Furniture	0	0	0	0	0	0
Light Equipment Purchases	500	510	520	530	541	551
Tools < \$3,000	950	969	988	1,008	1,028	1,048
Total Operating Expenses	21,401	21,825	22,257	22,698	23,147	23,605
Total Expenditures	72,172	73,865	75,598	77,372	79,188	81,048

The town of Buena Vista will be required to contribute an additional \$8,876 dollars for fire department operations in 2017 versus the 2012 budget amount.

Changes in assumption for TAV, CPI-U, wages and benefits could alter the overall projection of these assumed values. The assumptions and results above do not include any costs for the replacement of department vehicles.

CCEMS Financial Overview

CCEMS operates as a department of Chaffee County and is funded by the County and operational revenue. Information included in the analysis relates only to the EMS operations and will not include an examination of County finances.

CCEMS Debt

CCEMS does not have any bonded debt or capital leases.

CCEMS Revenue History

The following figure provides a detailed review of revenue from 2008 through 2012 budget.

Figure 66: CCEMS Revenue History, 2008 – 2012

Description	2008 Actual	2009 Actual	2010 Actual	2011 Actual	2012 Budget
Taxes	0	0	0	0	0
Licenses & Permits	0	0	0	0	0
Intergovernmental Revenue	61,887	7,500	38,447	7,500	21,500
Ambulance Fees	848,325	914,452	770,145	825,000	825,000
Interest	0	0	0	0	0
Miscellaneous	1,969	2,008	5,422	788	500
Transfers from Other Funds	300,000	400,000	450,000	350,000	356,930
Total Revenue	1,212,181	1,323,960	1,264,014	1,227,815	1,203,930

In the 2012 budget, 68.5 percent of total revenue is from ambulance fees with 29.6 percent from County funds.

The following table provides the billing summary for ambulance operations from 2007 through 2010.²³ A large divergence in the amount invoiced and the actual amount received is due to Medicare, Medicaid and contractual arrangements with insurance companies on the amount they will pay for services. The invoice amount is adjusted down to the contractual amount. The

²³ Data is from client provided report “Practice Analysis – Credits”

balance of the difference is the amount of funds written-off due to uncollectable charges to clients.

Figure 67: CCEMS Ambulance Invoicing/Collection History, 2007 – 2010

Year	Gross Invoice Amount	Insurance Payments	Client Payment	Net Income	Percent of Original Amount
2007	1,143,062	534,360	156,186	690,547	60.41%
2008	1,516,510	655,550	174,330	829,880	54.72%
2009	1,699,301	730,964	180,090	911,054	53.61%
2010	1,372,146	591,896	120,846	712,742	51.94%
2011	1,542,556	531,138	116,205	647,342	41.97%
Five-Year Total	7,273,575	3,043,908	747,657	3,791,565	52.13%

Gross invoicing to net income has decreased over the five years approximately 18.5 percent from 60.41 to 41.97 percent in 2011.

CCEMS Expenditures History

Figure 61 depicts the historical spending for CCEMS from 2008 through 2012.

Figure 68: CCEMS Expenditures History, 2008 – 2012

Description	2008 Actual	2009 Actual	2010 Actual	2011 Actual	2012 Budget
Salaries	434,129	441,919	415,928	419,425	448,369
Scheduled OT	64,976	70,043	68,403	68,303	71,000
Unscheduled OT	50,030	34,380	36,531	35,973	32,000
Run Pay	50,684	126,285	112,496	64,271	70,000
Other Operating	445,689	459,751	464,815	462,823	484,940
Transfer to Other Funds	25,255	22,788	21,511	22,000	19,700
Capital Outlay	272,022	107,166	187,574	53,505	155,000
Total Expenditures	1,342,785	1,262,332	1,307,258	1,126,300	1,281,009

Total expenditures, without capital outlay, have increased 5.2 percent from 2008 actuals and the 2012 budget.

Figure 69 summarizes the historical fund activities and ending fund balance for the CCEMS from 2008 through 2012.

Figure 69: CCEMS Fund Balance History, 2008 – 2012

Description	2008 Actual	2009 Actual	2010 Actual	2011 Actual	2012 Budget
Beginning Balance	313,433	182,829	244,457	201,213	302,728
Revenue	1,212,181	1,323,960	1,264,014	1,227,815	1,203,930
Expenditures	1,342,785	1,262,332	1,307,258	1,126,300	1,281,009
Ending Balance	182,829	244,457	201,213	302,728	225,649

CCEMS Vehicle Replacement

ESCI recommends that the equipment reserve fund be used for the funding of a vehicle replacement plan. ESCI developed a vehicle replacement plan for the CCEMS projecting the useful life of vehicles and scheduling the replacement date for these vehicles based on the remaining useful life. The replacement date assumes that all vehicles will be placed in reserve status for five years prior to disposal.

CCEMS Projected Capital Costs

ESCI developed a vehicle replacement plan for CCEMS projecting the useful life of vehicles. Replacement dates/average lives are projected based on vehicle type and run volume. Displayed below are useful life expectancies for active and reserve status vehicles with an estimated replacement cost.

Figure 70: CCEMS Apparatus Life Expectancy (Active Service)

Apparatus Type	Average Life	Replacement Cost
Ambulance	7 Years	150,000
Rescue	7 Years	150,000
Pick-up	10 Years	50,000

Figure 71: CCEMS Apparatus Life Expectancy (Reserve Service)

Apparatus Type	Average Life
Ambulance	5 Years
Rescue	5 Years
Pick-up	5 Years

The replacement plan calculates an annual amount of required funding based on estimated replacement cost divided by the useful life of the vehicle. Implementing this plan and encumbering the funds would ensure that when vehicles need to be replaced, funds would be available. This would avoid incurring debt or creating a budget shortfall.

The vehicle replacement plan summary below shows the annual reserve requirement necessary to fully fund apparatus replacement at the appropriate conclusion of its useful lifetime. Figure 72 shows a vehicle replacement plan summary for CCEMS.

Figure 72: CCEMS Vehicle Replacement Plan Summary

Apparatus Designation	Type	Make	Year	Replacement Year	Useful Life	Remaining Useful Life	Replacement Cost	Required Reserve	Annual Reserve Amount
520	ALS Ambulance	Ford McCoy - Miller	2010	2025	12	10	150,000	25,000	12,500
530	ALS Ambulance	GMC McCoy-Miller	2008	2023	12	8	150,000	50,000	12,500
540	ALS Ambulance	GMC McCoy-Miller	2008	2023	12	8	150,000	50,000	12,500
550	ALS Ambulance	Ford Wheeled Coach	2000	2015	12	0	150,000	150,000	12,500
560	Quick response vehicle	GMC Yukon	2008	2018	10	6	50,000	20,000	5,000
570	Quick response vehicle	Chevy Blazer	2009	2019	10	7	50,000	15,000	5,000
Total Cost							700,000	310,000	60,000

If the CCEMS was to adopt this plan, the current required balance in the capital would be \$310,000. Annually, the County would need to transfer from the operating fund to the capital fund \$60,000 to cover future purchases.

CCEMS Unfunded Liabilities

As of June 30, 2011, CCEMS had an open workers' compensation claim.

CCEMS Status Quo Financial Forecast, 2012 – 2017

Using the assumptions outlined in the section entitled Economic Indicators, financial forecast projections were created for CCEMS. Future financial forecasts use the 2012 budget as the beginning point for all calculations. Any changes made to the base data are identified in the section being reviewed.

CCEMS Forecast Revenue

All revenue categories have been inflated at the ten-year average CPI-U of 1.98 percent. Figure 73 reflects revenue forecasts between 2012 through 2017.

Figure 73: CCEMS Revenue Forecast, 2012 – 2017

Description	2012 Budget	2013	2014	2015	2016	2017
Taxes	0	0	0	0	0	0
Licenses & Permits	0	0	0	0	0	0
Intergovernmental Revenue	21,500	21,926	22,360	22,803	23,254	23,714
Ambulance Fees	825,000	841,335	857,993	874,982	892,306	909,974
Interest	0	0	0	0	0	0
Miscellaneous	500	510	520	530	541	551
Transfers from Other Funds	356,930	363,997	371,204	378,554	386,050	393,693
Total Revenue	1,203,930	1,227,768	1,252,078	1,276,869	1,302,151	1,327,933

CCEMS Forecast Expenditures

Salary, wages, and benefit expenses have been increasing 2.5 percent annually. All other expense categories were inflated at the ten-year average CPI-U of 1.98 percent. Capital transfers are included at the average dollar amount for 2011 and 2012. Figure 65 reflects forecast expenses through 2017.

Figure 74: CCEMS Expenditure Forecast, 2012 – 2017

Description	2012 Budget	2013	2014	2015	2016	2017
Salaries	448,369	459,578	471,068	482,844	494,915	507,288
Scheduled OT	71,000	72,775	74,594	76,459	78,371	80,330
Unscheduled OT	32,000	32,800	33,620	34,461	35,322	36,205
Run Pay	70,000	71,750	73,544	75,382	77,267	79,199
Other Operating	484,940	494,542	504,334	514,320	524,503	534,888
Transfer to Other Funds	19,700	20,090	20,488	20,894	21,307	21,729
Capital Outlay	155,000	105,000	107,079	109,199	111,361	113,566
Total Expenditures	1,281,009	1,256,535	1,284,726	1,313,559	1,343,047	1,373,206

CCEMS Forecast Summary Fund Balance

The following figure depicts a summary forecast providing a snapshot of what the fund balance would be from 2012 through 2017.

Figure 75: CCEMS Forecast Summary, 2012 – 2017

Description	2012 Budget	2013	2014	2015	2016	2017
Beginning Balance	302,728	225,649	196,882	164,233	127,543	86,647
Revenue	1,203,930	1,227,768	1,252,078	1,276,869	1,302,151	1,327,933
Expenditures	1,281,009	1,256,535	1,284,726	1,313,559	1,343,047	1,373,206
Ending Balance	225,649	196,882	164,233	127,543	86,647	41,375

The ending fund balance will decrease by approximately 82 percent from the 2012 budget to 2017.

Changes in assumption for TAV, CPI-U, wages and benefits could alter the overall projection of these assumed values. The assumptions and results above do not include any costs for the replacement of department vehicles.

CCFPD Financial Overview

CCFPD is an independent agency (special district) that is responsible for generating all operating revenue. The primary method of financing the District is through property taxes. The District property tax levy rate in the 2012 budget was 3.936 with a TAV of \$194,531,839.

CCFPD Debt

CCFPD does not have any bonded debt or capital leases. However, it does have lease purchase on several vehicles (aerial ladder, tender, chief’s staff car, and other staff cars). The initial lease payment was made in 2011 with the final payment being scheduled for 2016. Figure 76 is the amortization table for the lease:

Figure 76: CCFPD Lease Purchase Amortization Schedule

Year	Principal	Interest	Total
2011	89,057	15,272	104,329
2012	108,449	16,746	125,194
2013	112,732	12,462	125,194
2014	117,185	8,009	125,194
2015	121,813	3,381	125,194
2016	20,765	101	20,866
Total	570,000	55,971	625,971

CCFPD Taxable Assessed Value (TAV) History

Figure 77 shows the historical TAV for CCFPD from 2008 through 2012. The average annual percentage change for 2008 through 2012 was a growth of 3.90 percent. This value for 2012 was a large reduction in the assessed valuation for the District.

Figure 77: CCFPD TAV History, 2008 – 2012

Description	2008	2009	2010	2011	2012
TAV	181,632,910	186,542,630	213,058,476	216,961,848	194,531,839
Change from Prior Year	11.10%	2.70%	14.21%	1.83%	-10.34%

CCFPD Revenue History

The following figure provides a detailed review of revenue from 2009 through 2012 budget.²⁴

Figure 78: CCFPD Revenue History, 2009 – 2012²⁵

Description	2009 Actual	2010 Actual	2011 Actual	2012 Budget
Property Taxes	733,199	833,877	851,476	764,550
Specific Ownership Taxes	96,891	91,498	100,196	92,000
Penalties and Interest on Taxes	2,810	2,971	6,620	2,700
Interest Income	21,661	10,819	3,004	2,100
Receipts and Recoveries	93,933	74,986	128,597	50,957
Gain on Sale of Assets	0	2,600	1,852	0
Capital Grant	27,034	0	0	0
Operating Grants	217,395	31,932	0	0
Total Revenue	1,192,923	1,048,683	1,091,745	912,307
Levy Rate	3.930	3.914	3.925	3.930

Property tax revenue is projected to follow the decline in assessed value and may result in a reduction in overall revenue for CCFPD.

CCFPD Expenditures History

Figure 61 depicts the historical spending for CCFPD from 2009 through 2012.

²⁴ 2011 Chaffee County Abstract of Assessments and levies report.

²⁵ 2011 Actuals are un-audited.

Figure 79: CCFPD Expenditures History, 2009 – 2012

Description	2009 Actual	2010 Actual	2011 Actual	2012 Budget
Administration	20,584	48,593	26,178	21,740
Personnel Expense	384,608	434,279	467,914	455,421
Professional Fees	101,253	96,086	102,967	105,050
Utilities	26,330	34,387	33,903	30,000
Travel and Training	29,608	33,615	29,693	27,500
Maintenance and Repair	68,255	107,926	99,523	67,500
Firefighting Equipment	75,044	107,113	99,647	44,650
Grant Expenses	8,842	50,442	0	500
Interest	6,140	9,772	26,778	0
Strike Team	500	26,291	21,914	1,500
Capital Transfer	147,896	187,631	175,000	158,846
Total Expenditures	869,060	1,136,135	1,083,517	912,707

The table below summarizes the historical fund activities and ending fund balance for the CCFPD from 2009 through 2012.

Figure 80: CCFPD Fund Balance History, 2009 – 2012

Description	2009 Actual	2010 Actual	2011 Actual	2012 Budget
Beginning Balance	823,954	1,147,817	1,060,365	1,068,593
Revenue	1,192,923	1,048,683	1,091,745	912,307
Expenditures	869,060	1,136,135	1,083,517	912,707
Ending Balance	1,147,817	1,060,365	1,068,593	1,068,193

In addition to the operating fund, the District maintains two additional funds and one fiduciary fund, held in trust, for pension benefits.

The two funds are capital fund and the emergency fund. The Capital Fund historical information was extracted from the information provided for the operating fund for 2011 and 2012. The fire district should establish internal accounting practices to record all transaction for this fund providing a clear audit trail of the activity. No detail transaction information was provided for the Emergency Fund other than the 2012 activity. The historical information for capital fund is shown in the next figure:

Figure 81: CCFPD Capital Fund Activity History, 2009 – 2012

Description	2009 Actual	2010 Actual	2011 Actual	2012 Budget
Beginning Balance	161,054	308,950	496,581	486,725
Revenue				
Interest Income	0	0	0	529
Mill Levy Transfer In	147,896	187,631	175,000	158,846
Total Revenue	147,896	187,631	175,000	159,375
Expenditures				
Grant Expenditures	0	0	0	500
Interest Expense	0	0	15,272	16,750
Lease Purchase	0	0	169,584	183,450
Station Development	0	0	0	0
Truck Replacement	0	0	0	100,000
Expenditures	0	0	184,856	550,700
Ending Balance	308,950	496,581	486,725	95,400

The table below provides a snapshot of the 2012 balance of the emergency fund.

Figure 82: CCFPD Emergency Fund Balance, 2012

Description	2012 Budget
Beginning Balance	36,725
Revenue	
Interest Income	400
Mill Levy Transfer In	0
Total Revenue	400
Expenditures	0
Ending Balance	37,125

CCFPD Vehicle Replacement

ESCI recommends that the capital fund be used for the funding of a vehicle replacement plan. ESCI developed a vehicle replacement plan for the CCFPD projecting the useful life of vehicles and scheduling the replacement date for these vehicles based on the remaining useful life. The replacement date assumes that all vehicles will be placed in reserve status for five years prior to disposal.

Displayed below are useful life expectancies for active and reserve status vehicles with an estimated replacement cost.

Figure 83: CCFPD Apparatus Life Expectancy (Active Service)

Apparatus Type	Average Life	Replacement Cost
Engine	20 Years	250,000
Ladder	25 Years	750,000
Rescue	20 Years	175,000
Tender	20 Years	175,000
Brush	15 Years	100,000
Air-Light	15 Years	50,000
Command Vehicles	10 – 20 Years	35,000

Figure 84: CCFPD Apparatus Life Expectancy (Reserve Service)

Apparatus Type	Average Life
Engine	5 Years
Ladder	5 Years
Rescue	5 Years
Tender	5 Years
Brush	5 Years
Air-Light	5 Years
Command Vehicles	5 Years

The replacement plan calculates an annual amount of required funding based on estimated replacement cost divided by the useful life of the vehicle. Implementing this plan and encumbering the funds would ensure that when vehicles need to be replaced, funds would be available. This would avoid incurring debt or creating a budget shortfall.

The vehicle replacement plan summary below shows the annual reserve requirement necessary to fully fund apparatus replacement at the appropriate conclusion of its useful lifetime. Figure 85 shows a vehicle replacement plan summary for CCFPD.

Figure 85: CCFPD Vehicle Replacement Plan Summary

Apparatus Designation	Type	Make	Year	Replacement Year	Useful Life	Remaining Useful Life	Replacement Cost	Required Reserve	Annual Reserve Amount
R-1	Rescue	International	2007	2027	25	16	175,000	63,000	7,000
E-1	Engine	Pierce	1996	2016	25	5	250,000	200,000	10,000
Tower 1	Aerial Ladder	Nova Quintech	1995	2020	30	8	750,000	550,000	25,000
T-1	Tender	International	2003	2023	25	12	175,000	91,000	7,000
B-1	Brush	Ford 4x4	2002	2017	20	6	100,000	70,000	5,000
AL-1	Air-Light Unit	Eagle	2009	2024	20	13	50,000	17,500	2,500
B-2	Brush	Dodge 4x4	2009	2024	20	12	100,000	40,000	5,000
E-2	Engine	Pierce 4x4	1992	2012	25	1	250,000	240,000	10,000
T-2	Tender	Ford	1996	2016	25	5	175,000	140,000	7,000
R-4	Rescue	International	2007	2027	25	16	175,000	63,000	7,000
E-4	Engine	Pierce	1996	2016	25	5	250,000	200,000	10,000
T-4	Tender	International	2004	2024	25	12	175,000	91,000	7,000
B-4	Brush	Ford 4x4	2003	2018	20	7	100,000	65,000	5,000
HZT-4	Trailer	12x6 Trailer	2001	2026	15	14	30,000	2,000	2,000
B-41	Brush	Ford 4x4	2004	2019	20	8	100,000	60,000	5,000
E-5	Engine	Ford	1979	2004	25	0	250,000	250,000	10,000
T-5	Tender	International	2004	2024	25	12	175,000	175,000	7,000
E-3	Engine	Pierce	1995	2015	25	4	250,000	210,000	10,000
B-15	Brush	Dodge 4x4	2002	2024	20	12	100,000	40,000	5,000
HZT-1	Trailer	12x6 Trailer	2001	2026	15	14	30,000	2,000	2,000
T-3	Tender	International	2003	2021	25	9	175,000	112,000	7,000
D-1	Investigation	Chevy 4x4	2011	2026	15	14	35,000	2,333	2,333
D-2	Command	Ford 4x4	2008	2018	15	7	35,000	18,667	2,333
D-7	Personal	Dodge 4x4	2003	2016	15	5	35,000	23,333	2,333
M-1	Maintenance	N/A	2004	2029	15	17	35,000	(4,667)	2,333
BC-1	Brush	Ford 4x4	2008	2023	20	12	100,000	40,000	5,000
BC-3	Brush	Chevy 4x4	2011	2026	20	14	100,000	30,000	5,000
BC-4	Command	Ford 4x4	2008	2018	15	7	35,000	18,667	2,333
D-8	Inspection	Chevy 4x4	2011	2031	15	15	35,000	0	2,333
D-9	Training	Chevy 4x4	2011	2031	15	15	35,000	0	2,333
Total Cost							4,280,000	2,809,833	181,833

If the District was to adopt this plan, the current required balance in the capital would be \$2,809,833. Annually, the District would need to transfer from the operating fund to the capital fund \$181,833 to cover future purchases. Establishing this reserve is not practical at these dollar levels. To decrease the financial impact, ESCI recommends that the reserve be established over a 20-year timeframe. This would require an additional \$140,466 be moved to the capital reserve annually to make up the current shortfall in the reserve. Another alternative

would be to purchase “good” quality used vehicles for stations that don’t have the run volume to support the price of a new vehicle. This would reduce the amount the dollar requirement of the replacement plan.

CCFPD Fiduciary Fund

CCFPD contributes annually to the Firemen, Police Pension Association (FPPA) for future retirement obligations.²⁶ The fund balance is held in trust with the following breakdown of the investment type and fund balance:

Figure 86: CCFPD Pension Trust Fund Investment Summary

Description	2009	2010
Cash	245,830	256,206
Certificates of Deposit	418,051	715,560
Government Securities	466,024	359,304
Equities	556,802	507,439
Fixed Income	11,691	10,547
Other	60,416	65,255
Fund Balance	1,758,814	1,914,311

CCFPD Unfunded Liabilities

The pension trust fund has an unfunded liability that has increased slightly over the past four years; shown in the table below:

Figure 87: CCFPD Pension Trust Fund Unfunded Liability

Actuarial Valuation Date	Actuarial Value of Assets	Actuarial Accrued Liability (AAL)	Unfunded AAL	Funded Ratio
1/1/2004	1,399,515	1,702,553	(303,038)	82%
1/1/2006	1,564,975	1,908,497	(343,522)	82%
1/1/2008	1,736,880	2,178,809	(441,929)	80%
1/1/2010	1,758,814	2,260,900	(502,086)	78%

CCFPD has no other unfunded liabilities beyond the pension trust fund liability.

CCFPD Status Quo Financial Forecast, 2012 – 2017

Using the assumptions outlined in the section entitled Economic Indicators, financial forecast projections were created for CCFPD. Future financial forecasts use the 2012 budget as the

²⁶ Information for the Fiduciary Fund is selected from the 2010 audit report date July 27, 2011 issued by Elizabeth Gobbles CPA.

beginning point for all calculations. Any changes made to the base data are identified in the section being reviewed.

CCFPD Forecast Taxable Assessed Value (TAV)

CCFPD's average growth in TAV from 2008 through 2012 was 3.90 percent. The increase in TAV used to calculate tax on for 2010 through 2012 was 1.90 percent. In 2012, the TAV was a reduction in value of 10.34 percent.

The forecast percent of growth for the TAV from 2013 through 2017 are shown in Figure 88 below. With the large reduction in TAV in 2012, the growth rate is projected to be negative for 2013 and 2014 and then gradual growth for the remaining three years of the projection.

Figure 88: CCFPD TAV Growth Rates by Year, 2013 – 2017

Year	Percent Change
2012	0.00%
2013	-2.00%
2014	-0.50%
2015	0.00%
2016	0.50%
2017	1.00%

Figure 89 forecasts the changes in the TAV from 2012 through 2017 using the growth factors above.

Figure 89: CCFPD Taxable Assessed Value, 2012 – 2017

Year	TAV Amount
2012	194,531,839
2013	190,641,202
2014	189,687,996
2015	189,687,996
2016	190,636,436
2017	192,542,801

CCFPD Forecast Revenue

The levy rate used to project property tax was the same rate used in the 2012 budget of 3.930. All revenue categories have been inflated at the ten-year average CPI-U of 1.98 percent. Figure 90 reflects revenue forecasts between 2012 through 2017.

Figure 90: CCFPD Revenue Forecast, 2012 – 2017

Description	2012 Budget	2013	2014	2015	2016	2017
Property Taxes	764,550	749,220	745,474	745,474	749,201	756,693
Specific Ownership Taxes	92,000	93,822	95,679	97,574	99,506	101,476
Penalties and Interest on Taxes	2,700	2,753	2,808	2,864	2,920	2,978
Interest Income	2,100	2,142	2,184	2,227	2,271	2,316
Receipts and Recoveries	50,957	51,966	52,995	54,044	55,114	56,206
Gain on Sale of Assets	0	0	0	0	0	0
Capital Grant	0	0	0	0	0	0
Operating Grants	0	0	0	0	0	0
Total Revenue	912,307	899,903	899,140	902,183	909,013	919,669
Levy Rate	3.930	3.930	3.930	3.930	3.930	3.930

CCFPD Forecast Expenditures

Salary, wages, and benefit expenses have been increased by 2.5 percent annually. All other expense categories were inflated at the ten-year average CPI-U of 1.98 percent. Figure 91 reflects forecast expenses through 2017.

Figure 91: CCFPD Expenditure Forecast, 2012 – 2017

Description	2012 Budget	2013	2014	2015	2016	2017
Administration	21,740	22,170	22,609	23,057	23,514	23,979
Personnel Expense	455,421	466,807	478,477	490,439	502,700	515,267
Professional Fees	105,050	107,130	109,251	111,414	113,620	115,870
Utilities	30,000	30,594	31,200	31,818	32,448	33,090
Travel and Training	27,500	28,045	28,600	29,166	29,744	30,332
Maintenance and Repair	67,500	68,837	70,199	71,589	73,007	74,452
Firefighting Equipment	44,650	45,534	46,436	47,355	48,293	49,249
Grant Expenses	500	510	520	530	541	551
Interest	0	0	0	0	0	0
Strike Team	1,500	1,530	1,560	1,591	1,622	1,654
Capital Transfer	158,846	161,991	165,199	168,470	66,805	47,262
Total Expenditures	912,707	933,147	954,050	975,429	892,292	891,708

CCFPD Forecast Summary Fund Balance

The following figure depicts a summary forecast providing a snapshot of what the fund balance would be from 2012 through 2017.

Figure 92: CCFPD Forecast Summary, 2012 – 2017

Description	2012 Budget	2013	2014	2015	2016	2017
Beginning Balance	1,068,593	1,068,193	1,034,949	980,038	906,792	923,512
Revenue	912,307	899,903	899,140	902,183	909,013	919,669
Expenditures	912,707	933,147	954,050	975,429	892,292	891,708
Ending Balance	1,068,193	1,034,949	980,038	906,792	923,512	951,473

The ending fund balance is projected to decline by approximately 31 percent by 2017. Changes in assumption for TAV, CPI-U, wages and benefits could alter the overall projection of these assumed values. The assumptions and results above do not include any costs for the replacement of department vehicles.

SFD Financial Overview

Salida Fire Department operates as a department of the City of Salida. Functioning in this format some administrative costs are not charged to the fire department. These costs are generally referred to as in-kind or in-direct charges and include payroll processing, human resources, accounts payable, risk management, legal, IT support, budgeting and financial control/reporting. To estimate this amount, ESCI reviewed other clients that calculate and record a charge for services to the fire department (Figure 93).

Figure 93: SFD Estimated In-Direct Cost

Allocation Organization	In-kind Cost Allocated	Department Budget	Percent Allocation to Total per Budget Dollars
Vancouver, Washington	837,670	30,729,353	2.726%
SeaTac, Washington	602,282	7,598,182	7.927%
Imperial Valley, California	281,175	5,680,012	4.950%
Glenwood Springs, Colorado	151,305	3,272,845	4.623%
Total/Average	1,872,432	47,280,392	3.960%
Salida FD Cost based on Average Allocated Amount	54,850	1,385,000	3.960%

While the calculated amount shown in the table above will not be included in the analysis it is useful in the costing of overarching strategies.

SFD Debt

The City of Salida has outstanding debt as of December 31, 2011, of \$17,544,999.²⁷ None of this debt relates to the fire department.

City of Salida Taxable Assessed Value (TAV) History

Figure 94 shows the historical TAV for the City of Salida from 2008 through 2012. The average annual percentage change for 2008 – 2012 was a growth of 6.72 percent. This amount was considerably higher in 2008 – 2010 but has been reduced by the zero growth in TAV in 2011 and 2012.

Figure 94: City of Salida TAV History, 2008 – 2012

Year	2008	2009	2010	2011	2012
TAV	78,311,230	80,477,860	95,423,170	98,450,255	95,423,207
Change from Prior Year	12.17%	2.77%	18.57%	3.17%	-3.07%

SFD Revenue History

The following figure provides a detailed review of fire operations revenue for the Salida FD from 2009 through 2012.

Figure 95: SFD Revenue History, 2009 – 2012

Description	2009 Actual	2010 Actual	2011 Projected Actual	2012 Budget
South Arkansas Fire Protection Fee	70,000	70,000	70,000	70,000
Emergency Response Fee	11,602	12,684	65,000	0
Fire Plans & Inspections	6,987	2,596	5,500	3,000
Fire Works Donations	6,725	7,426	8,500	6,500
Grants	0	0	0	557,000
Total Revenue	95,314	92,706	149,000	636,500

The City provides fire service to South Arkansas Fire Protection District under a contractual relationship for an annual fee of \$70,000. This current inter-agency agreement expired December 31, 2011.²⁸ The City Council had a November 2011 agenda item to extend the agreement for three additional years. The agreement was similar in form to previous years with the exception that South Arkansas FPD would assume the cost of utilities for the fire station

²⁷ Client provided information from financing roll-forward worksheet.

²⁸ Resolution 2011 – 72 approving a cooperative agreement between the City of Salida and the South Arkansas Fire Protection District.

located at 124 E Street. The City has budgeted for a one-time grant to purchase apparatus (engine) of \$557,000.²⁹

SFD Expenditures History

Figure 96 depicts the historical spending for Salida FD from 2010 through 2012.

Figure 96: SFD Expenditures History, 2010 – 2012

Description	2010 Actual	2011 Projected Actual	2012 Budget
Salaries and Wages	512,314	539,100	527,100
Benefits and Taxes	137,647	166,000	177,500
Supplies	41,383	42,800	45,600
Purchased Services	33,817	54,500	42,200
Fixed Charges	0	0	0
Grants and Contributions	0	0	0
Capital Expenditures	39,791	13,200	11,500
Capital Purchases/Projects	0	0	582,000
Total Expenditures	764,952	815,600	1,385,900

Salaries, wages and benefits account for 87.6 percent of total fire department costs without capital costs. In the 2012 budget, benefits and taxes are 33.7 percent of wages. The next figure shows the percentage of cost by category for 2010 through 2012.

Figure 97: SFD Expenditures by Expense Category, 2010 – 2012

Description	2010 Actual	2011 Projected Actual	2012 Budget
Salaries and Wages	66.97%	66.10%	38.03%
Benefits and Taxes	17.99%	20.35%	12.81%
Supplies	5.41%	5.25%	3.29%
Purchased Services	4.42%	6.68%	3.04%
Fixed Charges	0.00%	0.00%	0.00%
Grants and Contributions	0.00%	0.00%	0.00%
Capital Expenditures	5.20%	1.62%	0.83%
Capital Purchases/Projects	0.00%	0.00%	41.99%
Total Expenditures	100.00%	100.00%	100.00%

²⁹ Subsequent to approval of the City of Salida budget, SFD was notified they were not a recipient of the grant.

SFD Summary of General Fund Balance History

The tables below summarize the historical fund activities and the City subsidy needed to fund the fire department from 2009 through 2012.

Figure 98: SFD Fund Balance History, 2009 – 2012

Description	2009 Actual	2010 Actual	2011 Projected Actual	2012 Budget
Revenue	95,314	92,706	149,000	636,500
Expenditure	0	764,952	815,600	1,385,900
Net Operating Subsidy	(95,314)	672,246	666,600	749,400
Percent Increase		-805.30%	-0.84%	12.42%

SFD Vehicle Replacement Plan

ESCI recommends that the capital fund be used for the funding of a vehicle replacement plan. ESCI developed a vehicle replacement plan for the SFD projecting the useful life of vehicles and scheduling the replacement date for these vehicles based on the remaining useful life. The replacement date assumes that all vehicles will be placed in reserve status for five years prior to disposal.

Figure 99: SFD Apparatus Life Expectancy (Active Service)

Apparatus Type	Average Life	Replacement Cost
Engine Custom	18 Years	400,000
Tower	25 Years	600,000
Rescue	18 Years	450,000
Command	7 Years	35,000

The replacement plan calculates an annual amount of required funding based on estimated replacement cost divided by the useful life of the vehicle. Implementing this plan and encumbering the funds would ensure that when vehicles need to be replaced, funds would be available. This would avoid incurring debt or creating a budget shortfall. Figure 100 shows a proposed vehicle replacement plan summary for Salida FD.

Figure 100: SFD Vehicle Replacement Plan Summary

Apparatus Designation	Station	Make	Year	Replacement Year	Useful Life	Remaining Useful Life	Replacement Cost	Required Reserve	Annual Reserve Amount
Engine 11	1	Pierce Sabre	1995	2013	18	2	400,000	355,556	22,222
Engine 12	1	Chevrolet Pierce	1986	2008	22	0	400,000	400,000	18,182
Rescue 11	1	International	2000	2018	18	7	450,000	275,000	25,000
Tower 11	1	Sutphen	1997	2023	25	12	600,000	312,000	24,000
Chief 11	1	Chevy K1500	2005	2012	7	1	35,000	30,000	5,000
Total Cost							1,885,000	1,372,556	94,404

Implementation of the vehicle replacement plan would require a fund balance of \$1,372,556 on December 31, 2011, and an annual accrual/budget of \$94,404 adjusted for inflation. SFD has included in the 2012 budget a vehicle purchase of \$557,000.³⁰ Without funding of this purchase through a grant, the entire \$1,372,556 would be required. A large infusion to capital replacement is not a viable option for the Salida FD. An alternative would be to increase the capital fund over a 20-year period. This would require an incremental contribution to the capital fund of \$68,627 per year. At the end of 20 years the account would be fully funded.

SFD Unfunded Liabilities

SFD has an unfunded liability for the Old-Hire Fire pension plan.³¹ The Old-Hire plan is for firefighters hired prior to April 7, 1978.

Figure 101: SFD Unfunded Pension Liability

Actuarial Valuation Date	Net Assets for Benefits	Actuarial Accrued Liability	Unfunded Liability	Funded Ratio
1/01/2006	289,599	282,186	7,413	102.6%
1/01/2008	296,097	262,997	33,103	112.6%
1/01/2010	228,808	248,446	(19,638)	92.1%

SFD Status Quo Financial Forecast, 2012 – 2017

Using the assumptions outlined in the section entitled Economic Indicators, financial forecast projections were created for Salida FD. Future financial forecasts use the 2012 budget as the

³⁰ Subsequent to approval of the City of Salida budget, SFD was notified they were not a recipient of the grant.

³¹ Information from December 31, 2010 audit report issued by Johnson, Holscher & Company, P.C., dated March 4, 2011.

beginning point for all calculations. Any changes made to the base data are identified in the section being reviewed.

SFD Forecast Revenue

The figure below is a projection of the revenue received by the fire department. The South Arkansas FPD fee remains at the current level of \$70,000 through 2014. The fee is projected to increase to \$75,000 based on normal increases in operating costs. Grants were excluded for all years. If grants were to be received, there would be a corresponding increase in expenditures equaling the revenue received. All other revenue categories have been inflated at the ten-year average CPI-U of 1.98 percent.

Figure 102: SFD Revenue Forecast, 2012 – 2017

Description	2012 Budget	2013	2014	2015	2016	2017
South Arkansas Fire Protection Fee	70,000	70,000	70,000	75,000	75,000	75,000
Emergency Response Fee	0	0	0	0	0	0
Fire Plans and Inspections	3,000	3,059	3,120	3,182	3,245	3,309
Fire Works Donations	6,500	6,629	6,760	6,894	7,030	7,169
Grants	557,000	0	0	0	0	0
Total Revenue	636,500	79,688	79,880	85,076	85,275	85,478

SFD Forecast Expenditures

Salary, wages, and benefit expenses are modeled to increase 2.5 percent annually with the exception of health insurance which was increased at 7.0 percent each year. Capital purchases and projects include the repair budget by year from the capital improvement plan and the \$94,404 annually for vehicle replacement calculated earlier. All expense categories were inflated at the ten-year average CPI-U of 1.98 percent. Figure 103 reflects forecast expenses through 2017.

Figure 103: SFD Expenditure Forecast, 2012 – 2017

Description	2012 Budget	2013	2014	2015	2016	2017
Salaries and Wages	527,100	540,278	553,784	567,629	581,820	596,365
Benefits and Taxes	177,500	187,068	197,233	208,037	219,523	231,735
Supplies	45,600	46,503	47,424	48,363	49,320	50,297
Purchased Services	42,200	43,036	43,888	44,757	45,643	46,547
Fixed Charges	0	0	0	0	0	0
Grants and Contributions	0	0	0	0	0	0
Capital Expenditures	11,500	11,728	11,960	12,197	12,438	12,684
Capital Purchases/Projects	582,000	106,004	109,404	96,904	99,404	99,404
Total Expenditures	1,385,900	934,615	963,693	977,886	1,008,148	1,037,032

The ongoing capital purchases/projects include costs for buildings/improvements, machinery/equipment and the annual amount for implementing the vehicle replacement plan.

SFD Forecast Summary Fund Balance

The following figure depicts a summary forecast to provide a snapshot of what the City's subsidy would be from 2012 through 2017.

Figure 104: SFD Forecast Summary Fire Operations, 2012 – 2017

Description	2012 Budget	2013	2014	2015	2016	2017
Revenue	636,500	79,688	79,880	85,076	85,275	85,478
Expenditures	1,385,900	934,615	963,693	977,886	1,008,148	1,037,032
Net Operating Subsidy	749,400	854,927	883,813	892,811	922,873	951,554
Percent Increase	12.42%	14.08%	3.38%	1.02%	3.37%	3.11%

Changes in assumption for TAV, CPI-U, wages, and benefits could alter the overall projection of these assumed values. The assumptions and results above do not include any costs for the replacement of department vehicles.

SAFPD Financial Overview

SAFPD contracts fire service and emergency services from the City of Salida. The current IGA (inter-governmental agreement) expired December 31, 2011. The new three-year agreement was approved in November 2011 with the same contract payment amount of \$70,000. The agreement contains one major change in that the District will now pay for all utility costs for the fire station located at 124 E Street. Funding for the District's expenses is primarily through

property tax revenues. In the 2012 budget 89.8 percent of total revenues are projected to be generated through property taxes. The District has a 3.615 approved levy rate.

SAFPD Debt

In August 31, 2009, the District entered into a lease/purchase agreement to finance the acquisition of two International 7400 type 1 Tenders. The lease has an amortized interest rate of 5.1 percent with the final payment being made in August 2021. The following table shows the amortization schedule for the Lease/purchase:

Figure 105: SAFPD Lease/purchase Amortization Schedule

Payment Date	Principal	Interest	Total
2010	20,607	17,124	37,731
2011	21,673	16,058	37,731
2012	22,752	14,978	37,731
2013	23,970	13,761	37,731
2014	25,209	12,521	37,731
2015	26,513	11,218	37,731
2016	27,857	9,874	37,731
2017	29,324	8,407	37,731
2018	30,840	6,890	37,731
2019	32,435	5,296	37,731
2020	34,102	3,628	37,731
2021	35,876	1,855	37,731
Total	331,158	121,610	452,768

The District records all financial activity related to the lease purchase as debt expense in the financial statements.

SAFPD Taxable Assessed Value (TAV) History

Figure 106 shows the historical TAV for the SAFPD from 2008 through 2012.³² It includes the change in TAV by year and the percentage change in total TAV from the previous year.

Figure 106: SAFPD TAV History, 2008 – 2012

Description	2008	2009	2010	2011	2012	
TAV	30,789,870	31,589,730	37,160,640	40,847,953	37,884,746	
Change from Prior Year		5.71%	2.60%	17.64%	9.92%	-7.25%

³² 2011 Chaffee County Abstract of Assessments and levies report.

SAFPD's average annual percent of change for TAV used to calculate tax from 2008 through 2012 was an increase of 5.72 percent. In 2010 through 2012, the average change in the TAV was an increase of 6.77 percent. Averaging 2011 and 2012, TAV inclined 1.33 percent.

SAFPD Revenue History

The following figure provides a detailed review of revenue from 2008 through 2012.

Figure 107: SAFPD Revenue History, 2008 – 2012

Description	2008 Actual	2009 Actual	2010 Actual	2011 Estimated Actual	2012 Budget
Property Taxes	128,518	132,190	136,462	136,014	144,464
Specific Ownership Taxes	19,184	17,697	14,931	15,000	15,000
Delinquent Taxes	(59)	192	2,478	400	400
Interest Apportion	421	530	661	300	0
Interest Income	1,359	2,054	3,854	700	700
Plan Review	0	125	725	300	300
Partition for Exclusion	0	0	300	0	0
Miscellaneous Income	430	0	150	0	0
Hazmat Incidents	3,459	1,180	613	1,230	0
Wildland Firefighting	24,925	0	14,743	45,000	0
Sale of Equipment	400	0	45,950	17,950	0
Grants	9,321	0	4,076	3,929	0
Donation - Control Burn	0	1,179	210	850	0
Donations	0	94	50	20	0
Wildlife Impact Assistance	57	61	31	148	0
Revenue from Capital	46,653	21,709	20,957	0	0
Total Revenue	234,668	177,011	246,191	221,841	160,864
Levy Rate	4.174	4.185	3.672	3.330	3.813

The 2012 budget has the lowest revenue amount in the five-year review period. The major declining line item in revenue is sale of equipment. The 2012 budget does not list revenue from wildland firefighting as this revenue is based on reimbursements.

SAFPD Expenditures History

Figure 108 and Figure 109 depict the historical spending for SAFPD from 2008 through 2012.

Figure 108: SAFPD Expenditures History, 2008 – 2012

Description	2008 Actual	2009 Actual	2010 Actual	2011 Estimated Actual	2012 Budget
Materials and Supplies	39,617	41,210	73,675	76,396	53,134
IGA - Salida	70,000	70,000	70,000	70,000	70,000
Debt	0	0	37,731	37,731	37,730
Capital	74,705	35,051	203,340	20,000	0
Contingency	100	0	0	17,714	0
Total Expenditures	184,422	146,261	384,746	221,841	160,864

The following is a percentage breakdown of costs by category:

Figure 109: SAFPD Percent of Expenditure Categories History, 2008 – 2012

Description	2008 Actual	2009 Actual	2010 Actual	2011 Estimated Actual	2012 Budget
Materials & Supplies	21.48%	28.18%	19.15%	34.44%	33.03%
IGA – Salida	37.96%	47.86%	18.19%	31.55%	43.52%
Debt	0.00%	0.00%	9.81%	17.01%	23.45%
Capital	40.51%	23.96%	52.85%	9.02%	0.00%
Contingency	0.05%	0.00%	0.00%	7.98%	0.00%
Total Expenditures	100.00%	100.00%	100.00%	100.00%	100.00%

SAFPD Summary of General Fund Balance History

The table below summarizes the historical fund activities and ending fund balance for the SAFPD from 2008 through 2012.

Figure 110: SAFPD Fund Balance History, 2008 – 2012

Description	2008 Actual	2009 Actual	2010 Actual	2011 Actual	2012 Budget
Beginning Fund Balance	278,989	329,235	359,985	221,430	221,430
Revenue	234,668	177,011	246,191	221,841	160,864
Expenditures	184,422	146,261	384,746	221,841	160,864
Ending Balance	329,235	359,985	221,430	221,430	221,430

SAFD Vehicle Replacement Plan

ESCI recommends that the capital fund be used for the funding of a vehicle replacement plan. ESCI developed a vehicle replacement plan for the SAFD projecting the useful life of vehicles and scheduling the replacement date for these vehicles based on the remaining useful life. The

replacement date assumes that all vehicles will be placed in reserve status for five years prior to disposal.

Figure 111: SAFD Apparatus Life Expectancy (Active Service)

Apparatus Type	Average Life	Replacement Cost
Tender	18 Years	250,000
Trailer	25 Years	30,000
Brush	18 Years	100,000
Command	12 Years	35,000

The replacement plan calculates an annual amount of required funding based on estimated replacement cost divided by the useful life of the vehicle. Implementing this plan and encumbering the funds would ensure that when vehicles need to be replaced, funds would be available. This would avoid incurring debt or creating a budget shortfall. Figure 100 shows a proposed vehicle replacement plan summary for SAFD.

Figure 112: SAFD Vehicle Replacement Plan Summary

Apparatus Designation	Station	Make	Year	Replace-ment Year	Useful Life	Remaining Useful Life	Replace-ment Cost	Required Reserve	Annual Reserve Amount
E-111	Dodge Ram 3500	2002	2020	15	5	100,000	66,667	6,667	E-111
E-114	Ford F550	2004	2022	15	7	100,000	53,333	6,667	E-114
T-11	International Navistar	2009	2027	18	15	250,000	41,667	13,889	T-11
T-12	International Navistar	2009	2027	18	15	250,000	41,667	13,889	T-12
HZT-11	Interstate	2008	2028	20	16	30,000	6,000	1,500	HZT-11
U-11	Ford Explorer	1999	2012	12	0	35,000	35,000	2,917	U-11
Total Cost							765,000	244,333	45,528

Implementation of the vehicle replacement plan would require a fund balance of \$244,333 on December 31, 2011, and an annual accrual/budget of \$45,528 adjusted for inflation.

SAFPD Unfunded Liabilities

As of December 31, 2011, SAFPD does not have any unfunded liabilities.

SAFPD Status Quo Financial Forecast, 2012 – 2017

Using the assumptions outlined in the section entitled Economic Indicators, financial forecast projections were created for SAFPD. Future financial forecasts use the 2012 budget as the

beginning point for all calculations. Any changes made to the base data are identified in the section being reviewed.

SAFPD Forecast Taxable Assessed Value (TAV)

SAFPD’s average growth in TAV from 2008 through 2012 was 5.72 percent. The forecast percent of growth for the TAV from 2013 through 2017 are shown in Figure 113. The growth rate for 2013 and 2014 is calculated assuming similar growth as 2012 and then gradual growth for the remaining three years of the projection.

Figure 113: SAFPD TAV Growth Rates by Year, 2013 – 2017

Year	Percent Change
2013	-1.00%
2014	-0.50%
2015	0.50%
2016	1.00%
2017	1.50%

Figure 114 forecasts the changes in the TAV from 2012 through 2017 using the growth factors above.

Figure 114: SAFPD Forecast TAV, 2012 – 2017

Description	2012	2013	2014	2015	2016	2017
TAV	37,884,746	37,505,899	37,318,369	37,504,961	37,880,011	38,448,211

SAFPD Forecast Revenue

The District’s projected income for property taxes used the average levy rate for actual dollars collected for 2010 through 2012. The average was rate was 3.605. All other revenue categories been inflated at the ten-year average CPI-U of 1.98 percent. Figure 115 reflects revenue forecasts between 2012 through 2017.

Figure 115: SAFPD Revenue Forecast, 2012 – 2017

Description	2012 Budget	2013	2014	2015	2016	2017
Property Taxes	144,464	135,212	134,536	135,208	136,560	138,609
Specific Ownership Taxes	15,000	15,297	15,600	15,909	16,224	16,545
Delinquent Taxes	400	408	416	424	433	441
Interest Apportion	0	0	0	0	0	0
Interest Income	700	714	728	742	757	772
Plan Review	300	306	312	318	324	331
Revenue from Capital	0	0	0	0	0	0
Total Revenue	160,864	151,936	151,592	152,602	154,298	156,698
Levy Rate	3.813	3.605	3.605	3.605	3.605	3.605

SAFPD Forecast Expenditures

All expense categories were increased at the ten-year average CPI-U of 1.98 percent. Debt was included based on the actual amortization schedule and the IGA was the contractual amount through 2015 and then increase \$5,000 for inflation impact on providing service. Figure 116 summarizes forecast expenses through 2017.

Figure 116: SAFPD Expenditure Forecast, 2012 – 2017

Description	2012 Budget	2013	2014	2015	2016	2017
Materials and Supplies	53,134	54,186	55,259	56,353	57,469	58,607
IGA – Salida	70,000	70,000	70,000	75,000	75,000	75,000
Debt	37,730	37,731	37,731	37,731	37,731	37,731
Capital	0	0	0	0	0	0
Contingency	0	0	0	0	0	0
Total Expenditures	160,864	161,917	162,990	169,084	170,200	171,337

SAFPD Forecast Summary Fund Balance

The following figure depicts a summary forecast providing a snapshot of what the fund balance would be from 2012 through 2017.

Figure 117: SAFPD Forecast Summary, 2012 – 2017

Description	2012 Budget	2013	2014	2015	2016	2017
Beginning Fund Balance	221,430	221,430	211,450	200,052	183,570	167,669
Revenue	160,864	151,936	151,592	152,602	154,298	156,698
Expenditures	160,864	161,917	162,990	169,084	170,200	171,337
Ending Balance	221,430	211,450	200,052	183,570	167,669	153,029

Changes in assumption for TAV, CPI-U, wages, and benefits could alter the overall projection of these assumed values.

Future Opportunities for Cooperative Efforts

Having completed the Evaluation of Current Conditions, ESCI is now armed with an understanding of the subject agencies, their operations, management, strengths, and challenges. Having benefited from the process of developing a full appreciation for where the organizations stand today, we are now able to look toward ways in which they can work together more effectively in the future.

The following section discusses the various concepts that are applied to identifying and analyzing partnership opportunities. Potential strategies are listed and evaluated for their applicability. General partnering strategies (overarching) fall in a range from remaining autonomous to the creation of a new organization. Strategies are further broken down into short, mid and long-term implementation horizons.

Partnering Concepts

Most public agencies are experiencing a period of transformation which has been accelerated by recent financial declines. Rapid economic change in virtually every sector of the nation is driving increasing demand for more collaborative and sophisticated fire and EMS protection. Many fire departments that have existed virtually unchanged for decades today find themselves challenged to anticipate and provide acceptable emergency service delivery with progressively constricting revenue.

As communities that are in close proximity to each other grow, their economies and emergency service demands become progressively more interdependent. The notion of cooperative service delivery is not a new one and has been undertaken in private industry for many years. Public providers of emergency services have sought ways to work more closely together only in relatively recent years and to a lesser extent. Those that have been reluctant to work together and have instead held to independent and territorial practices are being forced by new economic challenges to reconsider their outlook.

Compounding the impact of the economic downturn experienced in 2008, numerous states have experienced a public service funding crisis brought on by tax limitation laws or other policy shifts that squeeze the ability of communities to unilaterally finance and manage needed change. Even those rare communities not directly experiencing a funding crisis are pressured by residents and others to lower cost and increase service.

Beyond the financial considerations, it has become clear that, rather than autonomous service delivery by stand-alone entities, emergency response needs are more effectively met by a larger, regionally based, fire protection agency. This is because the successful outcome of an emergency is highly dependent on the rapid mobilization of significant numbers of personnel and equipment. Regionalized fire protection strategies inherently have the ability to field greater numbers of emergency workers and equipment while capitalizing on economies of scale in management and oversight.

Today, fire departments are sophisticated and indispensable channels for all forms of emergency service, including natural and man-caused disaster management, fire and accident prevention, and pre-hospital care. In the process, the role of many fire agencies has transformed to regional emergency service providers.

Combining fire and EMS service delivery providers by way of merger, consolidation or any of the many other available approaches is frequently viewed as a cost saving initiative. While financial advantages are often realized, ESCI's experience had been that savings are usually modest when smaller agencies pool their resources because the economies of scale found when large organizations are merged do not exist. However, what is gained when small agencies cooperate is significant in terms of increased efficiency, long term cost avoidance and depth of resources.

Processes for Collaboration

The potential efficiencies to be gained by pursuing cooperation between BVFD, CCEMS, CCFPD, SAFPD, and SAFD can be described on a continuum. Identified partnering strategies fall in a range, from remaining autonomous to the creation of a new organization encompassing multiple or all of the agencies. These general strategies are further broken down into short, mid and long-term implementation horizons.

To evaluate the opportunities for cooperative efforts effectively, a basic understanding of the methods for collaboration available to the agencies is necessary. The information we provide here should be considered for what it is—a primer regarding the legal aspects of collaborating public agencies. At the point where policymakers have decided to pursue any of the cooperative efforts, the advice of legal counsel should be sought in order to ensure that the appropriate procedures are followed.

There exist various ways for public agencies to join in cooperation. A method used frequently in Colorado is for government units to legally partner through the use of an IGA (Intergovernmental Agreement). Other methods of collaboration include consolidation, dissolution, merger, contract, or through the establishment of a subsidiary district. The movement toward more intergovernmental cooperation in the delivery of emergency service goes by many names, including unification, regionalization, consolidation, alliance, and merger. Our intent with this discussion is to be a primer and not a scholastic analysis of each concept.

General Partnering Strategies

The various partnering strategies are described, beginning with a do-nothing approach and ending with complete consolidation of the agencies into a new emergency service provider. The following alternatives will be evaluated and discussed:

- Complete Autonomy
- Administrative Consolidation
- Functional Consolidation
- Operational Consolidation
- Legal Unification or Merger

Complete Autonomy

This is a status quo approach in which nothing changes. While often viewed negatively, in some cases the best action is no action. In this case, the study agencies simply continue to do business as usual, cooperating with and supporting each other as they do today, but with no change to governance, staffing or deployment of resources. Current collaborative practices are not altered.

This approach carries with it the advantage of being the easiest to accomplish as well as maintaining the independence of the organizations and local control. The currently elected boards continue to oversee their individual agencies as their electorate desires, without the complication of considering the views of a different constituency. It creates the least stress on the organizations and does not necessitate reorganization. What it lacks is long-term commitment and the virtues that can be gained in terms of increased efficiency that is realized in a cooperative service delivery environment.

In today's environment, taxpayers typically hold their elected officials accountable for delivering a quality level of service at an affordable rate and expect creative thinking to solve problems or

achieve those ends. While “maintaining the status quo” is easy and involves the least amount of impact to the two agencies, it may well be one of the riskier decisions to make politically.

Administrative Consolidation

Under an administrative consolidation, the agencies remain independent of each other from a governance standpoint, but they blend some or all of their administrative functions. The result is often one of increased efficiency in the use of administrative and support personnel. Overhead costs are typically reduced and duplication of efforts is eliminated.

The advantages of such a model 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 rank and file in the operational elements than other consolidation options; and singularity of purpose, focus, and direction at the top of the participating organizations. This strategy lends itself well to a gradual move toward a single, consolidated agency where differences in attitude, culture and/or operation are otherwise too great to overcome in a single move to combine.

The disadvantages include potential conflicts in policy direction from the governing bodies; potentially untenable working conditions for the fire chief (“one man, two bosses”); and increased potential for personnel conflict as separate employee groups vie for dominance/supremacy.

An administrative consolidation is most effective in larger organizations where duplication exists and workload assignments can be re-aligned to gain efficiencies.

Functional Consolidation

A functional consolidation maintains separate agencies with their governing boards and administrations left unchanged. The approach is focused primarily on the response agency’s programs as opposed to its operations or administrative composition. It may be applied to nearly any program or practice and is commonly applied to training, fire prevention, and similar programs that are of a common interest and need in the participating agencies.

The initiative is often found to increase efficiency and make better use of limited resources. Advantages of elimination of duplication are often realized or more effective use of staffing. Direct cost savings may be limited, however long term gains can be anticipated.

Operational Consolidation

The operational consolidation strategy takes the next step in the continuum of closer collaboration development. In this case, all operations are consolidated under a single organization that serves the agencies. The organizations remain independent agencies from a legal standpoint, but from a service delivery perspective, they operate as one. An Operational Consolidation, accomplished through a written agreement between the two agencies, requires a significant commitment toward a full consolidation and is usually undertaken as a segue toward complete integration. The level of trust required to implement operational consolidation is very high, since independence and autonomy have been willingly relinquished in favor of the preferred future state of a complete integration.

Legal Merger

A merger is a complete integration of the multiple agencies into one. Each is absorbed into and becomes part of the other agencies. For multiple fire districts to merge, some cease to exist (merging agency or agencies) and one becomes the surviving entity (merger agency). The employees and volunteers of the merging agencies are transferred to the merger agency, and the elected positions are either eliminated from the merging district or brought into the merger district through an agreement to re-configure the composition of the board of directors.

Tax rates become a key factor in a merger. In this case, the taxing authority of the surviving agency may be applied to the entirety of the newly merged district. However, while the taxing authority is expanded, the board of directors of the new district chooses whether they will levy the full taxing authority to the constituents of the district, or some lesser amount based on identified needs and the willingness of the voters to agree.

A merger between any of the study agencies would require a decision as to which agency will be the surviving agency and which agencies will dissolve into the surviving agency or, more simply, a new fire district is formed. The merger is subject to approval of the respective boards and the communities' voters.

Legal Consolidation

Differing from a merger, a consolidation occurs when the fire districts cease to exist and an entirely new fire district is formed. Like under a merger, employees and volunteers become members of the newly formed fire district. Existing elected officials positions are replaced by newly elected members of the established district.

The primary difference compared to a merger is that a new tax rate is established as a component of the initiative's presentation to the electorate. Rather than applying an existing rate from one district to the other, as in a merger, a new maximum rate is established. As with a merger, a consolidation requires approval of the district's voters.

Overarching Strategy A – Status Quo

Level of Cooperation

- Functional

Timeline for Completion

- Short Term

Section

- Operations

Affected Stakeholders

- BVFD, CCEMS, CCFPD, SFD, and SAFPD

Objective

- Keep fire and EMS agencies independent for greatest local control.
- Capture efficiencies of selective functional strategies.

Summary

This is a do-nothing strategy. While typically viewed negatively, in some cases the best action is no action. In this case, maintaining status quo means that essentially nothing changes. BVFD, CCFPD, and SFD are neighboring agencies who occasionally call upon each other for assistance and operate collectively with CCEMS on EMS incidents but remain completely independent. For the organizations status quo should involve the continued development of as many of the functional strategies as possible.

Discussion

The advantages of this approach are that it is the easiest strategy to implement, creates the least amount of work or stress on the organizations, and does not necessitate any reorganization. The primary rationale is that it maintains local control; the currently elected boards, county commission, and city council continue to oversee their individual agencies as their electorate desires without the complication of considering the views of a different constituency.

The disadvantages of this approach are that the current fiscal difficulty facing the agencies is not changed, the opportunities for efficiency (either financial or service level) through greater collaboration are not realized, disparate levels of service delivery in the County and some duplication and overlap continue. In today's environment, taxpayers typically hold their elected officials accountable for delivering a quality level of service at an affordable rate and expect creative thinking to solve problems or achieve those ends. While "maintaining the status quo" is

easy and involves the least amount of impact to the agencies, it may well be one of the riskier political decisions.

Conclusion

Keeping the status quo and proceeding with only operational cooperation between the agencies has merit and would produce short-term benefits. As with any relationship that lacks long-term commitment, it is inevitable that a change in governing bodies, agency administration, financial situation, vision, or turning inward of focus will lead to a breakdown of cooperation. It is ESCI's experience that for mutual benefit of the region, development of a regional vision and an FA or IGA has a greater potential for long-term success.

Overarching Strategy B – Countywide FA (Fire Authority) including CCEMS

Level of Cooperation

- Governance

Timeline for Completion

- Mid to Long Term

Section

- Administration

Affected Stakeholders

- BVFD, CCEMS, CCFPD, SFD, and SAFPD

Objective

- Combine all administrative, operations, and support services of the five emergency service providers.
- Form a governing board (fire authority) with representation from each of the four fire agencies and Chaffee County.
- Retain local control.

Summary

An alternative to a merger is the formation of an FA (Fire Authority). An FA can be established by creating a new entity whereby the agencies use a legal framework with a tax base, operational plan, and new governance. An FA may also be accomplished with an IGA (intergovernmental agreement) with each of the agencies retaining taxing authority, governance, and local control. If an IGA model is selected for aligning the agencies, the long-term goal should be to merge the four fire agencies and incorporate CCEMS into a single regional fire and emergency service provider.

An option to Strategy B would be the addition of career staffing in Buena Vista to provide immediate initial emergency response. This option would be an adjunct not a replacement to the current response provided by volunteer firefighters.

Discussion

In the State of Colorado there have been a number of FAs established for the purpose of eliminating redundancy and duplicated efforts with an emphasis on cost avoidance. Examples of FAs include Poudre Fire Authority in Fort Collins, Durango Fire & Rescue Authority in Durango, the Clear Creek Fire Authority in Dumont, and the South Metro Fire Authority in Centennial. South Metro Fire Authority was formed when several fire districts merged. The

latest merger occurred on May 1, 2008, when the Parker Fire Protection District and South Metro Fire Rescue Authority began operating as a fire authority under an intergovernmental agreement. The long-term intent of the agreement is to fully merge the two districts into one. More recently Rifle, Burning Mountains, Glenwood Springs RFPDs and the City of Glenwood Springs FD are actively pursuing an FA under an IGA model.

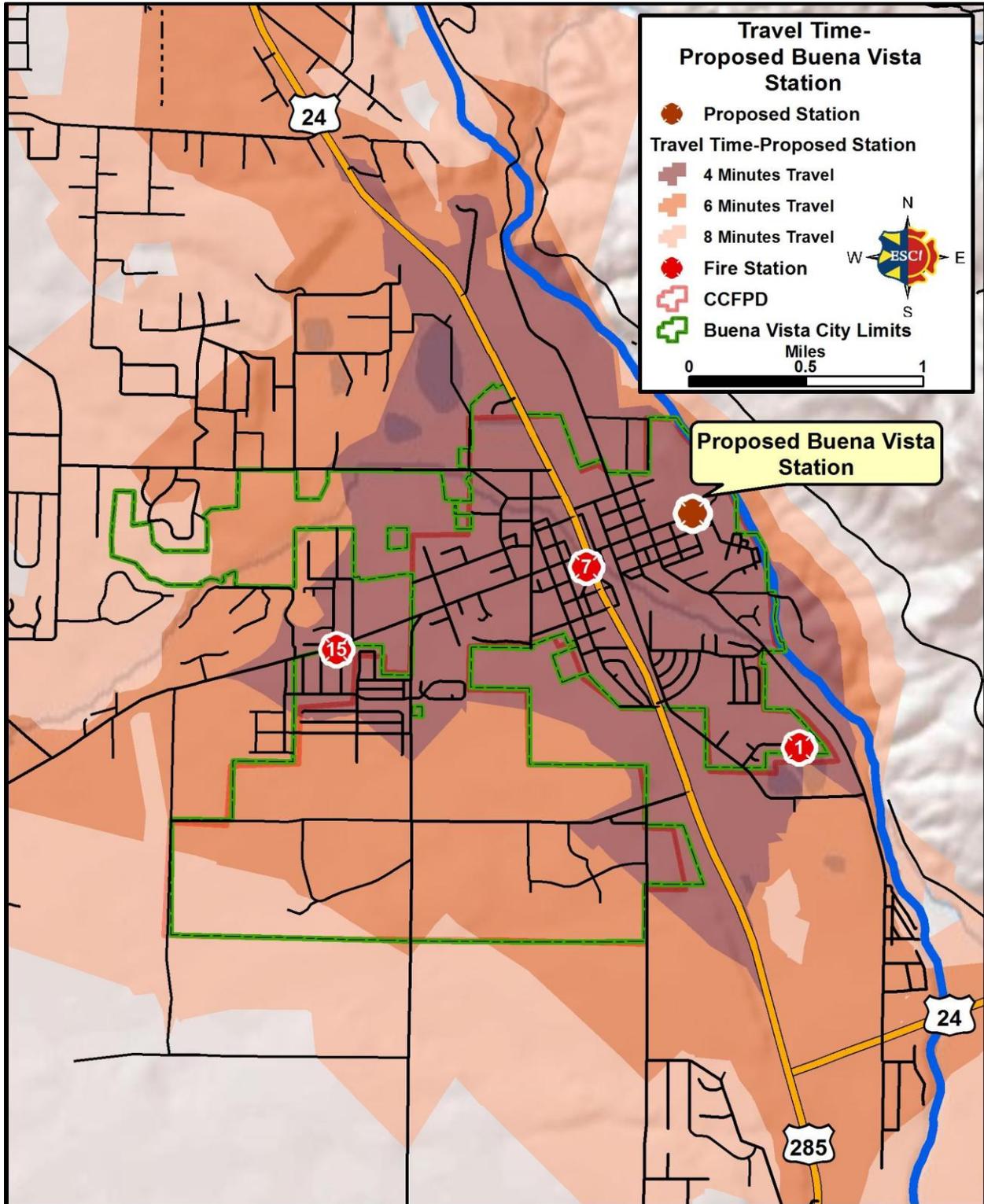
With an FA using an IGA, the city and districts retain taxing authority, governance, and local control with representation on an oversight (governance) board. IGAs commonly have a provision for the participants to extricate themselves from the agreement (escape clause). An escape clause in a contract allows a party to "escape" from the contract without being liable for breach of contract. This happened when the City of Greeley and Western Hills Fire Protection District negotiated the dissolution of the Union Colony Fire Rescue Authority (UCFRA). An amicable termination of the intergovernmental agreement that created the FA was agreed upon and in a role reversal Western Hills FPD now contracts with the City of Greeley for fire protection services. UCFRA officially ended services at midnight on December 31, 2010, and the Greeley Fire Department began providing emergency services at 12:01 a.m., January 1, 2011. There were no changes to service levels.

Facilities

With an FA, ESCI recommends that the three fire stations in the Town of Buena Vista be incorporated in a single fire and EMS facility. The current stations lack adequate space for apparatus and living quarters for CCEMS personnel.

ESCI reviewed possible sites large enough to locate a fire station that would meet, current and future needs, long into the future. Figure 118 shows the three fire stations that currently serve Buena Vista and the northern portion of Chaffee County and the proposed location of a new facility. Two of the stations are owned and operated by CCFPD and the third by BVFD.

Figure 118: Existing and Proposed Fire Station Location, Buena Vista



The proposed location for the fire station would:

- Provide access for protecting the older core area of the town, along Highway 24 and the newer industrial/commercial area near the current CCFPD Fire Station No. 1.
- Incident density map shows area of highest demand (Buena Vista) is within the four-minute travel time footprint of proposed station location.
 - Reach approximately 73 percent of the service area on the existing road network in four minutes or less of travel time.
 - Reach 100 percent of the service area in the Town of Buena Vista over the existing road system in six minutes or less travel time.
- Good access from the proposed location to Highway 24 for travel North and South.
- The Town of Buena Vista has property in the area of the proposed fire station location.

FA Apparatus Deployment

Figure 119 and Figure 120 demonstrate an apparatus deployment model for fire and EMS for an FA. At a minimum this deployment strategy would allow for three apparatus to be sold as surplus. In the best case scenario additional units could be disposed of.

Figure 119: FA Apparatus Deployment by Fire Station, North Chaffee County

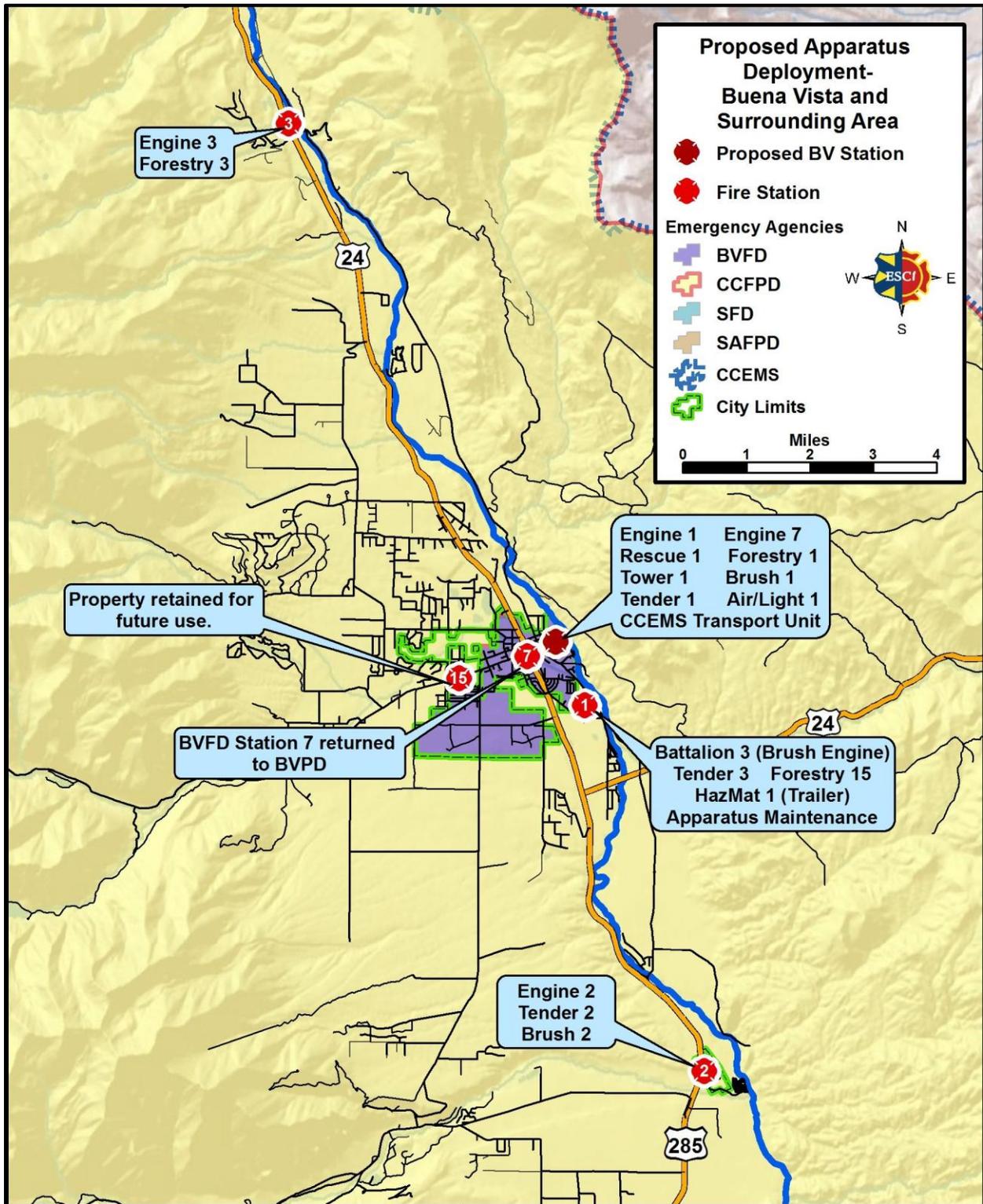
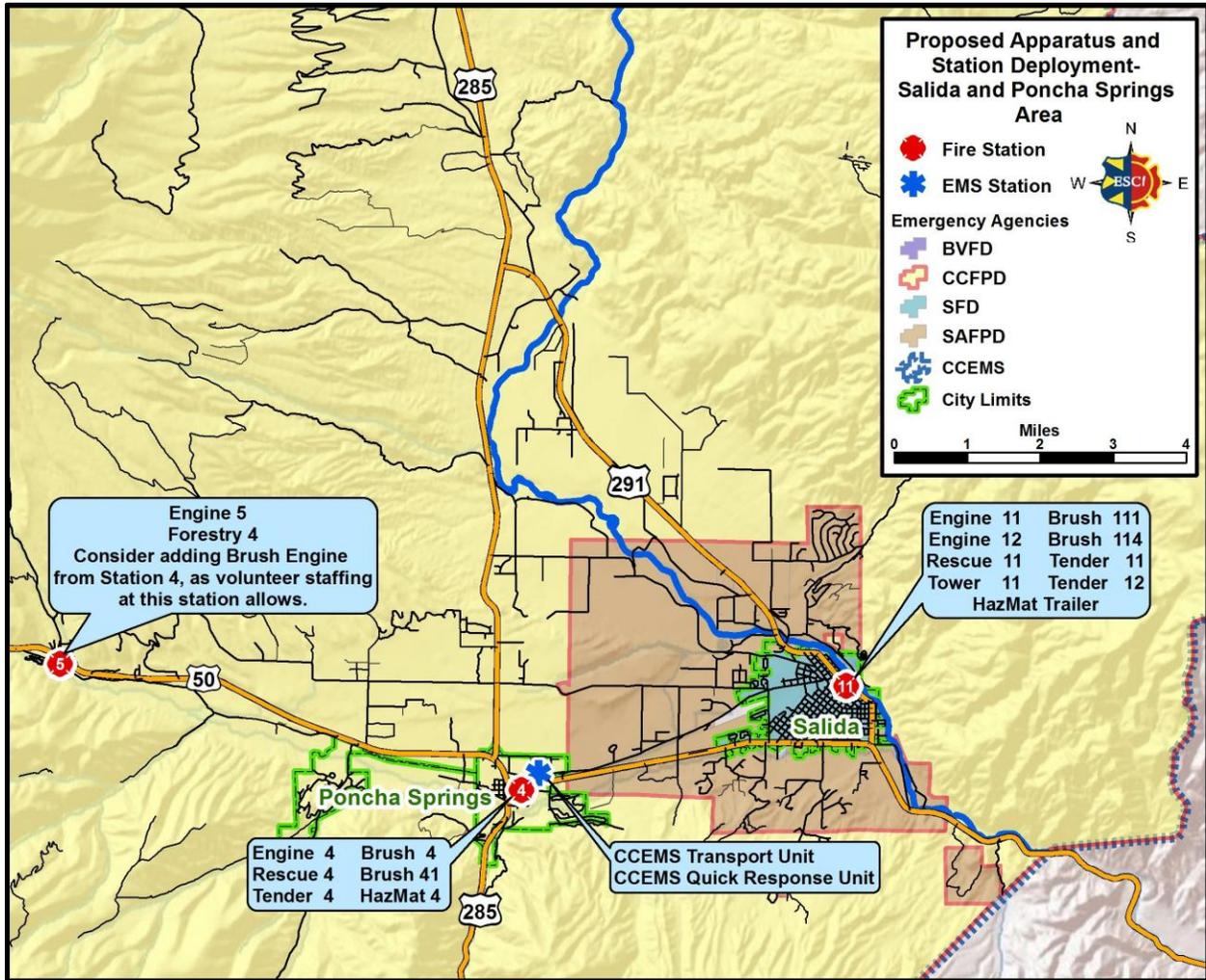


Figure 120: FA Apparatus Deployment by Fire Station, South Chaffee County



FA Staffing

The traditional model of static deployment of fire and EMS resources is changing. Several reasons often mentioned are an increased reliance on the fire department for EMS and improvements in construction methods (building and fire codes and the greater use of automatic fire sprinklers).

Everywhere "firefighters are figuring out how to change their deployment," says Dustin E. Morrow, assistant chief with Tualatin Valley Fire & Rescue. Every fire agency still must fight fires. But most calls involve medical emergencies or miscellaneous problems. And sending a big rig to one of those usually isn't nimble, fast, or cost-effective.³³

³³ *The Oregonian*, editorial page, The Oregonian Editorial Board, July 15, 2010.

TVF&R (Tualatin Valley Fire & Rescue located in Beaverton, Oregon) has deployed cars driven by one paramedic to respond to medical emergencies in conjunction with an EMS transport unit. In May and June 2010, 400 or so calls were handled that otherwise would have required a four-person engine or truck. TVF&R is hoping to experiment with paramedics on motorcycles in the future. A discussion on alternative staffing methods including the staffing of aid units with two personnel is recommended.

For the fire and EMS organizations of Chaffee County, the time of day with the greatest number of calls for service is also the time when the fewest volunteers are available. Based on volunteer firefighter/EMT availability, ESCI recommends that collectively BVFD and CCFPD add daytime staffing to provide immediate response to fire and EMS incidents in the Town of Buena Vista and north Chaffee County.

Leadership of an FA (consolidated organization) will require a manager that is a visionary, has an understanding of career and volunteer fire departments, and an ability to work with elected officials. The position of fire chief will be a highly visible position with diverging demands on the individual's time. ESCI recommends that an internal and external recruitment be conducted for a suitable individual as fire chief of the FA.

FA Operational Consolidation FTEs

Figure 121 lists the current budgeted administrative and support positions in the five agencies, followed by the conceptual staffing configuration for the newly formed FA and a summary of the projected changes in overall staffing numbers.

Figure 121: Current and Conceptual Staffing – FA Administrative and Support

Personnel/Positions	BVFD 2012 Budget	CCEMS 2012 Budget	CCFPD 2012 Budget	SFD 2012 Budget	Total FTEs	Net FTE Change	FA FTEs
Administration							
Fire Chief	1.0	0.0	1.0	1.0	3.0	(2.0)	1.0
Assistant Chief EMS	0.0	0.0	0.0	0.0	0.0	1.0	1.0
Deputy Chief	2.0	0.0	1.0	0.0	3.0	(1.0)	2.0
PIO/Educator/Fire Inspector	0.1	0.0	1.0	0.0	1.1	(0.1)	1.0
Captain Training	0.0	0.0	1.0	0.0	1.0	0.0	1.0
Administrative/Staff Assistant	0.0	1.0	1.0	1.0	3.0	0.0	3.0
Secretary/Treasurer	0.2	0.0	0.0	0.0	0.2	(0.2)	0.0
Mechanic (Preventative Maintenance Engineer)	0.1	0.0	1.0	0.0	1.1	(0.1)	1.0
Total Administration	3.4	1.0	6.0	2.0	12.4	(2.4)	10.0
Volunteer Administration	3.0	0.0	1.0	0.0	4.0	(2.0)	2.0
Career Administration	0.4	1.0	5.0	2.0	8.4	(0.4)	8.0

The conceptual illustration of administrative and support staffing for an FA provides for a single fire chief position, reduced from three (two career and one volunteer position). The position of assistant chief of EMS was added. Other position responsibilities are re-aligned and shared between the agencies where possible. The conceptual modifications to the administrative functions for an FA reduce overall positions by 2.4 and FTEs by 0.4 positions. In Figure 122, wage values by category are shown.

Figure 122: Current and Conceptual Costs – FA Administrative and Support

Personnel/Positions	BVFD 2012 Wages	BVFD Extended Wages	CCEMS 2012 Wages	CCEMS Extended Wages	CCFPD 2012 Wages	CCFPD Extended Wages	SFD 2012 Wages	SFD Extended Wages
Administration								
Fire Chief	0	0	0	0	79,897	79,897	72,648	72,648
Assistant Chief EMS	0	0	0	0	0	0	0	0
Deputy Chief	0	0	0	0	0	0	0	0
PIO/Educator/Fire Inspector	0	0	0	0	41,434	41,434	0	0
Captain Training	0	0	0	0	30,750	30,750	0	0
Administrative/Staff Assistant	0	0	34,887	34,887	34,887	34,887	17,749	17,749
Secretary/Treasurer	5,018	5,018	0	0	0	0	0	0
Mechanic (Preventative Maintenance Engineer)	3,060	3,060	0	0	32,394	32,394	0	0
Total Administration		8,078		34,887		219,362		90,397

Personnel Positions	Total Extended Wages	Wage Adjustments	FA Wages
Administration			
Fire Chief	152,545	(72,648)	79,897
Assistant Chief EMS	0	72,648	72,648
Deputy Chief	0	0	0
PIO/Educator/Fire Inspector	41,434	0	41,434
Captain Training	30,750	0	30,750
Administrative/Staff Assistant	87,523	0	87,523
Secretary/Treasurer	5,018	(5,018)	0
Mechanic (Preventative Maintenance Engineer)	35,454	(3,060)	32,394
Total Administration	352,724	(8,078)	344,646

This FA administrative and support staffing concept will result in a total cost avoidance of approximately \$80,726. However, the staffing strategy includes the addition of an assistant chief of EMS and would result in net cost avoidance for the \$8,078; plus applicable benefit decreases, primarily in the medical insurance costs.

Adding an assistant chief of EMS meets a need of the partnering organizations that is not currently being met. Each of the agencies addresses the administration, training, and management of EMS independently. With the majority of calls for service related to medical incidents it is appropriate to have an individual with the responsibility of oversight of such an important program.

Figure 123 shows a concept organizational structure for the administration section of an FA.

Figure 123: Conceptual Organizational Chart – FA Administration

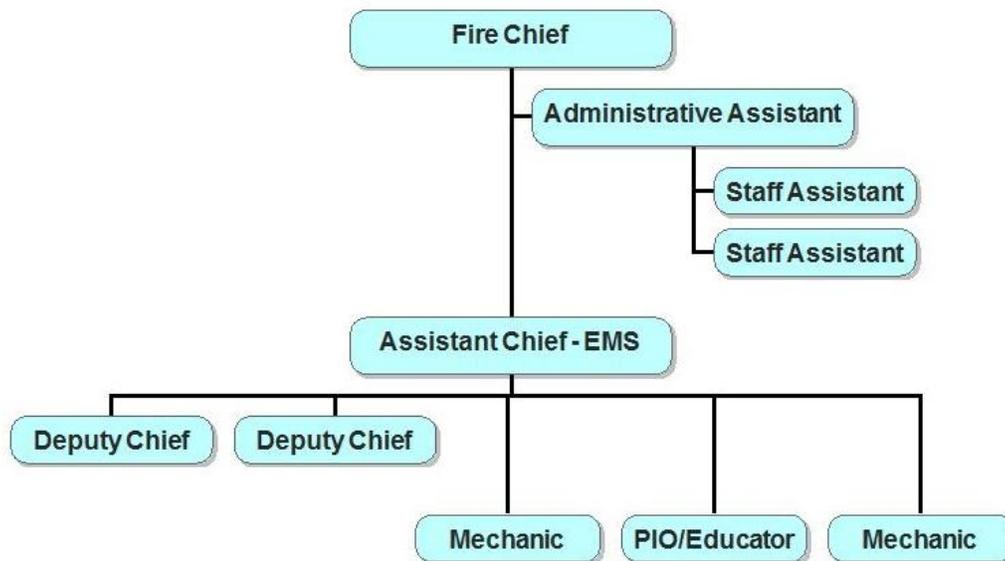


Figure 124 provides a comparison of current operational positions, and adjustments under an FA model. The exact number of operational personnel is likely to differ from the conceptual model slightly as some personnel have membership in more than one of the current organizations.

Figure 124: Conceptual Staffing – FA Operations

Positions	BVFD 2012 Budget	CCEMS 2012 Budget	CCFPD 2012 Budget	SFD 2012 Budget	Total	Net Change	FA
Operations							
Battalion Chief	1.0	0.0	3.0	0.0	4.0	(1.0)	3.0
Captains	1.0	0.0	4.0	3.0	8.0	0.0	8.0
Lieutenant	1.0	0.0	4.0	0.0	5.0	3.0	8.0
Firefighter/EMT	12.0	0.0	29.0	6.0	47.0	0.0	47.0
Firefighter Reserve	0.0	0.0	0.0	4.0	4.0	0.0	4.0
Paramedic	0.0	6.0	0.0	0.0	6.0	0.0	6.0
EMT-I	0.0	1.0	0.0	0.0	1.0	0.0	1.0
EMT-B	0.0	5.0	0.0	0.0	5.0	0.0	5.0
Paramedic Part Time	0.0	5.0	0.0	0.0	5.0	0.0	5.0
EMT-I Part Time	0.0	1.0	0.0	0.0	1.0	0.0	1.0
EMT-B Part Time	0.0	6.0	0.0	0.0	6.0	0.0	6.0
Total Operations	15.0	24.0	40.0	13.0	92.0	(1.0)	91.0

The majority of current positions and in this strategy in emergency operations are volunteers. Figure 125 shows the current number of volunteer operational personnel by rank and organization and the conceptual staffing for an FA.

Figure 125: Conceptual Staffing, Volunteer Personnel – FA Operations

Positions	BVFD 2012 Budget	CCEMS 2012 Budget	CCFPD 2012 Budget	SFD 2012 Budget	Total	Net Change	FA
Volunteer Personnel							
Battalion Chief	1.0	0.0	3.0	0.0	4.0	0.0	3.0
Captains	1.0	0.0	4.0	0.0	5.0	0.0	5.0
Lieutenant	1.0	0.0	4.0	0.0	5.0	0.0	5.0
Firefighter/EMT	12.0	0.0	29.0	0.0	41.0	0.0	41.0
Total Volunteer	15.0	0.0	40.0	0.0	55.0	(1.0)	54.0

Note: In this and the other strategies, there is no reduction in the number of full-time career firefighter/EMTs in Salida.

The next figure shows the current number of career operational personnel by rank and organization and the conceptual staffing for an FA.

Figure 126: Conceptual Staffing, Career Personnel – FA Operations

Positions	BVFD 2012 Budget	CCEMS 2012 Budget	CCFPD 2012 Budget	SFD 2012 Budget	Total	Net Change	FA
Operations							
Captains	0.0	0.0	0.0	3.0	3.0	0.0	3.0
Firefighter/EMT	0.0	0.0	0.0	6.0	6.0	0.0	6.0
Firefighter Reserve	0.0	0.0	0.0	4.0	4.0	0.0	4.0
Paramedic	0.0	6.0	0.0	0.0	6.0	0.0	6.0
EMT-I	0.0	1.0	0.0	0.0	1.0	0.0	1.0
EMT-B	0.0	5.0	0.0	0.0	5.0	0.0	5.0
Paramedic Part Time	0.0	5.0	0.0	0.0	5.0	0.0	5.0
EMT-I Part Time	0.0	1.0	0.0	0.0	1.0	0.0	1.0
EMT-B Part Time	0.0	6.0	0.0	0.0	6.0	0.0	6.0
Total Operations	0.0	24.0	0.0	13.0	37.0	0.0	37.0

No changes in operational staffing are included in the FA conceptual model.

FA Fiscal Analysis

2012 budget data provided by the client was used to create an FA for BVFD, CCFPD, SFD and SAFPD.

FA Forecast Consolidated Taxable Assessed Value

The percentage change in TAV used is from the individual agencies discussed earlier in the report. Figure 127 provides a view of the TAV for each organization and then consolidated for the FA.

Figure 127: FA Consolidated Taxable Assessed Valuation

Year	BVFD	CCFPD	SFD	SAFPD	Consolidated TAV
2012	49,072,141	194,531,839	95,423,207	37,884,746	376,911,933
2013	48,090,698	198,422,476	93,991,859	37,505,899	378,010,931
2014	47,850,245	202,390,925	93,051,940	37,318,369	380,611,479
2015	47,850,245	206,438,744	93,051,940	37,504,961	384,845,890
2016	48,089,496	210,567,519	93,517,200	37,880,011	390,054,225
2017	48,570,391	214,778,869	94,452,372	38,448,211	396,249,843

FA Forecast Revenue

Initial development of fire operations revenue was established to combine the 2012 budget data into a consolidated statement. This consolidation is detailed in Figure 128.

Figure 128: FA Budgeted Consolidated Revenue, 2012

Description	BVFD	CCEMS	CCFPD	SFD	SAFPD	Adjustments & Eliminations	Consolidated 2012 Budget
Property Taxes	0	0	764,550	0	144,464	0	909,014
Specific Ownership Taxes	0	0	92,000	0	15,000	0	107,000
Penalties And Interest on Taxes	0	0	2,700	0	400	0	3,100
Interest Income	0	0	2,500	0	700	0	3,200
Receipts and Recoveries	0	0	50,957	0	0	0	50,957
Plan Review	0	0	0	3,000	300	0	3,300
South Arkansas Fee	0	0	0	70,000	0	(70,000)	0
Fire Works Donation	0	0	0	6,500	0	0	6,500
Grants	0	0	0	557,000	0	0	557,000
Intergovernmental Revenue	0	21,500	0	0	0	0	21,500
Ambulance Fees	0	825,000	0	0	0	0	825,000
Miscellaneous	0	500	0	0	0	0	500
County Subsidy	0	350,000	0	0	0	0	350,000
City Subsidy	72,172	0	0	749,400	0	0	821,572
Total Revenue	72,172	1,197,000	912,707	1,385,900	160,864	(70,000)	3,658,643
Effective Levy Rate	1.471	N/A	3.930	7.853	3.813		4.591

Consolidation of the fire and EMS operations of the agencies results in a combined effective tax rate of \$4.591 per \$1,000 of TAV for the 2012 budget year.

FA Forecast Expense

Fire operations expense calculations merge the 2012 budget data into a consolidated statement. The modification of personnel and the cost increases associated with these modifications will increase wage levels and require a decrease in benefit costs. This consolidated budget is depicted in Figure 129.

Figure 129: FA Budgeted Consolidated Expense, 2012

Description	BVFD	CCEMS	CCFPD	SFD	SAFPD	Adjustments & Eliminations	Consolidated 2012 Budget
Personnel Expense	50,771	621,369	455,421	704,600	0	(8,078)	1,824,083
Materials & Supplies	21,401	484,940	253,290	87,800	53,124	0	900,555
Salida Service Fee	0	0	0	0	70,000	(70,000)	0
Transfers Out	0	19,700	0	0	0	0	19,700
Debt	0	0	125,194	0	37,731	0	162,925
Capital Expenditures	0	155,000	78,302	11,500	0	0	244,802
Grant Expense	0	0	500	582,000	0	0	582,500
Total Expenditures	72,172	1,281,009	912,707	1,385,900	160,855	(78,078)	3,734,565

Cost decrease in wages and benefits total under an FA model in the baseline year is \$8,078.

FA Forecast Debt Expense

Existing debt for the five agencies is assumed to follow the new organization. In the figure below, the amortization table of future debt is shown.

Figure 130: FA Consolidated Debt

Year	BVFD	CCEMS	CCFPD	SFD	SAFPD	Consolidated Debt
2012	0	0	125,194	0	37,731	162,925
2013	0	0	125,194	0	37,731	162,925
2014	0	0	125,194	0	37,731	162,925
2015	0	0	125,194	0	37,731	162,925
2016	0	0	20,866	0	37,731	58,597
2017	0	0	0	0	37,731	37,731
2018	0	0	0	0	37,731	37,731
2019	0	0	0	0	37,731	37,731
2020	0	0	0	0	37,731	37,731
2021	0	0	0	0	37,731	37,731

FA Forecast Revenue, 2012 – 2017

Figure 131 details the calculation of consolidated revenue for the new organization, projected to 2017. Included in the property revenue is the assumption that the new entity's tax rate will be established at 2012 budget effective rate of the consolidated organization calculated above of 4.591 per thousand of assessed property value. All other line items have been increased by the ten-year average CPI of 1.98 percent.

Figure 131: FA Consolidated Revenue, 2012 – 2017

Description	Consolidated 2012 Budget	2013	2014	2015	2016	2017
Property Taxes	909,014	1,735,448	1,747,387	1,766,827	1,790,739	1,819,183
Specific Ownership Taxes	107,000	109,119	111,279	113,482	115,729	118,021
Penalties And Interest on Taxes	3,100	3,161	3,224	3,288	3,353	3,419
Interest Income	3,200	3,263	3,328	3,394	3,461	3,530
Receipts and Recoveries	50,957	51,966	52,995	54,044	55,114	56,206
Plan Review	3,300	3,365	3,432	3,500	3,569	3,640
South Arkansas Fee	0	0	0	0	0	0
Fire Works Donation	6,500	6,629	6,760	6,894	7,030	7,169
Grants	557,000	0	0	0	0	0
Intergovernmental Revenue	21,500	21,926	22,360	22,803	23,254	23,714
Ambulance Fees	825,000	841,335	857,993	874,982	892,306	909,974
Miscellaneous	500	510	520	530	541	551
County Subsidy	350,000	356,930	363,997	371,204	378,554	386,050
City Subsidy	821,572	0	0	0	0	0
Total Revenue	3,658,643	3,133,652	3,173,276	3,220,948	3,273,651	3,331,457
Effective Levy Rate	4.591	4.591	4.591	4.591	4.591	4.591

The county subsidy remains as a revenue line item as Salida does not collect property taxes but receives a subsidy from the county. In the new FA, a mechanism must be identified to continue the current practice or establish property tax revenue for the new FA.

Figure 132: FA Consolidated Expense, 2012 – 2017

Description	Consolidated 2012 Budget	2013	2014	2015	2016	2017
Personnel Expense	1,824,083	1,869,685	1,916,427	1,964,338	2,013,446	2,063,782
Materials & Supplies	900,555	918,386	936,570	955,114	974,025	993,311
Salida Service Fee	0	0	0	0	0	0
Transfers Out	19,700	20,090	20,488	20,894	21,307	21,729
Debt	162,925	162,925	162,925	162,925	58,597	37,731
Capital Expenditures	244,802	153,525	159,043	164,671	168,800	48,319
Grant Expense	582,500	106,514	109,924	97,434	99,945	99,955
Total Expenditures	3,734,565	3,231,125	3,305,377	3,365,376	3,336,120	3,264,827

A consolidated capital replacement plan is not included in the expense numbers. The new FA will need to develop a capital replacement plan and encumber the funds for future purchases.

FA Summary of Operations

Summarized in Figure 133 is the revenue and expenditure activity for 2012 through 2017.

Figure 133: FA Operations Consolidated, 2012 – 2017

Description	Consolidated 2012 Budget	2013	2014	2015	2016	2017
Beginning Balance	1,584,523	1,508,601	1,411,128	1,279,026	1,134,599	1,072,131
Revenue	3,658,643	3,133,652	3,173,276	3,220,948	3,273,651	3,331,457
Expenditures	3,734,565	3,231,125	3,305,377	3,365,376	3,336,120	3,264,827
Ending Balance	1,508,601	1,411,128	1,279,026	1,134,599	1,072,131	1,138,761

The financial summary for operation of an FA shows that funds are forecast to be adequate through 2017.

Optional Staffing

An option to Strategy B: is the addition of career staffing in Buena Vista to provide immediate initial emergency response to the Town and the north end of Chaffee County. This option would be an adjunct, not a replacement to the current response provided by volunteer firefighters.

The option involves the deployment of two full time firefighters per day. To accomplish this level of coverage, six firefighters must be added, two personnel to cover each shift, A, B and C. Wages and benefits were calculated on the average of the 2012 budget for a full time Salida FD firefighter. In addition to the salary cost, operating costs will be incurred for firefighting equipment and supplies. ESCI calculated operating costs for the six positions based on the 9.3 percent of salaries for Salida FD.

Figure 134 shows the projected cost of the staffing option from 2012 through 2017.

Figure 134: Buena Vista Staffing Option Cost, 2012 – 2017

Description	2012 Budget	2013	2014	2015	2016	2017
Salaries	36,844	37,765	38,709	39,677	40,669	41,686
Overtime @ 7.1% of Wages	2,616	2,681	2,748	2,817	2,887	2,960
Benefits and Taxes	13,757	14,101	14,453	14,815	15,185	15,565
Total One Firefighter	53,217	54,547	55,911	57,309	58,742	60,210
Total Six Firefighters	319,302	327,284	335,466	343,853	352,449	361,260
Operating Supplies	29,695	30,437	31,198	31,978	32,778	33,597

Total wages, benefits, and operating supply costs for the option of adding six firefighter positions in 2012 are \$348,997.

FA Fiscal Considerations

- An FA will create a financial benefit but will also have challenges in establishing a new organizational structure and culture.

Conclusion

An FA allows the five agencies to have input on services to be provided, levels of service, budgets, and governance decisions. This strategy can provide cost avoidance in administrative, operational, and capital costs. It allows for long-term planning for facilities, apparatus, equipment, and staffing. Additional cost avoidance could be made with a reduction in the number of fire apparatus, disposal of surplus capital facilities, and reduced expenditures for maintaining and operating fewer fire stations.

Overarching Strategy C – Merge SFD into SAFPD

Level of Cooperation

- Governance

Timeline for Completion

- Short Term

Section

- Administration

Affected Stakeholders

- SAFD and SAFPD

Objective

- Annex the City of Salida into the South Arkansas Fire Protection District.
- Combine all SFD operational and administrative elements with SAFPD and abdicate policy decisions to the SAFPD.

Summary

The annexation of the City of Salida by SAFPD would have two distinctive impacts on the SFD and City residents:

1. The city residents would pay South Arkansas property taxes (the levy rate is currently \$3.615) to fund their share of the fire and EMS system. The City of Salida would divest itself of managing a fire department, turning that responsibility over to South Arkansas. Salida will continue to collect sales taxes at their customary rate to fund the general operation of the city, but without the expense of operating a fire department, which effectively creates a windfall. It is appropriate then for Salida to subsidize the South Arkansas Fire Protection District for the financial burden of managing the fire services.
2. Control of the SFD would transfer from the Salida City Council to the South Arkansas Board of Directors.

Discussion

In the 2012 budget, the City of Salida transferred \$1,385,900 from the General Fund (inclusive of SFD-generated user fees, donations, and grants) to support fire department operations. In addition, the City of Salida provides an estimated \$54,850 in in-kind services, such as Human Resources, Information Technology, Legal and Financial services. South Arkansas paid the city \$70,000 per year to provide fire services to district patrons. These expenses roughly offset, since SAFPD will need to provide those infrastructure services or contract with the City of Salida to continue to provide those services on behalf of the district.

Critical Issues

- Policy level
 - The fire department's structure would remain unchanged. The fire district's policies would become the fire department's policies.
 - A transfer of oversight authority for the fire department from the City Council to the Board of Directors would occur.
- Staff level
 - No staffing level changes would be required.
 - The Salida fire chief position should be kept as an interim position until this option is fully vetted. If the decision is made to move forward with this strategy, the fire chief position should be filled by SAFPD.
 - The new fire chief will lead the process of transition.
- Financial Considerations
 - The annexed fire department will become property tax supported.
 - Handling of personnel and in-kind costs currently paid for by the City need to be resolved. It is recommended that an intergovernmental agreement be drafted to have these services continue from the City and paid by the District.

Guidance

- Conduct regular joint board/council meetings. Include interim fire chief in discussions.
- Engage operational employee groups in regular discussions, fielding questions regularly. Reassure employees to the extent possible, but always be honest. Don't speculate, but express your collective intentions. There is no such thing as over-communicating when job security is at stake.
- Establish a focus group of external stakeholders to use as a sounding board on the concept. Select people of influence and keep them engaged. Listen carefully to their advice and concerns. As with employees, be honest and don't speculate, but express your collective intentions.
- Develop a communication strategy to keep the citizens of the combined service area informed as implementation appears a likely result of the discussions.

Fiscal Considerations

- The question of subsidy by the City of Salida must be addressed to determine the level of property tax support required to administer the district.
- Financial information included in this strategy is the same information that was provided in the current condition section of the report. In this strategy the information is consolidated.

Taxable Assessed Value Forecast

Projected property TAV growth assumptions are the same as presented in the current conditions section of the report.

Figure 135: Combined TAV Growth Assumptions, 2012 – 2017

Year	SFD	SAFPD	Consolidated TAV
2012	95,423,207	37,884,746	133,307,953
2013	93,991,859	37,505,899	131,497,757
2014	93,051,940	37,318,369	130,370,309
2015	93,051,940	37,504,961	130,556,901
2016	93,517,200	37,880,011	131,397,211
2017	94,452,372	38,448,211	132,900,583

Revenue Forecast

Figure 136: SFD and SAFPD Revenue Consolidated, 2012

Description	SFD	SAFPD	Adjustments & Eliminations	Consolidated 2012 Budget
Property Taxes	0	144,464	0	144,464
Specific Ownership Taxes	0	15,000	0	15,000
Penalties And Interest on Taxes	0	400	0	400
Interest Income	0	700	0	700
Receipts and Recoveries	0	0	0	0
Plan Review	3,000	300	0	3,300
South Arkansas Fee	70,000	0	(70,000)	0
Fire Works Donation	6,500	0	0	6,500
Grants	557,000	0	0	557,000
City Subsidy	749,400	0	0	749,400
Total Revenue	1,385,900	160,864	(70,000)	1,476,764
Effective Levy Rate	7.853	3.813		6.705

The levy rate shown listed for SFD is the effective rate that would have been charged if the department was fully funded—like a fire district—using only property taxes.

Figure 137: SAFPD Revenue Consolidated, 2012 – 2017

Description	Consolidated 2012 Budget	2013	2014	2015	2016	2017
Property Taxes	144,464	881,692	874,133	875,384	881,018	891,098
Specific Ownership Taxes	15,000	15,297	15,600	15,909	16,224	16,545
Penalties And Interest on Taxes	400	408	416	424	433	441
Interest Income	700	714	728	742	757	772
Receipts and Recoveries	0	0	0	0	0	0
Plan Review	3,300	3,365	3,432	3,500	3,569	3,640
South Arkansas Fee	0	0	0	0	0	0
Fire Works Donation	6,500	6,629	6,760	6,894	7,030	7,169
Grants	557,000	0	0	0	0	0
City Subsidy	749,400	0	0	0	0	0
Total Revenue	1,476,764	908,105	901,069	902,853	909,031	919,666
Effective Levy Rate	6.705	6.705	6.705	6.705	6.705	6.705

The above data is calculated using the 2012 consolidated budget's effective tax rate if the FA was funding entirely by property taxes.

Expenditures Forecast

Expenditures for the consolidated SFD and SAFPD are consolidated in the figure below:

Figure 138: SFD and in SAFPD Expenditures 2012 Budget Consolidated

Description	SFD	SAFPD	Adjustments & Eliminations	Consolidated 2012 Budget
Personnel Expense	704,600	0	0	704,600
Materials & Supplies	87,800	53,124	0	140,924
Salida Service Fee	0	70,000	(70,000)	0
Transfers Out	0		0	0
Debt		37,731	0	37,731
Capital Expenditures	11,500		0	11,500
Grant Expense/Projects	582,000		0	582,000
Total Expenditures	1,385,900	160,855	(70,000)	1,476,755

Figure 139 depicts the estimated consolidated fire expenses for the new organization. Personnel and fringe benefits are increased by 2.5 percent per year; all other line items have been increased by the ten-year average CPI of 1.98 percent. Debt is included at the current amortization schedule.

Figure 139: SFD and SAFPD Expenditures 2012 – 2017

Description	Consolidated 2012 Budget	2013	2014	2015	2016	2017
Personnel Expense	704,600	722,215	740,270	758,777	777,747	797,190
Materials & Supplies	140,924	143,714	146,560	149,462	152,421	155,439
Salida Service Fee	0	0	0	0	0	0
Transfers Out	0	0	0	0	0	0
Debt	37,731	37,731	37,731	37,731	37,731	37,731
Capital Expenditures	11,500	11,728	11,960	12,197	12,438	12,684
Grant Expense/Projects	582,000	106,004	109,404	96,904	99,404	99,404
Total Expenditures	1,476,755	1,021,392	1,045,925	1,055,070	1,079,741	1,102,448

Financial Summary

The figure below is the summary of operations for a consolidated SFD and SAFPD from 2012 through 2017:

Figure 140: Consolidated SFD and SAFPD Operations Summary, 2012 – 2017

Description	Consolidated 2012 Budget	2013	2014	2015	2016	2017
Beginning Balance	221,430	221,439	108,153	(36,704)	(188,921)	(359,630)
Revenue	1,476,764	908,105	901,069	902,853	909,031	919,666
Expenditures	1,476,755	1,021,392	1,045,925	1,055,070	1,079,741	1,102,448
Ending Balance	221,439	108,153	(36,704)	(188,921)	(359,630)	(542,412)

Conclusion

Annexation of the City of Salida to the SAFPD is financially not sustainable without incremental contributions from the City. The above values exclude capital purchases.

Overarching Strategy D – Merge BVFD into CCFPD

Level of Cooperation

Governance

Timeline for Completion

Short Term

Section

Administration

Affected Stakeholders

BVFD and CCFPD

Objective

- Annex the Town of Buena Vista into the Chaffee County Fire Protection District
- Combine all BVFD operational and administrative elements with CCFPD and abdicate policy decisions to the CCFPD.

Summary

The annexation of the Town of Buena Vista by CCFPD would have two distinctive impacts on the BVFD and Town residents:

- The town residents would pay Chaffee County Fire Protection District property taxes (in 2012, the tax levy is \$3.936) to fund their share of the fire and EMS system. The Town of Buena Vista would divest itself of managing a fire department, turning that responsibility over to Chaffee County Fire Protection District. Buena Vista will continue to collect sales taxes at their customary rate to fund the general operation of the town, but without the expense of operating a fire department, which effectively creates a windfall. It is appropriate then for Buena Vista to subsidize the Chaffee County Fire Protection District for the financial burden of managing the fire services.
- Control of the BVFD would transfer from the Buena Vista Town Council to the Chaffee County Fire Protection District Board of Directors.

Discussion

The Town of Buena Vista does not budget revenue for the fire department but does consider the fire department operating costs in the total revenue required to operate the Town. In the 2012 budget, Buena Vista is expected to incur \$72,172 in expenses for operating BVFD, which will be funded by the general fund of the Town. Additionally, the Town of Buena Vista provides an estimated \$2,858 in in-kind services, such as human resources, information technology, legal and financial services. This amount should be added to the anticipated total costs of supporting BVFD, bringing the total budget for 2012 to \$75,030.

Critical Issues

- Policy level
 - The fire department's structure would remain unchanged. The fire district's policies would become the fire department's policies.
 - A transfer of oversight authority for the fire department from the Town Council to the Board of Directors would occur.
- Staff level
 - The BVFD fire chief position would be eliminated and the incumbent should be absorbed into the Chaffee County Fire Protection District in an appropriate position out of respect for his former position.

Financial Considerations

- The annexed fire department will become property tax supported.
- The Town of Buena Vista should subsidize Chaffee County Fire Protection District to reduce the property tax burden of the town's citizens, reflecting the windfall the town receives by divesting itself of fire department expenses but maintaining the current level of revenue.

Guidance

- Conduct regular joint board/council meetings. Include the both fire chiefs in merger discussions.
- Engage operational employee and volunteer groups in regular communications, fielding questions.
 - Reassure employees and volunteers to the extent possible, but always be honest. Don't speculate, but express your collective intentions. There is no such thing as over-communicating when job security or life activity is at stake or change is occurring.
- Establish a focus group of external stakeholders to use as a sounding board on the concept.
 - Select people of influence and keep them engaged. Listen carefully to their advice and concerns. As with employees, be honest and don't speculate, but express your collective intentions.
- Develop a communication strategy to keep the citizens of the combined service area informed as implementation appears a likely result of the discussions.

Fiscal Considerations

- The question of subsidy by the Town of Buena Vista must be addressed to determine the level of property tax support required to administer CCFPD.
- Financial information included in this strategy is the same information that was provided in the current condition section of the report. In this strategy the information is consolidated.

Taxable Assessed Value Forecast

The property TAV growth assumptions are the same as presented in the current conditions section of the report.

Figure 141: Combined TAV Growth Assumptions, 2012 – 2017

Year	BVFD	CCFPD	Consolidated TAV
2012	49,072,141	194,531,839	243,603,980
2013	48,090,698	198,422,476	246,513,174
2014	47,850,245	202,390,925	250,241,170
2015	47,850,245	206,438,744	254,288,988
2016	48,089,496	210,567,519	258,657,015
2017	48,570,391	214,778,869	263,349,260

Figure 142: Projected Property Tax Revenue, 2012³⁴

Description	Valuation	Levy Rate	2012 Projected Tax Revenue
Buena Vista	46,795,851	3.936	184,188
Chaffee County FPD	194,531,839	3.936	765,677
Total	241,327,690		949,865

Revenue Forecast

Figure 143: BVFD and CCFPD Revenue Consolidated, 2012

Description	BVFD	CCFPD	Adjustments & Eliminations	Consolidated 2012 Budget
Property Taxes	0	764,550	0	764,550
Specific Ownership Taxes	0	92,000	0	92,000
Penalties And Interest on Taxes	0	2,700	0	2,700
Interest Income	0	2,500	0	2,500
Receipts & Recoveries	0	50,957	0	50,957
City Subsidy	72,172	0	0	72,172
Total Revenue	72,172	912,707	0	984,879
Effective Levy Rate	1.471	3.930		3.435

The rate shown for BVFD is the levy effective rate that would have been charged if the department was fully funded—like a fire district—using only property taxes.

³⁴ Buena Vista would pay CCFPD property taxes at their levy rate, minus any subsidy from the Town of Buena Vista.

Figure 144: BVFD and CCFPD Revenue Consolidated, 2012 – 2017

Description	Consolidated 2012 Budget	2013	2014	2015	2016	2017
Property Taxes	764,550	846,773	859,578	873,483	888,487	904,605
Specific Ownership Taxes	92,000	93,822	95,679	97,574	99,506	101,476
Penalties And Interest on Taxes	2,700	2,753	2,808	2,864	2,920	2,978
Interest Income	2,500	2,550	2,600	2,651	2,704	2,757
Receipts & Recoveries	50,957	51,966	52,995	54,044	55,114	56,206
City Subsidy	72,172	0	0	0	0	0
Total Revenue	984,879	997,863	1,013,661	1,030,616	1,048,731	1,068,022
Effective Levy Rate	3.435	3.435	3.435	3.435	3.435	3.435

The budgeted 2012 effective tax rate was used to calculate property tax revenue. Using this method of revenue generation, the City subsidy of the fire department would not be required.

Expenditures Forecast

Figure 145 depicts the estimated consolidated fire expenses for the new organization. Personnel and fringe benefits are increased by 2.5 percent per year; all other line items have been increased by the ten-year average CPI of 1.98 percent. Debt is included at the current amortization schedule.

Figure 145: BVFD and CCFPD Expenditures Budget Consolidated, 2012

Description	BVFD	CCFPD	Adjustments & Eliminations	Consolidated 2012 Budget
Personnel Expense	50,771	455,421	0	506,192
Materials & Supplies	21,401	253,290	0	274,691
Debt	0	125,194	0	125,194
Capital Expenditures	0	78,302	0	78,302
Grant Expense	0	500	0	500
Total Expenditures	72,172	912,707	0	984,879

Figure 146: BVFD and CCFPD Expenditures, 2012 – 2017

Description	Consolidated 2012 Budget	2013	2014	2015	2016	2017
Personnel Expense	506,192	518,847	531,818	545,113	558,741	572,710
Materials & Supplies	274,691	280,130	285,676	291,333	297,101	302,984
Debt	125,194	125,194	125,194	125,194	20,866	0
Capital Expenditures	78,302	79,852	81,433	83,046	84,690	86,367
Grant Expense	500	510	520	530	541	551
Total Expenditures	984,879	1,004,533	1,024,642	1,045,217	961,939	962,612

Financial Summary

The figure below is the summary of operations for a consolidated BVFD and CCFPD from 2012 through 2017:

Figure 147: Consolidated BVFD and CCFPD Operations Summary, 2012 – 2017

Description	Consolidated 2012 Budget	2013	2014	2015	2016	2017
Beginning Balance	1,060,365	1,060,365	1,053,695	1,042,714	1,028,113	1,114,904
Revenue	984,879	997,863	1,013,661	1,030,616	1,048,731	1,068,022
Expenditures	984,879	1,004,533	1,024,642	1,045,217	961,939	962,612
Ending Balance	1,060,365	1,053,695	1,042,714	1,028,113	1,114,904	1,220,314

Conclusion

Annexation of the Town of Buena Vista to the CCFPD is financially sustainable. The financial analysis of the strategy shows that the property tax method of providing revenue to the CCFPD will result in a 15 percent increase in operation fund balance by 2017.

This strategy allows for long-term planning for facilities, apparatus, equipment, and staffing. Additional cost avoidance could be by a reduction in the number of fire apparatus, disposal of surplus capital facilities, and reduced expenditures for maintaining and operating fewer fire stations.

Overarching Strategy E – IGA SFD and CCEMS

Level of Cooperation

- Governance

Timeline for Completion

- Short Term

Section

- Administration

Affected Stakeholders

- SFD and CCEMS (Chaffee County)

Objective

- Provide for an integrated EMS system between CCEMS, SFD, and Heart of the Rockies Regional Medical Center.
- Provide consistent emergent and non-emergent inter-facility EMS transport service.
- Provide additional EMS unit and personnel resources.
- Increased CCEMS ambulance service revenue.
- Provide BLS transport with cross-trained fire department personnel.
- Provide inter-facility transport services through collaboration with Heart of the Rockies Regional Medical Center.

Summary

Medical incidents in the City of Salida currently involve all on-duty fire and fire/EMS personnel of SFD and the CCEMS transport unit assigned to cover the south end of Chaffee County. Adding a BLS EMS transport unit to the SFD and cross-training CCEMS personnel in fire suppression adds flexibility to the system. With this strategy it is envisioned that SFD personnel would respond with two personnel and have the capability to transport patients requiring a BLS level of care.

Heart of the Rockies Regional Medical Center has a need to transport some patients to medical facilities outside of Chaffee County. CCEMS has a limited capacity for providing inter-facility EMS transport services. The additional capacity of one BLS transport unit would allow a CCEMS ALS unit to remain available for response and immediate response for BLS inter-facility transfers.

Discussion

SFD responds to fire and EMS incidents in the City of Salida and the South Arkansas Fire Protection District. CCEMS responds under a tiered response model to all EMS incidents in Chaffee County including the City of Salida. SFD answer medical incidents with a fire apparatus and the three on-duty firefighters, CCEMS responds with an ALS transport unit and two medically trained personnel; one of the CCEMS personnel being a paramedic. With the current tiered response model, SFD arrives and begins patient care and CCEMS personnel provide continued care and transportation to Heart of the Rockies Regional Medical Center for definitive care.³⁵ The current deployment commits all five on-duty personnel, three SFD and two CCEMS, to a single EMS incident.

Strategy E, an IGA between SFD and CCEMS would involve:

- Adding one FTE per shift to the daily staffing of SFD.
- Moving an existing or acquired BLS EMS transport unit to SFD.
- Cross train CCEMS personnel in basic fire suppression (Fire Fighter I certification for initial response to all emergent incidents.
- Cooperative agreement with Heart of the Rockies Regional Medical Center to provide inter-facility transports.

Strategy E would increase the availability of full-time fire and EMS personnel for emergency response to medical incidents. The concept calls for one CCEMS unit and a SFD EMS transport unit with two medically trained personnel be dispatched to medical emergencies. In situations where SFD arrives first and determines that the patient requires a basic level of care and transport, the CCEMS ALS unit can be recalled. For patients requiring an advanced life support, CCEMS would continue. The most appropriate unit would transport to the medical center. With both CCEMS and SFD EMS units committed, two personnel remain available a concurrent event. When one ambulance (medic unit) transports to the hospital it leaves an ambulance available without moving the north CCEMS unit south or recalling off-duty personnel.

The transfer of patients from one medical facility to another has become a significant issue for hospitals, care facilities, and EMS transport agencies. Patient transfers between facilities or between facilities and a specialized care centers have increased as a result of medical consolidation (regionalization), specialization, and facility designation by payers. The

³⁵ ESCI found that the CCEMS quarters location to be ideal for serving the greatest geographic area and responding to medical emergencies in Poncha Springs and Salida.

emergence of specialty systems (e.g., cardiac centers, stroke centers) often determines the ultimate destination of patients rather than proximity of a facility. Additional transfers may be necessary if payers provide reimbursement only for specific facilities within their own plans.

Greater integration of inter-facility transport service into the EMS pre-hospital system could generate additional revenue. The revenue generated by providing inter-facility EMS transport service could be used to increase system resources; ambulances and personnel would be available to augment the EMS system during peak activity times. These resources could be flexibly scheduled to meet peak and non-peak service needs and times. Integrating inter-facility EMS transport service into an EMS and fire-based ambulance service would result in an integrated EMS system.

CCEMS provides many of the inter-facility transport service from Heart of the Rockies Regional Medical Center to medical treatment outside of Chaffee County. Given that there are only two staffed ambulances in the County an inter-facility transport request or one EMS call for service has a profound impact on CCEMSs ability to provide prompt service. With Strategy E and the addition of one BLS transport unit will offer an opportunity to provide inter-facility EMS transport service. Benefits include:

- Greater depth of ambulance resources to meet requests for inter-facility transports from Heart of the Rockies Regional Medical Center.
- Lower cost to patients not requiring air transportation that presently may be flown because of EMS personnel availability.
- Untapped revenue resource for CCEMS and SFD.

Critical Issues

Fire, EMS system, and medical center administrators must carefully study current and future inter-facility service demands to ensure sufficient resources (e.g. ambulances and personnel). Adequate resources need to be available to provide acceptable service (defined response time goals) for emergency and non-emergency calls. In addition to the assessment of the system, policy development and QA/QI are necessary so that services achieve the agreed upon objectives.

Inter-facility Transport Service

Integration of EMS inter-facility transport (IFT) requires:

- Cross training of CCEMS personnel in basic fire suppression

- Education and training of the SFD EMS personnel
- Legal authority including IFT protocols
- Cost reimbursement, funding, and allocation for the service
- Integration of the IFT service into the fire and healthcare system
- Staffing, equipment and apparatus requirements
- Medical direction
- Evaluation of “Best Practices”
- Review of fees for service schedule
- Treatment and transport protocols
- Evaluate billing services for inter-facility EMS transports, whether to use one of the IGA agencies or continuing to contract with an outside vendor

Guidance

- Meet and confer with representatives from all three entities
- Develop a committee to address how the initiative will be implemented.
- Evaluate other ambulance transport systems that provide inter-facility transport service especially integrated fire/EMS-based systems.
- Address identified critical issues.
- Present a comprehensive inter-facility EMS transport service plan to the Chaffee County Commission for adoption and licensing.

Fiscal Considerations

- Inter-facility transport service could provide additional revenue for the EMS transport system.
- Additional equipment, supplies and training costs.
- Inter-facility transport would provide additional personnel and ambulances for the EMS system.
- An issue since the strategy was developed is that the medical center signed a six-month contract with AMR to do inter-facility transports. There are approximately 200 inter-facility transports. A potential deal killer for the strategy is if SFD and CCEMS are unable to secure a long-term contract for inter-facility transports.

Taxable Assessed Value Forecast

Property TAV growth assumptions are the same as presented in the current conditions section of the report.

Figure 148: Combined TAV Growth Assumptions, 2012 – 2017

Year	CCEMS	SFD	Consolidated TAV
2012	0	95,423,207	95,423,207
2013	0	93,991,859	93,991,859
2014	0	93,051,940	93,051,940
2015	0	93,051,940	93,051,940
2016	0	93,517,200	93,517,200
2017	0	94,452,372	94,452,372

Revenue Forecast

Figure 149: CCEMS and SFD Revenue Consolidated, 2012

Description	CCEMS	SFD	Adjustments & Eliminations	Consolidated 2012 Budget
Property Taxes	0	0	0	0
Specific Ownership Taxes	0	0	0	0
Penalties And Interest on Taxes	0	0	0	0
Interest Income	0	0	0	0
Receipts and Recoveries	0	0	0	0
Plan Review	0	3,000	0	3,000
South Arkansas Fee	0	70,000	0	70,000
Fire Works Donation	0	6,500	0	6,500
Grants	0	557,000	0	557,000
Intergovernmental Revenue	21,500	0	0	21,500
Ambulance Fees	825,000	0	0	825,000
Miscellaneous	500	0	0	500
County Subsidy	350,000	0	0	350,000
City Subsidy	0	749,400	0	749,400
Total Revenue	1,197,000	1,385,900	0	2,582,900
Effective Levy Rate	N/A	7.853		7.853

The rate shown for SFD is the effective levy rate that would have been charged if the department was fully funded—like a fire district—using only property taxes.

Figure 150: CCEMS and SFD Revenue Consolidated, 2012 – 2017

Description	Consolidated 2012 Budget	2013	2014	2015	2016	2017
Property Taxes	0	0	0	0	0	0
Plan Review	3,000	3,059	3,120	3,182	3,245	3,309
South Arkansas Fee	70,000	71,386	72,799	74,241	75,711	77,210
Fire Works Donation	6,500	6,629	6,760	6,894	7,030	7,169
Grants	557,000	0	0	0	0	0
Intergovernmental Revenue	21,500	21,926	22,360	22,803	23,254	23,714
Ambulance Fees	825,000	841,335	857,993	874,982	892,306	909,974
Miscellaneous	500	510	520	530	541	551
County Subsidy	350,000	356,930	363,997	371,204	378,554	386,050
City Subsidy	749,400	854,927	883,813	892,811	922,873	951,554
Total Revenue	2,582,900	2,156,702	2,211,363	2,246,646	2,303,514	2,359,532

The projected revenue source includes using the current structure of City and County subsidies.

Expenditures Forecast

Figure 151 depicts the estimated consolidated fire expenses for the new organization. Personnel and fringe benefits are increased by 2.5 percent per year; all other line items have been increased by the ten-year average CPI of 1.98 percent.

Figure 151: CCEMS and SFD Expenditures Budget Consolidated, 2012

Description	CCEMS	SFD	Adjustments & Eliminations	Consolidated 2012 Budget
Personnel Expense	621,369	704,600	72,648	1,398,617
Materials & Supplies	484,940	87,800	0	572,740
Salida Service Fee	0	0	0	0
Transfers Out	19,700	0	0	19,700
Debt	0	0	0	0
Capital Expenditures	155,000	11,500	0	166,500
Grant Expense	0	582,000	0	582,000
Total Expenditures	1,281,009	1,385,900	72,648	2,739,557

Figure 152: CCEMS and SFD Expenditures, 2012 – 2017

Description	Consolidated 2012 Budget	2013	2014	2015	2016	2017
Personnel Expense	1,398,617	1,433,582	1,469,422	1,506,158	1,543,811	1,582,407
Materials & Supplies	572,740	584,080	595,645	607,439	619,466	631,732
Salida Service Fee	0	0	0	0	0	0
Transfers Out	19,700	20,090	20,488	20,894	21,307	21,729
Debt	0	162,925	162,925	162,925	58,597	37,731
Capital Expenditures	166,500	93,202	119,039	121,396	123,799	126,250
Grant Expense	582,000	106,004	109,924	96,904	99,404	99,404
Total Expenditures	2,739,557	2,399,884	2,477,443	2,515,715	2,466,384	2,499,252

Financial Summary

The figure below is the summary of operations for a consolidated CCEMS and SFD from 2012 through 2017:

Figure 153: Consolidated CCEMS and SFD Operations Summary, 2012 – 2017

Description	Consolidated 2012 Budget	2013	2014	2015	2016	2017
Beginning Balance	302,728	146,071	(97,111)	(363,191)	(632,259)	(795,130)
Revenue	2,582,900	2,156,702	2,211,363	2,246,646	2,303,514	2,359,532
Expenditures	2,739,557	2,399,884	2,477,443	2,515,715	2,466,384	2,499,252
Ending Balance	146,071	(97,111)	(363,191)	(632,259)	(795,130)	(934,850)

Social Considerations

- Emergency services personnel generally prefer emergency response and transport over non-emergency transport. A thorough, well thought out and clearly communicated process of implementation including a discussion of the opportunities and benefits of providing inter-facility is important.

Conclusion

Joining SFD and CCEMS under terms of an IGA could increase costs but has the potential of improving the level of fire and EMS service to the community. With a contract for inter-facility transports the strategy could result in increased revenue and cost avoidance for patients and Heart of the Rockies Regional Medical Center.

Overarching Strategy F – CCFPD and SAFPD District Boundary Readjustment

Level of Cooperation

- Governance

Timeline for Completion

- Mid Term

Section

- Administration

Affected Stakeholders

- CCFPD and SAFPD

Objective

- Adjust fire protection district boundaries to create contiguous service areas, eliminating islands.
- Adjust fire protection district service area boundaries to create a more efficient service delivery model.

Summary

South Arkansas Fire Protection District (SAFPD) has several “islands” of service area within Chaffee County Fire Protection District’s (CCFPD) service area. Likewise, CCFPD has several remote islands and peninsulas which are inefficient to serve and which are much closer and more efficient for SAFPD to serve.

These island areas should be modified to reflect a more efficient service delivery model and to establish contiguous service area boundaries. The current political lines are counterintuitive for service delivery and create obstacles to the long-range planning efforts of each district.

Discussion

Property owners and residents living in these islands areas and peninsulas pay for services based on the funding structure of the fire protection district they reside. However, that district likely does not routinely serve those same residents because the response assets of the district are not the closest resource. Examples include areas in South Arkansas Fire Protection District that are better served by Chaffee County Fire Protection District, and areas in Chaffee County Fire Protection District which are better served by South Arkansas Fire Protection District (Salida Fire Department).

Discussion should begin between the two districts at the board of directors level first, then engage affected residents. Options include:

- 1) Annex or de-annex areas to the most appropriate service provider based on service capability alone.
- 2) Swap roughly equal areas between districts from a revenue perspective to provide a more cost-effective service area for each affected district.
- 3) Combine the service providers of Salida Fire Department, South Arkansas Fire Protection District, Poncha Springs and the south portion of Chaffee County Fire Protection District into a single south county district.

Laws pertaining to boundary changes for fire protection districts are found in Colorado Revised Statutes Title 32, Special Districts, Special Districts Act, Special Districts Provisions Article 1.

Property tax levy rate are closely aligned between the two districts and would have little impact on property owners. SAFPD had a 2012 levy of 3.936 and 3.615 in CCFPD. However, whether the districts chose to make a change or not, the district with the burden of providing service must remain financially viable in order to adequately serve the area.

Conclusion

Adjusting the fire protection district boundaries of SAFPD and CCFPD to create contiguous service areas eliminates islands and is a sensible decision. It ends spaces where fire and EMS services delivery varies between adjoining properties. The importance of this strategy is diminished or eliminated if a decision is made to create a single fire and EMS organization (Overarching Strategy B – Countywide FA (Fire Authority) including CCEMS)

Findings and Recommendations

Any cooperative venture between the Chaffee County, fire departments, and fire protection districts presents the organizational leaders with a series of challenges. Successful implementation of this proposal will require that significant matters be addressed regardless if or which form or level of cooperative effort is chosen.

Findings

During this process, ESCI found that BVFD, CCEMS, CCFPD, SFD, and SAFPD had characteristics that are found in progressive emergency service agencies. However, the agencies planning and service delivery are carried out autonomously. Decisions on service delivery, capital resource deployment, and staffing are made with the best interest of the citizens served in each emergency service provider's area of responsibility but independently. This results in varying levels of service throughout the County and the fire and EMS departments not capturing opportunities for efficiencies. Opportunities exist for the five emergency service agencies to provide a higher level of service with no cost increase and the potential for cost avoidance.

Based on all of the preceding work of developing organizational Strengths, Weaknesses, Opportunities and Challenges (SWOC), evaluation of current conditions, fiscal analysis, and based on our experience with other projects of similar character and scope, we draw certain conclusions regarding Buena Vista Fire Department, Chaffee County EMS, Chaffee County Fire Protection District, Salida Fire Department, and South Arkansas Fire Protection District, the region, and the opportunities for cooperative efforts. A summary of those findings follow:

- **BVFD, CCEMS, CCFPD, SFD, and SAFPD are Interdependent** – The emergency service agencies of Chaffee County have historically created long-term plans and generally functioned in an autonomous fashion. Collaboration between departments has been motivated by individual agency need. More recently, internal and external forces have encouraged a more widespread policy of mutual interdependence and cooperation between agencies. Chief among the pressures are monetary and political. The trend is likely to continue as the cost of providing emergency service escalates, and as the uncertain funding system persists.
- **BVFD, CCEMS, CCFPD, SFD, and SAFPD Value Customer Service** – During the work leading to this report, the fire departments, fire districts, and CCEMS consistently expressed and demonstrated a focus of serving those who live, work, and play in the area.
- **BVFD, CCEMS, CCFPD, SFD, and SAFPD Meet the Public's Service Expectation** – While not empirically verifiable, there is a general impression across the region that the fire departments, fire districts and CCEMS do a good job of satisfying the service expectations

of the public within the limits of geography, transportation, and funding. A perception of duplicated efforts by the agencies was also expressed by many of the interviewees.

- **Existing Limited Partnerships Reduce Duplicated Effort** – BVFD, CCEMS, CCFPD, SFD, and SAFPD have eliminated some regional duplication through active interagency cooperation. Examples include automatic/mutual aid (albeit limited) and of great significance, this project. These successful programs hint at the high potential value of a policy encouraging greater intergovernmental collaboration.
- **Volunteers and Part-time (Reserve) Employees are the Backbone of Fire Protection and EMS** – Volunteer and reserve firefighter/EMTs and EMTs are an important part of the community and the fire departments and EMS. BVFD, CCEMS, CCFPD, and SFD maintain a roster of committed volunteer and part-time firefighters and EMTs. The need for volunteer and reserve firefighters in Chaffee County fire and EMS service will not be eliminated by any of the partnership opportunities detailed in this report. Rather, the intention is to administratively support and strengthen the volunteer program.
- **Other Organizations Should be Included in Partnership Initiatives** – Organizations outside of BVFD, CCEMS, CCFPD, SFD, and SAFPD that participated in this work should be included when developing cooperative efforts. Heart of the Rockies Regional Medical Center (HRRMC) has a large stake in any decisions that could affect or change the provision of fire and EMS services. Chaffee County Combined Communications Center (CCCCC) as the point of connection between the agencies is without question integral to any plan development process.
- **Chaffee County is Geographically Diverse and Unique** – The geography of the Chaffee County includes a variety of waterways, rock formations, open land, mountains, and rugged terrain. All add to the allure of the region as a desirable place to live or visit; however, such features also include the expectation of hazards from flooding, snow, wildfire, rockslides, and erosion-related mudslides. Individually, the agencies do not have the resources to mitigate such disastrous events alone.
- **Chaffee County Region is Politically Diverse** – The highly varied geography of the County influences where and how people choose to live. Consequently, the City of Salida, and towns of Poncha Springs and Buena Vista and the unincorporated community gain its political identity from the people who live in it and who participate in the governance. It is no surprise therefore, that the culture and politics within individual communities of the area are as diverse as the topography.

The Regional Transportation System Limits Emergency Response – Much of Chaffee County is remote with a sole route of access and egress. In general, the areas expanse contributes to difficulties in efficient emergency response. Long travel distances will continue to affect response times in the future, equating to increased protection cost because of the necessity of a greater number of fire stations. Vast expanses of open land with little population increase the difficulty in delivering service.

- **Internal and External Forces Act on BVFD, CCEMS, CCFPD, SFD, and SAFPD** – Internal pressure from increasing demands on the administration and support staff of the agencies, an overall increase in workload and community expectations, and uncertain funding tend to create a sense of urgency, leading to a general inclination to “do something.” While a merger or consolidation under an FA would ultimately provide

increased efficiency, the initial intricacy of combining the organizations is complex and will require additional efforts from fire and EMS leadership.

- **An Integration, Alliance, or Consolidation as an FA of BVFD, CCEMS, CCFPD, SFD, and SAFPD has Local Political Support** – The governing bodies of BVFD, CCEMS, CCFPD, SFD, and SAFPD appear to be genuinely interested in improving the efficiency and quality of fire protection and emergency medical service. Officials expressed openness to virtually any suggestion of intergovernmental collaboration that would maintain or improve service without increasing in the burden on taxpayers.
- **Opportunities Exist for Cost Avoidance** – An ability to reduce duplication and/or improve efficiency exists for BVFD, CCEMS, CCFPD, SFD, and SAFPD. Such opportunities include the development of standardized specifications for fire apparatus, the creation of a unified fire training division, administrative services, a reduction in the number of reserve apparatus, adjusting jurisdictional boundaries, and sharing of unique resources (like specialty teams).
- **Formation of and FA is Feasible** – BVFD, CCEMS, CCFPD, SFD, and SAFPD should consolidate under the provision of an FA (Fire Authority) (Overarching Strategy B – Countywide FA (Fire Authority) including CCEMS, page 186). While the goal of a single unified agency is attainable, in the near term an IGA provides the best opportunity for success. An IGA would result in reduced duplication and increased efficiency at the administrative and operational level. Long-term, extending the agreement with a goal of a single service provider is forecast to save money, reduce the complexity of managing independent organizations, and enhance the ability of the agencies to plan and manage fire and emergency medical service in the region.

Recommendations

It is common for those in the fire service to tout themselves, or their department in terms such as “a pride-driven organization that is at their best every day,” and “the best by test,” or more simply, “the best.” The true mark of quality of the best fire departments however, is those that work continuously for measurable improvement in organizational performance. By undertaking this agency evaluation and feasibility study, the leadership (county commissioners, city council, board of trustees, board of directors, and administration) of BVFD, CCEMS, CCFPD, SFD, and SAFPD have begun a dialog. The willingness and commitment of the agencies to an organizational and system evaluation and a discussion on strategies to better serve the communities is to be applauded.

“Success is peace of mind, a direct result of self-satisfaction in knowing that you did your best to become the best that you are capable of becoming” —

John Wooden

We intend no suggestion that BVFD, CCEMS, CCFPD, and SFD are not already providing a valuable service. In fact, we are pleased to report all available evidence shows that emergency services agencies consistently provide quality service to the citizens of the protected

communities. However, in keeping with the notion of continuous improvement wherein an unending loop of performance, measurement, and evaluation leads to system enhancements that would otherwise be impossible, we offer recommendations to assist the County, City, towns, and districts to implement the strategies that will best benefit the public.

The success of adopting and implementing opportunities depends on many things. However, in ESCI's experience with dozens of functional, operational, and legal unifications, leadership is the single factor that most frequently determines success. Nearly always, a key staff, commissioner, councilor, or board member champions the concept garnering the support of the various affected groups (political, labor, volunteer, and community). Additionally, good leadership fosters an organizational culture receptive to planning, calculated risk taking, and flexibility. The manner in which leaders promote a trusting relationship between all groups and aid two-way communication between them is essential. From these issues, research by Kohm, Piana, and Gowdy identifies five factors that most often seem to contribute to the successful implementation of a partnership or consolidation.³⁶ The five factors are:

1. A leadership that believes strongly in the partnership and demonstrates this belief, often by acting selflessly to maintain it.
2. Multiple forms of communication to keep all persons (county commission, city council, town trustees, governing boards, staff, members, and community) up to date about plans, problems, and benefits concerning the partnership.
3. Face-to-face communications with partner organizations in the forms of meetings, training, and other forums to build trust and understanding among staff.
4. Flexibility through an expectation that even in the best-planned partnership unforeseen issues will arise, mistakes will be made, and alternative paths will be identified.
5. Early evidence of benefit to assure everyone that they are on the right track, such as better or less expensive employee benefits or improved facilities.

Kohm, Piana, and Gowdy term the establishment of an ongoing relationship between two or more independent organizations as *strategic restructuring*. The relationship is generally created to increase the administrative efficiency and/or further the programmatic mission of one or more of the participating agencies through shared, transferred, or combined services, resources, or programs. Restructuring may be thought of as a continuum that ranges from jointly managed programs (such as automatic aid agreements) to complete organizational merger.

³⁶ 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.

Recommended Overarching Strategies

ESCI recommends that, Overarching Strategy B – Countywide FA (Fire Authority) including CCEMS be the first course of action adopted by the Chaffee County Commission, Salida City Council, Buena Vista Board of Trustees, and fire district BODs. ESCI further recommends that Overarching Strategy E – IGA SFD and CCEMS be pursued.

Establishment of an FA (Overarching Strategy B – Countywide FA (Fire Authority) including CCEMS) should be under an IGA with terms and conditions developed and agreed upon by the elected officials.

1. Reduction to one fire chief position. The combined service area has three fire chiefs that represent four fire agencies and the three fire service providers. With a combined career and volunteer workforce of nearly 100 personnel, the size of a unified fire agency is appropriately directed by a single fire chief dedicated to administration duties.

Other position responsibilities are re-aligned and job functions modified to meet the needs of the FA. The conceptual modification to the administrative functions for an FA results in a net reduction of 2.4 positions.

2. The service area of BVFD, CCEMS, CCFPD, SFD, and SAFPD covers over 1,000 square miles and includes all of the land mass of the County, which is served by eight fire stations. A battalion chief configuration is appropriate to the number of fire stations supervised but not to the distance traveled. However, given the total number of emergency responses per year for the combined agencies that the majority of risk and service demand in and around Buena Vista and Salida, incident supervision and emergency response readiness could be managed by rotating coverage between chief officers (volunteer and career). With a single chief officer, the function should be centralized to the combined service area to the greatest extent possible. While no one centroid location exists, fire administration would generally serve as one location during normal business hours. At other hours locating an officer in the north and one in the south would be most advantageous. This is predicated on the fact that during periods of highest service demand, business hours, a chief officer (fire or EMS) would generally be available to respond. Moving forward it is preferable to establish two battalions to serve the FA and should be a goal of the amalgamated organization.
3. Establishing an FA under an IGA (intergovernmental agreement), with each of the agencies retaining taxing authority, governance, maintains a high degree of local control. An IGA model is considered an interim step to further alignment of the agencies. The long-term goal should be to merge the five agencies into a single regional fire and emergency service provider.
4. An FA administrative and support staffing concept will result in a cost avoidance of approximately \$8,078 plus applicable benefit decreases primarily in the medical insurance costs. Staffing is increased with the addition of an assistant chief of EMS. The FA strategy makes the assumption that overall operational staffing costs will be static, with a possible minor decrease with economies of size.
5. With an FA the four fire agencies and County have input on services to be provided, level of service, budgets, governance, and policy level decisions. This strategy can

provide cost avoidance in administrative, operational, and capital costs. It allows for long-term planning for facilities, apparatus, equipment, and staffing.

With a unified emergency service organization the number of facilities (fire and EMS stations) is reduced and allows for the disposal of surplus properties. Based on terms of an IGA for an FA there is the opportunity to eliminate a number of the combined agencies rolling stock. Disposal of surplus facilities and apparatus will net revenue but as important is the long-term benefit of lower capital replacement and maintenance costs.

CCFPD and SAFFPD rely primarily on property taxes for funding. The fire protection districts are forecast to experience flat or declining tax revenue over the next three years. CCEMS, BVFD, and SFD are single departments in larger organizations that have multiple sources of revenue. The City of Salida and the Town of Buena Vista have sales tax revenue and fees for service to support the general fund and thus the fire department. The other major source of revenue for CCEMS is from fees for service; EMS and transport services. There is a benefit, balance, and stability with three potential sources of revenue for an FA.

Overarching Strategy E – IGA SFD and CCEMS would increase emergency staffing and provide a source of revenue. It would also:

5. Increase the availability of full-time fire and EMS personnel for emergency response to medical incidents. The concept calls for one CCEMS unit and a SFD EMS transport unit with two medically trained personnel be dispatched to medical emergencies. In situations where SFD arrives first and determines that the patient requires a basic level of care and transport, the CCEMS ALS unit can be recalled. For patients requiring an advanced life support, CCEMS would continue. The most appropriate unit would transport to the medical center.

Medical incidents in the City of Salida currently involve all on-duty fire and fire/EMS personnel of SFD and the CCEMS transport unit assigned to cover the south end of Chaffee County. Adding a BLS EMS transport unit to the SFD and cross-training CCEMS personnel in fire suppression adds flexibility to the system.

6. Heart of the Rockies Regional Medical Center has a need to transport some patients to medical facilities outside of Chaffee County. CCEMS has a limited capacity for providing inter-facility EMS transport services. The additional capacity of one BLS transport unit would allow a CCEMS ALS unit to remain available for response and immediate response for BLS inter-facility transfers.
7. An issue since the strategy was developed is that the medical center signed a six-month contract with AMR to do inter-facility transports. A potential deal killer for the strategy is if SFD and CCEMS are unable to secure a long-term contract for inter-facility transports.

Plan of Implementation

First steps are important. If the governing boards of the districts, Salida City Council, Buena Vista Town Trustees, and Chaffee County Commissioners support the conclusions of this report, policy action by officials needs to focus the efforts of many persons toward the goal of an

FA. Without clear direction from policymakers, indecisive or counter-productive work is likely to result. If all stakeholder groups actively participate in the process, the need for work plan revisions are more easily identified and made.

Therefore, ESCI recommends that the BODs of CCFPD, SAFPD, the Salida City Council, the Buena Vista Town Trustees, and the Chaffee County Commissioners jointly adopt through resolution the outcome of an FA as the fire and EMS vision. The jurisdictions should resolve to work cooperatively toward carrying out the goal within a specific time; ESCI recommends that the goal be targeted far enough in the future to allow for systematic planning and implementation but not so far as to lose project momentum. From experience in such matters, four to six months is usually considered the minimum amount of time required for planning and implementing these sorts of system changes. We suggest that the agencies focus on reaching the goal by July 1, 2013; but first, careful consideration should be given to budgeting cycles to assure the proper timing of organizational startup.

With adoption of a vision, the agencies should appoint an oversight committee that includes representation from all stakeholder groups to plan, communicate, oversee, and direct progress toward the FA. The committee should be charged to develop a schedule, meet regularly to discuss issues of mutual concern, and deliver progress reports to policymakers; at minimum of monthly. The group should work to provide cohesive policy direction to the fire chiefs and others regarding the details of reaching the vision. Activities of the committee might include consultation with staff, other policy makers, or professional experts.

Mission and vision statements, goals, and objectives provide key organizational management foundations. Development of such organizational underpinnings is important, but communication of them is paramount. Leaders and workers alike need to understand why the organization exists, where it is headed, and how to identify success. While the mission of the FA may seem obvious, if the organization's purpose is left to an individual's imagination, many individual missions may result; which in the end can cause agency members to work at cross-purposes.

A vision statement for the FA should be an explanation of outcomes. It should inspire, energize, and help members to visualize a mental picture of the fire authority's goal. Vision statements ought to describe outcomes that are five to ten years away, though some may be further out in time.

If possible, try to summarize the vision using a single prophetic phrase or statement. Capturing the real meaning of a vision using a memorable phrase can increase the effectiveness of a vision statement. The phrase serves as the trigger to create an image of the vision. An example of a vision statement follows:

Our Vision: Our vision serves as the framework and guides every aspect of our actions by describing what we need to accomplish in order to provide exceptional emergency service to the citizens and visitors of Chaffee County.

Other Considerations

We offer comment on a few additional issues pertaining to the preferred option. The listing is in no particular order or priority.

The decision to consider implementation of the preferred option represents a partnership between the County, City, Town, and districts. Well before the governing bodies ever adopt a joint resolution proposing an FA (IGA), there must be a high degree of trust. Each governing body must understand that the other will act in the best interest of constituencies, and that the business between the commission, boards, trustees, and city council will be open and honest. As with many human endeavors, communication is the key and reasonable negotiation is the vehicle. In the time before adopting a resolution, the agencies will need to come to agreement on a number of important details. Those matters should be committed to an implementation plan.

Creation of a new identity for the consolidated fire and EMS agency is important. The identity should be created with a global view and an eye on branding. A global name will signal a new birth and the creation of a unique culture while eliminating any appearance of empire building. If it is determined to be in the best interest of the County, City, Town, and districts to continue with the existing taxing authorities, ESCI would recommend that creating a new persona is important; however, not selecting a new name should not be considered a “deal breaker.” The option of operating under terms of an IGA as a fire and EMS agency dba (doing business as) and retaining the taxing authority is possible.

Burning Mountains, Glenwood Springs, and Rifle FPDs, and the City of Glenwood Springs held a contest to name the new FA. The steering committee developed a short list of potential names and then advertised for public votes on the name, helping build a sense of organizational ownership throughout the communities. From the short list it was determined that the new entity would be Colorado River Fire & Rescue.

Framework for Action

- **Consult with other Emergency Service Partners:** The governing officials of the County, City, Town and districts begin a dialog with all of the service partners (and legal counsel) regarding the proposed vision and the work plan. Establish which agencies are likely to participate in reaching the goal. This would include but not be limited to other service purveyors: Chaffee County Sheriff's Office and Heart of the Rockies Regional Medical Center.
- **Joint Adoption of a Fire Protection Vision:** The governing officials formally adopt a fire and EMS vision for an FA. Such action includes the appointment, charge, and timeline goal of an oversight committee.
- **Organize the Oversight Committee:** The governing officials instruct the committee to formulate and report on all elements of a work plan. Establish leadership roles of the chair and other committee members. Create meeting guidelines and elect leadership. Develop a schedule with meeting dates and times. Review and adopt the work plan. Meetings are ongoing, as is the review and revision of the work plan. The committee performs as a clearinghouse for all information concerning the effort so that service partners speak with a unified voice.
- **Obtain Definitive Legal Advice:** The oversight committee obtains legal opinion concerning the statutory requirements for formation of an IGA between Buena Vista, Chaffee County (CCEMS), CCFPD, Salida, and SAFPD. Several law firms in the State of Colorado have attorneys specializing in the workings of Fas.
- **Establish the Name of the Proposed FA:** Obtain consensus on the name, logo, mission, vision, values, and organizational structure of the proposed FA.
- **Determine which Commissioners, Councilors, Directors, and Trustees will serve on the FA Board:** Come to an agreement on the need for number of representatives for an FA governance body.
- **City, County, Districts and Town Approve the Proposed FA IGA:** The Chaffee County Commissioners, City of Salida City Council and district BODs and Buena Vista Town Trustees approve the IGA for the proposed FA.
- **Deliver a Public Education/Information Campaign:** During the time that the oversight committee is preparing for the FA, citizens must be provided with information regarding the proposed action and its benefit to the emergency service system. Entities should actively participate in the process to the extent allowed by law. Volunteers should conduct knock and talks throughout all neighborhoods.³⁷
- **Prepare IGA Documents of the FA:** During the time leading up to an FA, prepare supporting documents such as budget, risk management, bylaws, policies, rules, and procedures, and obtain errors and omissions insurance,.
- **Inventory Assets:** Capital assets of the County, City, districts, and Town need to be inventoried to insure equity of contribution and in the event of a disillusion of the FA.
- **Disband the Oversight Committee:** Once the FA is operational, and the vision has been accomplished, the oversight committee is no longer required.

³⁷ All material must be of a public education/ informational nature only.

- **Implement a Strategic Planning Process:** The FA BODs oversees the development of a facility site plan, equipment replacement plan, and a staffing plan. Investigate and include in the strategic planning process, facilities and equipment needs, staffing, and RA long-term goals.

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Appendix B: Summary Table of Recommended Actions by Agency (Current Conditions)

BVFD Recommended Actions

BVFD: Mission statement should be regularly assessed and prominently displayed (such as on letterhead, facilities, website) to remind all personnel of their purpose.....27

BVFD: Continue development of organizational vision statement and communicate it broadly throughout the agency – include personnel in its development.....27

BVFD: Establish organizational values to guide personnel in decision-making. Communicate points of emphasis for department annually.27

BVFD: Develop Master Plan, then Strategic Plan, both to be adopted by elected officials, published, and made available to your constituency.27

BVFD: Establish a strategic plan with goals and objectives for divisions, programs, and performance metrics with timelines and intended outcomes.28

BVFD: Continue the development of a code of ethics and broadly disseminate throughout the organization.28

BVFD: Develop a formal process for proposed, changes, or additions to SOPs/SOGs. ...29

BVFD: Establish a department policy manual and routinely review them for consistency between polices, legal requirements and train personnel on department policies.....29

BVFD: Develop a process for improving communications with citizens: impanel citizens’ advisory committee, develop formal process for registering citizen complaints, contribute to the town newsletter, and conduct a community survey.32

BVFD: Establish an “attractive asset” security system and conduct an annual inventory.33

BVFD: Create an electronic annual report and post to website. Provide analysis of information for layperson.....34

BVFD: Obtain and maintain pump test records on site.....34

BVFD: Include staff in budget development.35

BVFD: Establish and adopt a Master Plan and a Strategic Plan.....37

BVFD: Tie budget to service levels, incorporating the service level definitions into the budget document.37

BVFD: Determine mod rate for workers’ compensation, which is a reflection of employee claims history. Lower mod rates equate to lower annual costs and lower claims history.39

BVFD: Seek grants and other non-tax revenues to augment community service.....40

BVFD: Maximize non-tax revenue opportunities, such as billing for certain fire responses, inspection fees, hazardous materials, external cost recovery, wildland mobilizations.....41

BVFD: The Human Resource Manager position manages many legal risks for the agency (even an all-volunteer agency), thus it is critical that the position is a well-trained management position.44

BVFD: Complete development and implementation of a member retention program.44

BVFD: Establish a CISD program, possibly in partnership with neighboring agencies. Establish an employee (volunteer) assistance program for personnel in need of counseling services.....47

BVFD: Establish an ongoing recruitment program to maintain a ready pool of potential volunteers.....47

BVFD: Establish a thorough volunteer selection process for prospective new volunteers, including qualifications, reference and background check, establish physical standards, knowledge testing, interviews, medical examination, and psychological examination.....48

BVFD: Establish minimum physical abilities, skills and performance standards and evaluate all personnel annually. Establish promotional testing based on skills and competence.....48

BVFD: Establish minimum medical standards for personnel and provide periodic medical exams. Establish a safety committee, include line personnel, hold meetings at least quarterly and keep minutes of meetings.....49

BVFD: Track geographic call distribution for future station siting decisions. Track call distribution by time of day/day of week to understand highest vulnerability periods for targeted recruitment of volunteers during high exposure windows.53

BVFD: Measure effective travel time reach from BV fire station. Partner with CCFPD for effective response coverage.54

BVFD: Increase recruiting of volunteer personnel to increase likelihood of achieving adequate staffing for initial attack of predominant risk. Staffing turnout time must be tracked as a separate component of response time. This is a controllable component of total response time but must be measured to be addressed.54

BVFD: Establish critical task analyses for each major response type, determine staffing levels required to implement these critical tasks, and determine ability to assemble necessary resources in the first ten minutes of the incident. This defines whether the agency is primarily offensive, defensive, or transitional.55

BVFD: Track all workload analysis components, enabling good management decisions based on good management data. Significant duplication can be eliminated and partnership opportunities identified by tracking these data points.56

BVFD: All components of the Cascade of Events are necessary to calculate complete response time (NFIRS compliance). Work with the Chaffee County Communications Center to capture response data in a hours:minutes:seconds format. Complete, accurate response activity provides data for making staffing and apparatus deployment decisions based on response performance.57

BVFD: Implement Hazardous Material-Incident Command certification as a requirement for command level officers.....61

BVFD: Develop a standardized definition of turnout time and turnout time standard.77

BVFD: Assess current EMS administrative support effectiveness and develop a plan and budget to meet future needs.79

BVFD: Assess current clerical support effectiveness and develop a plan and budget to meet future needs. Develop and implement an inventory management process.80

BVFD: Continue efforts to contract with a medical director.80

BVFD: Integrate case reviews with QA/QI process.....80

BVFD: Include in-service training requirement in MPD contract.....80

BVFD: Develop and implement a formal QA/QI plan with MPD participation.80

BVFD: Establish Safety Classes and attend monthly training offered by the Chaffee County Regional Training Group.81

BVFD: Link OTEP to QA/QI process.81

BVFD: Include responder safety training in OTEP.81

BVFD: Establish as a minimum standard for ICS Certification as follows: IS-100, IS-200 and IS-700 for all line personnel, and additionally require IS-300, IS-400 and IS-800b for all command officers and chief officers. 128

BVFD: Implement Hazardous Material-Incident Command certification as a requirement for command level officers..... 129

BVFD: Implement a “closest force” response by all emergency response agencies to all incidents in Chaffee County without regard to political jurisdictional boundaries through an automatic aid agreement. 130

BVFD: Implement joint training activities to improve cross-agency coordination during multi-agency responses. 130

BVFD: Establish a combined training plan with the participating agencies..... 132

BVFD: Establish a multi-year training calendar, providing ample opportunity for personnel to attend training at a neighboring agency. 132

BVFD: Establish a joint recruit academy annually or semi-annually, as the need dictates.134

BVFD: Establish a common recruit task book, with standardized goals and objectives, and signature check-offs at three superior levels in the organization. 134

BVFD: Establish a joint training manual for ongoing training. 135

BVFD: Establish a shared training facility plan and seek funding collectively. 135

CCEMS Recommended Actions

CCEMS: Mission statement should be regularly assessed. 27

CCEMS: Develop and broadly communicate organizational vision statement – include personnel in its development..... 27

CCEMS: Establish organizational values to guide personnel in decision-making. Communicate points of emphasis for department annually. 27

CCEMS: Develop Master Plan, then Strategic Plan, both to be adopted by elected officials, published, and made available to your constituency..... 27

CCEMS: Establish a strategic plan with goals and objectives for divisions, programs, and performance metrics with timelines and intended outcomes..... 28

CCEMS: Establish a code of ethics and broadly disseminate throughout the organization. 28

CCEMS: Develop a process for improving communications with citizens: create and distribute a community newsletter or provide material to the county for distribution, impanel citizens’ advisory committee or focus groups. 32

CCEMS: Establish an “attractive asset” security system. 33

CCEMS: Create an electronic annual report and post to website. Provide analysis of information for layperson..... 34

CCEMS: Include staff in budget development. 35

CCEMS: Establish and adopt a Master Plan and a Strategic Plan..... 37

CCEMS: Tie budget to service levels, incorporating the service level definitions into the budget document..... 37

CCEMS: Determine mod rate for workers’ compensation, which is a reflection of employee claims history. Lower mod rates equate to lower annual costs and lower claims history..... 39

CCEMS: The Human Resource Manager position manages many legal risks for the agency, thus it is critical that the position is a well-trained management position. The county HR director should serve in this capacity.....44

CCEMS: Develop and implement a member retention program.....44

CCEMS: Establish an ongoing recruitment program to maintain a ready pool of potential employees47

CCEMS: Add a psychological examination to the hiring process with satisfactory passage a condition of employment.....48

CCEMS: Establish minimum physical abilities standards and evaluate all personnel annually. Establish promotional testing based on skills and competence.....48

CCEMS: Establish a safety committee, include line personnel, hold meetings at least quarterly and keep minutes of meetings.....49

CCEMS: Track geographic call distribution to site current or future ambulance resources where the high risk/high demand areas are.....53

CCEMS: Staff turnout time must be tracked as a separate component of response time. This is a controllable component of total response time but must be measured to be addressed.....54

CCEMS: Establish critical task analyses for each major response type, determine staffing levels required to implement these critical tasks, and determine ability to assemble necessary resources in the first ten minutes of the incident. For an EMS provider, this defines where and what types of incidents where mutual assistance is required while responding, avoiding loss of valuable time waiting until arrival.55

CCEMS: Track all workload analysis components, enabling good management decisions based on good management data. Significant duplication can be eliminated and partnership opportunities identified by tracking these data points.56

CCEMS: All components of the Cascade of Events are necessary to calculate complete response time (NFIRS compliance). Work with the Chaffee County Communications Center to capture response data in a hours:minutes:seconds format. Complete, accurate response activity provides data for making staffing and apparatus deployment decisions based on response performance.57

CCEMS: Implement Hazardous Material-Incident Command certification as a requirement for command level officers.....61

CCEMS: Assess current EMS administrative support effectiveness and develop a plan and budget to meet future needs.....79

CCEMS: Assess current EMS field supervisor effectiveness and develop a plan and budget to meet future needs.79

CCEMS: Evaluate current collection rate and seek opportunities for improvement.....80

CCEMS: Assess impact of implementation or non-implementation of the Affordable Care Act on Collections.....80

CCEMS: Establish Safety Classes and attend monthly training offered by the Chaffee County Regional Training Group.....81

CCEMS: Link OTEP to QA/QI process.....81

CCEMS: Include responder safety training in OTEP.81

CCEMS: Implement joint training activities to improve cross-agency coordination during multi-agency responses.130

CCEMS: Establish a combined training plan with the participating agencies.....132

CCEMS: Establish a multi-year training calendar, providing ample opportunity for personnel to attend training at a neighboring agency.132
CCEMS: Establish a joint recruit academy annually or semi-annually, as the need dictates.134
CCEMS: Establish a common recruit task book, with standardized goals and objectives, and signature check-offs at three superior levels in the organization..... 134
CCEMS: Establish a joint training manual for ongoing training..... 135
CCEMS: Establish a shared training facility plan and seek funding collectively.135
CCEMS: Provide training and require participation in a countywide personal accountability system.....137

CCFPD Recommended Actions

CCFPD: Communicate points of emphasis for department annually.....27
CCFPD: Develop Strategic Plan. Consider scanning the current Master Plan document and including it on department website.27
CCFPD: Establish a strategic plan with goals and objectives for divisions, programs, and performance metrics with timelines and intended outcomes.....28
CCFPD: Establish a code of ethics and broadly disseminate throughout the organization.28
CCFPD: Develop a formal process for proposed, changes, or additions to SOPs/SOGs..29
CCFPD: Develop a process for improving communications with citizens: impanel citizens' advisory committee, create and distribute a community newsletter, conduct a community survey.32
CCFPD: Distribute board reports to district membership.....34
CCFPD: Conduct annual hose testing and pump testing in compliance with NFPA standards – liability risk.34
CCFPD: Include community in budget development.35
CCFPD: Establish and adopt a Strategic Plan. Scan the Master Plan document and including it on district website.....37
CCFPD: Tie budget to service levels, incorporating the service level definitions into the budget document.....37
CCFPD: Develop and implement a member retention program.....44
CCFPD: Establish an employee (volunteer) assistance program for personnel in need of counseling services.....47
CCFPD: Establish an ongoing recruitment program to maintain a ready pool of potential volunteers.....47
CCFPD: Establish a thorough volunteer selection process for prospective volunteers, including qualification review, general knowledge testing, interviews, medical physical and psychological examinations.48
CCFPD: Establish minimum skills standards and evaluate all personnel annually. Establish promotional testing based on skills and competence.....48
CCFPD: Establish minimum medical standards for personnel and provide periodic medical exams.49

CCFPD: Track geographic call distribution to site current or future fire stations where the high risk/high demand areas are.53

CCFPD: Measure effective travel time reach from each fire station. Partner with BVFD for effective response coverage.54

CCFPD: Staff turnout time must be tracked as a separate component of response time. This is a controllable component of total response time but must be measured to be addressed.54

CCFPD: Establish critical task analyses for each major response type, determine staffing levels required to implement these critical tasks, and determine ability to assemble necessary resources in the first ten minutes of the incident. This defines whether the agency is primarily offensive, defensive, or transitional.55

CCFPD: Track all workload analysis components, enabling good management decisions based on good management data. Significant duplication can be eliminated and partnership opportunities identified by tracking these data points.56

CCFPD: All components of the Cascade of Events are necessary to calculate complete response time (NFIRS compliance). Work with the Chaffee County Communications Center to capture response data in a hours:minutes:seconds format. Complete, accurate response activity provides data for making staffing and apparatus deployment decisions based on response performance.57

CCFPD: Implement National Incident Management System guidelines in department training standards.61

CCFPD: Assess current EMS administrative support effectiveness and develop a plan and budget to meet future needs.79

CCFPD: Assess current clerical support effectiveness and develop a plan and budget to meet future needs.80

CCFPD: Establish regular medical reviews.80

CCFPD: Integrate case reviews with QA/QI process.80

CCFPD: Include in-service training requirement in MPD contract.80

CCFPD: Develop and implement a formal QA/QI plan with MPD participation.80

CCFPD: Establish minimum standards of First Responder level or higher.81

CCFPD: Establish Safety Classes and attend monthly training offered by the Chaffee County Regional Training Group.81

CCFPD: Link OTEP to QA/QI process.81

CCFPD: Include responder safety training in OTEP.81

CCFPD: Establish as a minimum standard for ICS Certification as follows: IS-100, IS-200 and IS-700 for all line personnel, and additionally require IS-300, IS-400 and IS-800b for all command officers and chief officers.128

CCFPD: Implement Hazardous Material-Incident Command certification as a requirement for command level officers.129

CCFPD: Implement a “closest force” response by all emergency response agencies to all incidents in Chaffee County without regard to political jurisdictional boundaries through an automatic aid agreement.130

CCFPD: Implement joint training activities to improve cross-agency coordination during multi-agency responses.130

CCFPD: Establish a combined training plan with the participating agencies.132

CCFPD: Establish a multi-year training calendar, providing ample opportunity for personnel to attend training at a neighboring agency.132
CCFPD: Establish a joint recruit academy annually or semi-annually, as the need dictates.134
CCFPD: Establish a common recruit task book, with standardized goals and objectives, and signature check-offs at three superior levels in the organization.....134
CCFPD: Establish a joint training manual for ongoing training.135
CCFPD: Establish a shared training facility plan and seek funding collectively.....135

SFD/SAFPD Recommended Actions³⁸

SFD: Mission statement should be regularly assessed.27
SFD: Develop Master Plan, then Strategic Plan, both to be adopted by elected officials, published, and made available to your constituency.27
SFD: Establish a strategic plan with goals and objectives for divisions, programs, and performance metrics with timelines and intended outcomes.....28
SFD: Develop a formal process for proposed, changes, or additions to SOPs/SOGs; incorporate SOPs/SOGs into training.....29
SFD: Develop a process for improving communications with citizens: create and distribute a community newsletter, develop formal process for registering citizen complaints, conduct a community survey.32
SFD: Establish an “attractive asset” security system and conduct an annual inventory. 33
SFD: Establish and adopt a Master Plan and a Strategic Plan.37
SFD: Tie budget to service levels, incorporating the service level definitions into the budget document.....37
SFD: Incumbent and new personnel should be training on the contents of the HR manual.44
SFD: Establish a thorough selection process for prospective new employees, including psychological examination.48
SFD: Safety committee membership should include line personnel. Hold meetings at least quarterly and keep minutes of meetings.....49
SFD: Track geographic call distribution to site current or future fire stations where the high risk/high demand areas are.53
SFD: Staff turnout time must be tracked as a separate component of response time. This is a controllable component of total response time but must be measured to be addressed.....54
SFD: Establish critical task analyses for each major response type, determine staffing levels required to implement these critical tasks, and determine ability to assemble necessary resources in the first ten minutes of the incident. This defines whether the agency is primarily offensive, defensive, or transitional.55
SFD: Track all workload analysis components, enabling good management decisions based on good management data. Significant duplication can be eliminated and partnership opportunities identified by tracking these data points.56

³⁸ Recommended actions for SAFPD have been incorporated with SFD.

SFD: All components of the Cascade of Events are necessary to calculate complete response time (NFIRS compliance). Work with the Chaffee County Communications Center to capture response data in a hours:minutes:seconds format. Complete, accurate response activity provides data for making staffing and apparatus deployment decisions based on response performance.....57

SFD: Implement Hazardous Material-Incident Command certification as a requirement for command level officers.61

SFD: Assess current EMS administrative support effectiveness and develop a plan and budget to meet future needs.79

SFD: Establish Safety Classes and attend monthly training offered by the Chaffee County Regional Training Group.81

SFD: Link OTEP to QA/QI process.....81

SFD: Include responder safety training in OTEP.81

SFD: Establish as a minimum standard for ICS Certification as follows: IS-100, IS-200 and IS-700 for all line personnel, and additionally require IS-300, IS-400 and IS-800b for all command officers and chief officers. 128

SFD: Implement Hazardous Material-Incident Command certification as a requirement for command level officers. 129

SFD: Implement a “closest force” response by all emergency response agencies to all incidents in Chaffee County without regard to political jurisdictional boundaries through an automatic aid agreement..... 130

SFD: Implement joint training activities to improve cross-agency coordination during multi-agency responses. 130

SFD: Establish a combined training plan with the participating agencies. 132

SFD: Establish a multi-year training calendar, providing ample opportunity for personnel to attend training at a neighboring agency. 132

SFD: Establish a joint recruit academy annually or semi-annually, as the need dictates.134

SFD: Establish a common recruit task book, with standardized goals and objectives, and signature check-offs at three superior levels in the organization. 134

SFD: Establish a joint training manual for ongoing training..... 135

SFD: Establish a shared training facility plan and seek funding collectively. 135

Appendix C: Cost Allocation

Local governments provide services (such as fire protection) based on an assumption of public interest rather than the need for profitability, as in the private sector. Consequently, the limiting market forces of supply, demand, and price are not typically found at the forefront of policy decisions concerning fire protection. While elected officials may spend significant time and effort debating the overall cost of fire protection, it is very unusual that the point of service price is considered. In this light, it is not surprising that local governments find it difficult to establish a fair market price for essential services when entering into partnerships.

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. In the case of municipalities, the full cost of the service may not be easily determined because administrative and support expenses are frequently borne by other municipal departments and not documented in the fire department's budget. It all works because individual users of the service are not charged; therefore, the real price of that service is never an issue. On the other hand, when two or more communities share in providing fire protection, elected officials must assure that each community 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.

However, while purely economic considerations may suggest that those who benefit from a service should pay in direct proportion to the level of benefit (the "benefits received" principle), social and political concerns may also enter into the price-setting process. For example, ESCI completed an evaluation of the fire protection system comprised of a city and a fire protection district located in eastern Oregon.³⁹ The fire district provides no emergency service of its own, contracting instead with the city fire department for all operations within the district's territory. The fire district compensates the city for a percentage of the fire department budget (minus certain budgetary transfers and any funds not spent during the previous year) equivalent to a rolling five-year average of district alarms compared to city alarms.

Cost Allocation Options

What follows is a listing of system variables that can be used (singly or in combination) to allocate cost between allied fire departments. Each option is summarized by the concept, its advantages and disadvantages, and other factors that should be considered. Regardless of the

³⁹ City of John Day and John Day Rural Fire Protection District, Oregon.

option(s) chosen to share the cost of fire protection, the resulting intergovernmental service agreement needs to address the issues of full cost versus marginal cost and should be clear about the inclusion of administrative or overhead cost. In addition, service contracts often must reconcile the exchange of in-kind services between the participating agencies.

Area

The cost of emergency service can be apportioned based on the geographic area served relative to the whole. For instance, the jurisdictional boundaries of Salida, Buena Vista, SAFPD, and CCFPD represent about 220.92 square miles. The following figure displays the services area in square miles and the percentage for each jurisdiction.

Figure 154: Cost Allocation by Service Area

Jurisdiction	Service Area in Square Miles	Percentage of Total
BVFD	3.44	1.557%
CCFPD	200.00	90.531%
SAFPD	14.91	6.749%
SFD	2.57	1.163%
Total	220.92	100.000%

Apportionment founded on service area alone may work best in areas that are geographically and developmentally homogeneous.

- Pro: Service area is easily calculable from a variety of sources. Size of service area is generally remains constant with few if any changes.
- Con: Service area does not necessarily equate to greater risk or to greater workload.
- Consider: Service area may be combined with other variables (such as assessed value and number of emergencies) to express a compound variable (such as assessed value per square mile and emergencies per square mile).

Taxable Assessed Value

The taxable assessed value (TAV) of agencies is established by tax assessors under laws of the state. Usually, higher-valued structures and complexes carry a greater risk to the community from loss by fire; consequently, taxable assessed value also tends to approximate the property at risk within an area. Fire departments are charged with being sufficiently prepared to prevent property loss by fire. Therefore, the cost of contracted fire protection may be apportioned relative to the assessed value of the allied jurisdictions. Typically, TAV is used to apportion cost of shared service by applying the percentage of each partner's TAV to the

whole. Figure 155 illustrates the allocation of cost by the taxable assessed value of the four agencies.

Figure 155: Cost Allocation by Taxable Assessed Value

Jurisdiction	Taxable Assessed Value	Percentage of Total
BVFD	\$46,795,851	12.491%
CCFPD	194,531,839	51.926%
SAFPD	37,884,746	10.112%
SFD	95,423,207	25.471%
Total	\$374,635,643	100.000%

- **Pro:** TAV is updated regularly, helping to assure that adjustments for changes relative to new construction, annexation, and inflation are included. Because a third party (the assessor) establishes TAV in accordance with state law, it is generally viewed as an impartial and fair measurement for cost apportionment. Fire protection is typically considered a property-related service; thus, apportionment tied directly to property value has merit.
- **Con:** TAV may not reflect the property risk associated with certain exempt property, such as schools, universities, government facilities, churches, and institutions. TAV may not always represent the life risk of certain properties, such as nursing homes or places of assembly, which might dictate more significant use of resources. In addition, some large facilities may seek economic development incentives through TAV exemptions or reductions. Adjustments may need to be made to TAV if such large tracts of exempt property in one jurisdiction cause an imbalance in the calculation. Last, TAV typically includes the value of land, which is not usually at risk of loss by fire. Depending on the local circumstance, however, this may not be a significant factor if the relative proportion of land value to structure value is reasonably uniform over the whole of the territory.
- **Consider:** Discounted TAV depending on the class of property (commercial or residential), which may skew the overall proportion of those properties compared to risk. As an additional consideration, assessors usually establish the AV in accord with the property tax cycle, which can lag somewhat behind the budget cycle of local agencies and the time when service contracts are reviewed or negotiated.

Deployment

The cost for service is based on the cost of meeting specific deployment goals. Deployment goals may be tied to the physical location of fire stations, equipment, and personnel (strategic deployment) or by stating the desired outcome of deployment (standards of cover). For example, a strategic goal could specify the location of two stations, two engines, and four on-duty firefighters. A standard of cover might state the desired outcome of the same deployed resources as two engine companies and four emergency workers on the scene of all structure

fire emergencies within eight minutes 85 percent of the time. While both strategic and outcome goals can be used effectively to assist in allocating cost, ESCI views outcome goals to be more dynamically linked to the quality of service and therefore preferable to strategic goals. This alternative is highly variable due to the independent desires of each community in regard to outcome goals.

A weighted scoring system uses a critical task analysis. This type of scoring system for each agency allows the ranking of each area based on the assigned risk as well as the apparatus, manpower, and Needed Fire Flow (NFF). The following figure (Figure 156) illustrates the allocation of cost by the number of resources deployed to serve each jurisdiction. It includes fire stations and frontline engines and ladder trucks.

Figure 156: Cost Allocation by Resource Deployment

Jurisdiction	Facilities	Engines and Aerials	Total	Percentage of Total
BVFD	1	2	3	15.000%
CCFPD	6	5	12	60.000%
SAFPD	1	0	1	5.000%
SFD	1	2	4	20.000%
Total	9	9	20	100.000%

- Pro: Deployment is intuitively linked to the level of service. The outcome of deployment based on a standard of cover can be monitored continuously to assure compliance. Such deployment can be adjusted if standards are not met. This assures the continuous quality of emergency response throughout the life of a service contract.
- Con: Strategic deployment may not equate to better service because such goals are prone to manipulation wherein resources may be sited more for political reasons and less for quality of service reasons. Outcome goals require common reporting points and the automatic time capture of dispatch and response activities to assure accuracy. Record keeping needs to be meticulous to assure the accurate interpretation of emergency response outcomes.
- Consider: Contracts for deployment-based fire protection should address the inclusion of administrative or overhead cost, as well as capital asset cost, depreciation, rent, and liability insurance.

Service Demand

Service demand may be used as an expression of the workload of a fire department or geographical area. Cost allocation based on emergencies would consider the total emergency

response of the service area and apportion system cost relative to the percentage of emergencies occurring in the jurisdictions.

Figure 157: Cost Allocation by Service Demand, 2010

Jurisdiction	Service Demand	Percentage of Total
BVFD	188	11.713%
CCFPD	287	17.882%
SAFPD	231	14.393%
SFD	899	56.012%
Total	1,605	100.000%

- **Pro:** Easily expressed and understood. Changes in the workload over the long term tend to mirror the amount of human activity (such as commerce, transportation, and recreation) in the corresponding area.
- **Con:** Emergency response fluctuates from year to year depending on environmental and other factors not directly related to risk, which can cause dependent allocation to fluctuate as well. Further, the number of alarms may not be representative of actual workload; for example, one large emergency event requiring many emergency workers and lasting many hours or days versus another response lasting only minutes and resulting in no actual work. Last, emergency response is open to (intentional and/or unintentional) manipulation by selectively downgrading minor responses, by responding off the air, or by the use of mutual aid. Unintentional skewing of response is most often found in fire systems where dispatch and radio procedures are imprecisely followed. Further, service demand does not follow a predetermined ratio to land area. As such, the service demand per square mile ratios may produce large variations.
- **Consider:** Using a rolling average of alarms over several years can help to suppress the normal tendency for the year-to-year fluctuation of emergencies. Combining the number of emergencies with the number of emergency units and/or personnel required may help to align alarms with actual workload more closely; however, doing so adds to the complexity of documentation. In a similar manner (and if accurate documentation is maintained), the agencies could consider using the total time required on emergencies as an aid to establish the comparative workload represented by each jurisdictional area.

Fixed Rate

The use of fixed fees or rates (such as a percentage) to calculate allocation of shared cost is more common between municipalities and independent fire districts. Occasionally, fixed-rate contracts involve the exchange of in-kind services.

- **Pro:** The concept is simple and straightforward. A menu of service options and the fees corresponding to those alternatives can be developed by the contractor agency. The contracting agencies can tailor a desired level of service based on risk and community expectation by choosing from the various menu items.

- **Con:** Partnering communities may change (i.e., population, jobs, commerce, structures, and risk) at divergent rates, causing disconnection between the rationales used to establish the fee and the benefit received. A fixed-rate contract may be difficult to coherently link to the services provided and/or received, which can lead to a lack of support by officials and the community.
- **Consider:** Partnering agencies need to assure that provision for rate adjustment is included in the agreement, including inflation. The agreement should address the issue of full cost versus marginal cost. The inclusion or non-inclusion of administrative and/or overhead cost also requires statement, as does the reconciliation of in-kind service exchange. The ownership and/or depreciation of capital assets should be addressed, as should rent, utilities, and liability insurance. In the case of a fixed fee, the agreement should establish how the participation of other public agencies in the partnership would affect cost.

Population

Payment for service can be based on the proportion of residential population to a given service area. The following figure lists the population by jurisdiction and the percentage of the total number of individuals living in each service area.

Figure 158: Cost Allocation by Population

Jurisdiction	Population Served	Percentage of Total
BVFD	2,615	14.734%
CCFPD	6,900	38.878%
SAFPD	3,000	16.903%
SFD	5,233	29.485%
Total	17,748	100.000%

- **Pro:** Residential population is frequently used by governmental agencies to measure and evaluate programs. The U.S. Census Bureau maintains an easily accessible database of the population and demographics of cities, counties, and states. Estimates of population are updated regularly. Laypersons intuitively equate residential population to the workload of fire departments.⁴⁰
- **Con:** While census tracts for cities frequently follow municipal boundaries, this is not the case with fire district boundaries, forcing extrapolated estimates, which can fail to take into account pockets of concentrated population inside or outside of the fire district boundaries. Residential population does not include the daily and seasonal movement of a transient population caused by commerce, industry, transport, and recreation. Depending on the local situation, the transients coming in (or going out) of an area can be very significant, which can tend to skew community risk. Residential population does

⁴⁰ The average citizen may easily associate population to emergency workload, but no statistical link can be made between the two.

not statistically link with emergency workload; rather, human activities tend to be the linchpin that connects people to requests for emergency assistance.

- For example, if residential population actually determined emergency workload, emergencies would peak when population was highest within a geographic area. However, in many communities where the residential population is highest from about midnight to about 6:00 AM (bedroom communities), that time is exactly when the demand for emergency response is lowest. It turns out that emergency demand is highest when people are involved in the activities of daily life—traveling, working, shopping, and recreating. Often, the persons involved in such activities do not reside in the same area. Additionally, simply relying on population will not account for the effects that socio-economic conditions have on emergency service response activity.
- Consider: The residential population of unincorporated areas can sometimes be estimated by using the GIS mapping capability now maintained by most counties and municipalities. By counting the residential households within the area in question, then applying demographic estimates of persons per household, it may be possible to reach a relatively accurate estimate of population within the area in question. Alternately, residential population can be estimated by using information obtainable from some public utility districts by tallying residential electrical meters within a geographic area and then multiplying by the persons per household.

Salida, Buena Vista, Chaffee County FPD, and South Arkansas FPD experience a daily or seasonal influx of people who are not counted as residential population. This transient population can be estimated by referring to traffic counts, jobs data, hotel/motel occupancy rates, and, in some cases, park entry statistics. Residential population plus transient population is referred to as functional population. Where functional population is significantly different from residential population, service agreements based on population should be adjusted to account for it.

The study area is unique in that considerable transient population may be present depending on the season or routinely during the daily commute. Basing cost allocation only on residential population may seem to disregard the effect of these transient populations on the regional emergency services system, but ESCI believes that the nature of transient populations and the character of the region result in an equivalent on the four agencies. Residents and visitors to the area tend to move in and through the study jurisdictions. Some travel is for work and daily activities, while other is seasonal; such as destination travel related the Monarch Mountain ski area, rafting on the South Arkansas River, and Clearwater Casino Resort, and the waterfront in Salida. ESCI believes that the fact that transient populations shift in this manner tends to negate most disproportionate impacts on the agencies, creating instead a background effect that need not be considered for the purpose of apportionment.

Multiple-Variable Allocation

Frequently, even though everyone may agree on the benefit of allied fire protection, officials find it difficult to reach an accord on the cost. The differences between community demographics and/or development, along with changes that occur within the system over the long term, can cause the perception of winners and losers. This can be especially prevalent when a single variable is used to apportion cost. A service contract based on more than one allocation determinate may help solve these problems.

For example, ESCI is familiar with a 9-1-1 dispatch center in Oregon that serves more than 20 fire agencies of all sizes and types—large, small, metropolitan, and rural; on-duty career and on-call volunteer. Here, the service contract includes three determinates applied to each agency.

- Base charge — 10 percent of the dispatch center's budget is divided equally between all agencies. This charge is based on the acknowledgement that each agency is equally responsible to maintain the dispatch center on continuous stand-by, irrespective of size of the agency or its use of the dispatch services.
- Usage charge — 45 percent of the dispatch center's budget is divided between the agencies in accordance with the number of emergency dispatches made for each during the preceding year. The member agencies determined that this charge fairly assesses the overall use of the 9-1-1 dispatch system by each.
- Risk charge — 45 percent of the dispatch center's budget is divided between the agencies in accordance with the relative percentage of each department's AV. The member agencies determined that this charge is relational to each department's community risk and that it is closely associated with the overall ability to pay.

By apportioning the dispatch center cost over three variables, the members of this alliance have been able to reach a long-term agreement that fits the diversity of the partnering agencies. Other partnerships in other geographical areas may require a different solution involving different combinations of variables. In summary, we restate something said earlier: When choosing a cost-sharing strategy for partnered fire protection, it is important to keep any apportionment formula fair, simple, and intuitively logical to assure that the public accepts and supports the endeavor.

Allocation Summary

The information provided previously serves as a detail of cost allocation factors. Given the lengthy discussion provided with each option, ESCI has compiled the information into a summary table illustrating the distribution of factors between the City, Town and two districts.

These examples are for illustrative purposes and may be used as part of a check for fairness of assigning the cost for service.

Figure 159: Summary of Cost Allocation Factors by Percentage, 2009

Jurisdiction	Area	Assessed Value	Resource Deployment	Service Demand	Population
BVFD	1.557%	12.491%	15.000%	11.713%	14.734%
CCFPD	90.531%	51.926%	60.000%	17.882%	38.878%
SAFPD	6.749%	10.112%	5.000%	14.393%	16.903%
SFD	1.163%	25.471%	20.000%	56.012%	29.485%
Total	100.000%	100.000%	100.000%	100.000%	100.000%

ESCI extrapolated the cost of emergency services using the fiscal year 2012 consolidated budget amounts for an FA using a multiple variable formula. This was applied to the cost allocation factors derived from 2012 data. The dollar amount used in the calculations was the operational budgets of the two fire districts \$3,734,565.

In addition to the individual funding alternatives, several multiple-variable scenarios are also provided as examples of how this type of methodology can be modified and applied. The following figures show three multiple cost allocations by variable, the weighted apportionment by percentage, and cost to each agency. The first (Figure 160) allocates costs on the basis of taxable assessed value (50 percent) and service demand (50 percent).

Figure 160: Multiple Variable No. 1, Allocation and Cost Apportionment

Jurisdiction	Allocation	Apportioned Cost
BVFD	12.102%	451,965
CCFPD	34.904%	1,303,498
SAFPD	12.252%	457,577
SFD	40.742%	1,521,525
Total	100.000%	3,734,565

The second (Figure 161) allocates costs on the basis of taxable assessed value (70 percent) and service demand (30 percent).

Figure 161: Multiple Variable No. 2, Allocation and Cost Apportionment

Jurisdiction	Allocation	Apportioned Cost
BVFD	12.258%	457,773
CCFPD	41.712%	1,557,777
SAFPD	11.396%	425,608
SFD	34.633%	1,293,407
Total	100.000%	3,734,565

The third example (Figure 162) allocates the cost based on taxable assessed value (50 percent), deployment (25 percent), and service demand (25 percent).

Figure 162: Multiple Variable No. 3, Allocation and Cost Apportionment

Jurisdiction	Allocation	Apportioned Cost
BVFD	12.924%	482,650
CCFPD	45.433%	1,696,733
SAFPD	9.904%	369,884
SFD	31.739%	1,185,298
Total	100.000%	3,734,565

Appendix D: FLSA (Fair Labor Standards Act)

The FLSA (Fair Labor Standards Act) has become a familiar component in fire department policies; however, the way the special rules are established and administered for firefighters may be different. Public sector fire departments may establish special work cycles for sworn firefighters, which can increase the FLSA overtime threshold beyond the normal 40-hour workweek. Firefighters covered by these special rules are entitled to FLSA overtime only for hours worked in excess of a threshold set by the Department of Labor. For example, in a 28-day cycle firefighters are entitled to FLSA overtime only for the time actually worked over 212 hours during that 28-day period. On the other hand, a work cycle of 27 days entitles employees to overtime after 204 hours of work.

FLSA regulations also permit employers in certain instances to exclude up to eight hours of sleep time from work when shifts exceed 24 hours in length.⁴¹ For FLSA purposes, hours worked means time when the employee is actually performing services for the employer. These are the only hours that must be included when determining if FLSA overtime is due. Thus, sleep time, "Kelly Days," or other paid leave days may not count as hours worked for FLSA purposes. Because of the potential overtime liability when FLSA work cycles are changed, these are important issues requiring a clear understanding between all parties.

⁴¹ The law requires that there be an agreement with the employees to exclude sleep time.

Appendix E: Summary Table of Stakeholder Interviews

Person	Date	Affiliation or Group
1. Don Stephens	2/6/2012	City of Salida
2. Don Taylor	2/6/2012	Fire Chief, Salida Fire Department
3. Keith Baker	2/6/2012	City Councilman, City of Salida
4. Salida Fire Department career and reserve personnel	2/6, 2/7, and 2/8/2012	Salida Fire Department
5. Wes Wagner	2/6/2012	Board Member, South Arkansas Fire Protection District
6. Rick Shovald	2/6/2012	Board Member, South Arkansas Fire Protection District
7. Ron Hassel	2/6/2012	Board of Directors Vice Chairman, Chaffee County Fire Protection District
8. Andrew Fahmey	2/6/2012	Training Coordinator Chaffee County Fire Protection District
9. Mary Brown	2/7/2012	Board of Directors Chaffee County Fire Protection District
10. Rob Thorp	2/6/2012	Board Member and Assistant Chief Chaffee County Fire Protection District
11. Chaffee County Fire Volunteers, Station 1	2/8/2012	Chaffee County Fire Protection District
12. Brian Welch	2/8/2012	Firefighter/Inspector, Chaffee County Fire Protection District
13. Shannon Vallejos	2/7/2012	Administrative Assistant/Board Secretary, Chaffee County Fire Protection District
14. Poncha Springs Volunteers	2/7/2012	Chaffee County Fire Protection District
15. Charlie Blake	2/7/2012	Battalion Chief, Chaffee County Fire Protection District
16. Williams 'Billy' Cordova	2/7/2012	Board Member and Battalion Chief, Chaffee County Fire Protection District
17. Dave Pots	2/8/2012	County Commissioner Chaffee County/Chaffee County EMS
18. Brian Behn	2/6/2012	EMT-P, Infection Control Officer, QA/QI Chaffee County EMS
19. Laura Smith	2/8/2012	Administrative Assistant, Chaffee County EMS
20. Craig Dale	2/6/2012	Training Coordinator, EMT-P Chaffee County EMS
21. Donnie Smith	2/6/2012	Field Supervisor, EMT-P, Chaffee County EMS
22. Dara MacDonald	2/6/2012	Interim City Administrator, City of Salida (Appointed City Administrator May 2012)
23. Sue Boyd	2/7/2012	Town Administrator Town of Buena Vista
24. Darrell Pratt	2/7/2012	Buena Vista Fire Department
25. Jim Amster	2/8/2012	Buena Vista Volunteer Fire Fighter
26. Dan Crane	2/8/2012	Buena Vista Volunteer Fire Fighter
27. Patrick Flesher	2/8/2012	Buena Vista Volunteer Fire Fighter
28. Randy Loback	2/8/2012	Assistant Chief, Buena Vista Volunteer Fire Department
29. Marsha Sailer	2/8/2012	Buena Vista Volunteer Fire Fighter
30. Mitch Stinnett	2/8/2012	Buena Vista Volunteer Fire Fighter

Buena Vista and Salida FDs, Chaffee CO and South Arkansas FPDs, and Chaffee CO EMS, CO
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Person	Date	Affiliation or Group
31. Dan Vandiver	2/8/2012	Suppression Chief, Buena Vista Volunteer Fire Department
32. Dixon Villers	2/8/2012	Captain, Buena Vista Volunteer Fire Department
33. Annette Stolba	2/8/2012	Dispatch Director, Chaffee County Communications Center
34. Dr. Ruiter	2/7/2012	ER Physician, Co-Director of Emergency Room at Heart of the Rockies Regional Medical Center, Physician Advisor for CCFPD, Salida FD, CC Search and Rescue, and Chaffee County 9-1-1 Communication Center
35. Dr. Bruce Gross	2/7/2012	Co-Director of Heart of the Rockies Regional Medical Center and Physician Advisor for Chaffee County EMS



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