



## Emergency Medical Services Consultative Visit



## Jackson County, Colorado

Date \_\_\_\_\_

Funded by:



Colorado Department  
of Public Health  
and Environment

# STATE OF COLORADO

John W. Hickenlooper, Governor  
Christopher E. Urbina, MD, MPH  
Executive Director and Chief Medical Officer

Dedicated to protecting and improving the health and environment of the people of Colorado

4300 Cherry Creek Dr. S.      Laboratory Services Division  
Denver, Colorado 80246-1530      8100 Lowry Blvd.  
Phone (303) 692-2000      Denver, Colorado 80230-6928  
Located in Glendale, Colorado      (303) 692-3090  
<http://www.cdphe.state.co.us>



Colorado Department  
of Public Health  
and Environment

Date

Any County  
Board of County Commissioners  
Address 1  
Address 2  
City, Colorado Zip Code

Dear Commissioners,

On behalf of the Colorado Department of Public Health and Environment and the \_\_\_\_\_ Colorado Regional Emergency Medical and Trauma Advisory Council (\_\_\_RETAC), attached is the \_\_\_\_\_ County Emergency Medical Services (EMS) system consultative review report. Pursuant to your invitation and support of this project, a group of EMS system consultants worked under the general coordination of both the \_\_\_RETAC and CDPHE to review the current status of the EMS system in \_\_\_\_\_ County. The \_\_\_\_\_ Board of County Commissioners and the \_\_\_\_\_ County emergency services community are to be commended for the dedication and foresight you have demonstrated by undertaking this important activity. Hopefully, this report will provide the basis from which the community can move forward to ensure that quality patient care and transportation continue to be provided throughout the county.

The department is pleased to have provided the funding for this project and wishes to thank the \_\_\_RETAC for their willingness to provide additional resources and support to this effort. Understanding that Colorado statute vests each county with the authority to develop, design and implement local emergency medical services systems, this consultative review is intended to provide insight and information from which the Board of County Commissioners, organizational boards of directors, the healthcare community and local EMS services can make the policy decisions necessary to support the development of improved services to patients throughout your jurisdiction. The report itself has been authored by members of the contracted review team and represents their perspectives and recommendations. Understanding that the department has limited regulatory authority regarding services that provide prehospital care and transportation, this report nonetheless represents our commitment to work with local governments to ensure quality health care to all Coloradoans. As such, the department looks forward to working with the \_\_\_\_\_ County EMS and trauma care community to support your future decisions regarding local system improvements.

As the local community considers its next steps, if our office or the \_\_\_\_RETAC can be of further assistance, we will look forward to the opportunity.

Respectfully,

A handwritten signature in blue ink that reads "D. Randy Kuykendall". The signature is written in a cursive style with a large, stylized "D" and "K".

D. Randy Kuykendall, MLS  
Deputy Director  
Acute, Community and Emergency Services Programs  
Health Facilities and EMS Division

Colorado Department of Public Health and Environment

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## Executive Summary

Assigned to: Sean Caffrey

### Content:

- Brief Description of project
- Overview of stakeholders
- Scope of system and agency roles
- Overall determination of system status
- Strengths
- Major Challenges
- Highlight recommendations

An emergency medical services (EMS) consultative visit of the Dolores County EMS system was conducted at the invitation of the Dolores County Board of County Commissioners (BOCC) in December 2011. The review team was selected from throughout Colorado for their expertise in EMS issues faced by Dolores County. All major participants in the local EMS system were interviewed and additional information was collected from publicly available sources. The Dolores County EMS system is comprised of two local volunteer ambulance services located in Dove Creek and Rico with some remote areas of the county covered by the EMS Department at Southwest Memorial Hospital in Cortez. Other local public safety agencies, including volunteer fire departments in Dove Creek, Dolores, Egnar, Pleasant View and Rico as well as the Dolores County Sheriff also provide support for EMS response. The Dove Creek Clinic, a non-profit federally-qualified health center, also provides urgent and primary care services in the Dove Creek area. Communications services are provided by multi-jurisdictional communications centers in Cortez and Dove Creek.

The review team determined that EMS services currently being provided within Dolores County were functional, but challenged. While the dedication of volunteer EMS providers to answer the call when needed was without question, proper attention to administrative and organizational details was often limited. In particular, the hard work of developing and implementing a long-term vision for the local EMS system was not a priority. As such, administrative, operational and financial concerns were often not addressed in a proactive manner. Resources, particularly human resources, were obviously in short supply. Challenges were noted with ambulance licensing, data collection, initial provider education, billing and communications systems. It was also clear that the system could benefit from improved coordination and cooperation between the multiple small organizations that comprise the local EMS system. Despite these findings, the team was very impressed with the dedication of all system participants, as well as the commitment of the BOCC to EMS issues. The team further believes strongly that the improvement of planning and communications mechanisms, as well as exploration of key partnerships, will allow the Dolores County EMS system to become a successful model for effective EMS in rural Colorado. This report contains a number of recommendations including:

- Enact a county ambulance licensing resolution
- Provide for EMS data collection compliance
- Regularly deliver EMS Provider (EMT & AEMT) courses locally
- Implement shared billing arrangements
- Improve radio system coordination and mutual aid agreements
- Implement an electrocardiogram (ECG) transmission system and protocol
- Formalize the Emergency Operations Coordinator position
- Integrate quality improvement and continuing education programs
- Consider inclusion into Telluride area services for the Rico area
- Explore a Dove Creek Health Services District
- Explore shared services with Southwest Memorial Hospital EMS

## Introduction and Project Overview

Assigned to: Sean Caffrey

- Project Origin and History
- County Authority
- State Authority
- Description of funding and RETAC partnership

In the late spring of 2011 the Board of Directors of the North Park Hospital District (NPHD), which provides Emergency Medical Services (EMS) response and ambulance transportation throughout Jackson County, Colorado inquired about EMS technical assistance services available from the state government through the Colorado Department of Local Affairs. The district board was connected to the Emergency Medical Services (EMTS) Section at the Colorado Department of Public Health and Environment (CDPHE) and made aware of the EMS consultative visit program. In 2012 the district subsequently applied and was awarded a system improvement grant to conduct the consultation. The Jackson County Government was both aware and supportive of this request by the North Park Hospital District.

Under Colorado law, the Jackson County Board of County Commissioners is the ambulance licensing authority as defined by C.R.S. § 25-3.5-301. The NPHD and the BOCC expressed interest in developing viable long-term solutions to ensure that high-quality EMS services are provided to the residents and visitors of Jackson County.

The EMTS Section, pursuant to declaration and authority provided in C.R.S. § 25-3.5-102 and 603 respectively to assist local jurisdictions, recruited an EMTS consultative visit team to evaluate the Jackson County system and to make recommendations for improvement. Analysis of the current system included interviews with all primary stakeholders in the current EMS system, as well as key stakeholders in adjoining areas. The consultation also included review of available system data and comparison to other EMS systems within Colorado. Overall, the state of the current system was analyzed using the 15 essential EMS system components contained in the 1996 National *EMS Agenda for the Future*, published by the National Highway Traffic Safety Administration. These components serve as the basis for a number of statewide and regional planning activities and are further referenced in 6 CCR 1015-4, Chapter Four. Finally, both short- and long-term recommendations are provided for improvement to the overall Jackson County EMS system, including the treatment, transportation, communications and documentation subsystems addressed in C.R.S. § 25-3.5-101 et seq.

The system improvement grant authorized approximately \$23,000 to conduct the review and developed a contractual relationship with the NCRETAC to serve as the fiscal agent for the project. Project management for the EMTS consultative visit was provided by the EMS System Development Coordinator and a team of five seasoned EMTS leaders. Of the team of five experts, all were selected jointly by the EMTS section, NCRETAC and NPHD for their expertise in rural EMS systems. In



addition to these team members, the NCRETAC Executive Director was instrumental to the success and support of the project team.

## Dolores County Geography and Demographics

Assigned to: Sean Caffrey

- Square Mileage
- Origin of County Name
- Major Landmarks and Geographic features
- Population
- # of households
- Municipalities / Census Places
- Major Highways
- County Seat
- Population Density
- Public Lands
- Major Economic Drivers
- Commuting Patterns
- Emergency Services Structure
- Dispatch Overview
- County Role

Jackson County, Colorado encompasses 1,621 square miles in north central Colorado and is located in an intermontane basin known as the North Park. The basin is rimmed by the Park, Rabbit Ears, Never Summer and Medicine Bow Ranges on three sides while opening up into Wyoming to the north. The basin contains the headwaters to the North Platte River and ranges in elevation from 7,800 to 13,000 feet above sea level. The term park is derived from the French word “parc” meaning game preserve. Both Grand and Larimer counties claimed the North Park area in the late 1800s leading to a Colorado Supreme Court decision in 1886 to include the area in Larimer County. Jackson County was established as an independent county in 1909 and is named for President Andrew Jackson. The only incorporated municipality in the county is the 0.3 square mile Town of Walden located in the center of the basin at 8,099 feet in elevation and is named for Postmaster Marcus Walden. Walden also serves as the county seat.

Jackson County had a 2011 estimated population of 1,370 in approximately 690 households according to the Colorado State Demography Office. The county includes the incorporated municipality of Walden (population 600) as well as an estimated population of 770 in the unincorporated areas of the County which include the unincorporated places of Cowdrey, Gould and Rand. Overall population density is 0.9 persons per square mile with a maximum population density of 2,000 persons per square mile within the Town of Walden.

As of the 2010 Census agriculture is the major economic activity in Jackson County accounting for an estimated 234 or 30% of the jobs in the county. Following agriculture tourism accounts for an estimated 77 or 9.9% of the jobs in the county. The government sector, manufacturing and regional services account for an additional 22.8 % of employment. 16 households (2.05%) are categorized as commuters to other areas with 62 households (8%) are listed as retirees. Approximately 6% of households are listed as receiving public assistance. The North Park area is among the few remaining mountainous counties in Colorado primarily dependent on ranching and agriculture. The Town of Walden has a small number of commercial establishments including lodging, retail, restaurants and fuel stations.

Walden is located at the intersection of State Highways 14 and 125. A 34 mile segment of State Highway 14 runs roughly east-west and a 54 mile portion State Highway 125 that runs north-south through the County. Additionally, all 9.2 miles of State Highway 127 also runs through the northern portion of the county. Colorado Department of Transportation(CDOT) data indicates daily traffic counts through Walden of up to 2,500 vehicles per day in 2011 with up to 13% truck traffic. 2,700 vehicles per day are estimated to travel through Walden in 2020 according to CDOT projections.

The county also contains a large portion of the 71,000 acre Colorado State Forest State Park as well as large percentage of land under federal management by the Bureau of Land Management and the U.S. Forest Service. A small number of Colorado State Parks employees are certified as EMS Providers and occasionally respond to emergencies on state land when circumstances allows.

Emergency services within the county are provided by a handful of agencies. Law enforcement agencies include the Jackson County Sheriff and the Colorado State Patrol (CSP). CSP maintains one residential trooper within Jackson County. Law enforcement agencies in the county do not routinely provide EMS service. Jackson County Fire – Rescue is the only local fire department which often responds with the ambulance on EMS responses. Ambulance response and transportation is provided throughout the county by the North Park Hospital District. Dispatching and emergency communications services are provided 24/7 by the Jackson County Sheriff's Office.

Jackson County licenses ambulance services and issues ambulance vehicle permits annually in accordance with the requirements of C.R.S. § 25-3.5-301. Ambulances are licensed and permitted in accordance with Jackson County Board of County Commissioners Resolution 2011-vii-15(e). The County Administrator also serves as emergency manager.

## Emergency Medical and Trauma Services Providers

### North Park Hospital District EMS

The North Park Hospital District Ambulance Service is the sole provider of ground ambulance service in Jackson County.

The North Park Hospital District, a title 32 Special District, was founded in the **1950's** (unsure of exact date) in order to establish a local hospital for Jackson County residents. During their endeavors to establish this hospital, it became evident then that a hospital would not be able to be sustained so efforts to do so were quit. The Board of Directors decided instead that the Hospital District would provide an ambulance service for Jackson County. The Hospital District has maintained a board of directors that have managed the budgetary and financial issues for the agency.

The Service is the primary 911 emergency response for all of Jackson County which covers approximately 1620 sq miles with a population of approximately 1800. The Town of Walden is the only incorporated municipality in Jackson County. State Roads 125 and 14 are the two main highways travelled. The Service responds to approximately 150 calls for service a year.

The Service maintains 3 ambulances in its fleet. Each ambulance is equipped to provide ALS care. Every call is minimally staffed with at least one EMT and a driver. Most commonly, it is reported that a Paramedic attends all calls along with either 2 other volunteers, either EMT or Driver, or both.

The Service is overseen by the North Park Hospital District Board of Directors and day-to-day operations are directed by the paid Paramedic. The Service has an annual budget of \_\_\_\_\_ and current maintains approximately \$500,000 in cash reserves. Revenues are generated by both fee for service and a mil levy assessed by the Hospital District. Neither the Board of Directors or the paid Paramedic are able to provide details about their payor mix.

Assigned to: Rob Handley

- Corporate Structure / Governance
- Founding Date
- Organizational History / Evolution
- Service Area
- Geographic Features
- Population Covered
- Major Highways / Municipalities
- Call Volume
- Service Level & Availability (ALS/BLS)
- Fleet Size
- Staffing Model
- Leadership / Administration
- Budget

- Revenue Sources
- Payor Mix

### North Park Fire Rescue

513 Harrison St,  
Walden, CO 80480  
Telephone: (970) 723-4242  
Fax: (970) 723-8243  
Fire Chief Jeff Benson nbenson@northpark.k12.co.us

North Park Fire Rescue (NPFR) is organized under a fire authority model that shares funding from Jackson County Government and the Town of Walden. The founding date of the original fire department was in the 1940's. NPFR operated as an unstructured business model until late in 2012, when the fire authority was created. Services provided by the Fire Authority include: fire suppression, emergency medical response, wildland firefighting, vehicle rescue, and response to hazardous materials, search and rescue.

NPFR is considered an all-hazards response agency under Department of Homeland Security guidelines. The Service area of the fire authority encompasses all areas within Jackson County and extends into contiguous jurisdictions through formal and informal agreements for assistance.

The nature of the district geography is varied from a densely populated town to vast open areas of grassland and forested areas. Most of Jackson County is a high relatively broad intermontane basin known as North Park, which covers 1,613 square miles (4,180 km<sup>2</sup>). This basin opens north into Wyoming and is rimmed on the west by the Park Range, on the south by the Rabbit Ears Range and the Never Summer Mountains, and on the east by the Medicine Bow Mountains. Elevations range from 7,800 to 12,953 feet (3,948 m) above sea level and is home to the head waters of the North Platte River.

NPFR response area had a 2011-estimated population of 1,370 in approximately 690 households according to the Colorado State Demography Office. The county includes the incorporated municipality of Walden (population 600) as well as an estimated population of 770 in the unincorporated areas of the County which include the unincorporated places of Coalmont, Cowdrey, Gould, Rand. The major highways in the county are State highways 14, crossing east-west and 125 running north-south.

Call Volume averages about 150 calls for assistance per year with approximately 110 of those being EMS related according to the Fire Chief Benson. Service Level & Availability is based on trained volunteer firefighters and a subgroup of EMT's responding when paged out by the Jackson County dispatch center. Availability of personnel is variable due to the volunteer staffing of the agency. The Fire Authority is served by four fire stations located in the town of Walden and unincorporated areas of Cowdrey, Gould and Rand.

Fleet Size and Makeup consists of the following:

#### Walden Station

Unit 301	Type 6	250 GPM CAFS	300 Gallons
Unit 303	Type 6	250 GPM A FOAM	300 Gallons
Unit 304	Type 1	1,000 GPM A & B FOAM	2,500 Gallons
Unit 305	Rescue		
Unit 308	Type 3	250 GPM	1,000 Gallons
Unit 302	Type 1	1,250 GPM	1,000 Gallons
Unit 911	Command	Chevy 2500 4X4	
Unit 343	Type 6	250 GPM	300 Gallons

#### Cowdrey Station

Unit 300	Type 6	250 GPM	300 Gallons
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#### Gould Station

Unit 310	Type 3	250 GPM	1,200 Gallons
Unit 311	Type 6	250 GPM A FOAM	300 Gallons
Unit 309	Type 3	250 GPM A FOAM	1,000 Gallons

#### Rand Station

Unit 306	Type 3	250 GPM A FOAM	1,000 Gallons
Unit 307	Type 2	750 GPM	1,000 Gallons

Staffing Model consists of an all volunteer workforce of 20 responders and a partime-paid Fire Chief. Leadership and Administration of NPFR is provided through a single partime-paid Fire chief, Town and County budgeting officials and volunteer Fire Officers.

Revenue Sources include a 50/50 split from the town of Walden and Jackson County, Each entity contributing \$50,000 on an annual basis.

### Middle Park Medical Center – North Park Clinic

Incorporated in 1993, the North Park Clinic is a Colorado Non-Profit Corporation and is governed by a board of directors. The Clinic operated out of a small cinder block building until 2008 when the new facility was built. One doctor served the clinic up until that time.

In 2012 the North Park Clinic entered into contract with and became a member facility of the Middle Park Medical Center, which includes the Kremmling Memorial Hospital and the Granby Hospital, both of which are Critical Access Hospitals and Level IV Trauma Centers.

The agreement with Middle Park Medical Center preserves North Park's ownership of the medical buildings, land, equipment and other assets and will be renewed on a 5 year basis.

One of the driving reasons for North Park Clinic to join with the Middle Park Medical Center at this time is the approaching 2015 deadline for the requirement to come into compliance with electronic health records under the federal Health Information Technology for Economic and Clinical Health Act. Implementation could cost as much as \$80,000. Joining Middle Park Medical Center's established system solves that problem while providing access to more resources for North Park patients and improving processes like billing. Affiliation with the Kremmling Hospital will also result in greater reimbursements in Medicaid and Medicare.

The North Park Medical Center is served by three practitioners: Dr. Daniel H Smilkstein MD, Dr. Lynnette Telck MD and Physician's Assistant Megan . The clinic is open 8AM to 5PM Monday through Friday. One MD and the PA each work three days per week, overlapping on one day. The clinic staffs about eight people all together.

The facility has four exam rooms, one trauma room, one treatment room and an X-ray room. The building also houses three tenants: North Park Physical Therapy, Jackson County Social Services and Jackson County Mental Health.

The North Park Clinic is not subject to EMTALA and is not a Federally Qualified Health Care Clinic. They have no Surge Plan per se but they have done some mass fatality planning and there is a designated temporary morgue. Staff has been training on NIMS requirements and all staff will have completed IS 100 by January 1, 2013. Services offered include: Family Medicine, X-Ray, Lab Draws / Quick Lab, Pulmonary Function Testing, Air and Ground Transportation Available, Physician-dispensed prescription service. Last year they saw 3,323 patients.

EMS transports from the clinic were estimated to average around 3 per month. EMS has not typically used the clinic as a destination.

A direct 911 phone is not available at the clinic for after hours use, however there is a sign advising anyone who may need help to call 911. Cell phone coverage seems adequate in town but it is obviously patchy elsewhere in the county. Most Walden residents know the home numbers for the Chief Paramedic and the EMTs and they do not hesitate to call them. North Park Hospital District's

EMTs reportedly answer thousands of questions about medical problems each year in addition to responding to ambulance calls. They frequently make “house calls” to assess a person’s condition to determine if they need an ambulance response or not.

### Yampa Valley Medical Center

The Yampa Valley Medical Center (YVMC) is a 39 bed general hospital, with a dedicated 12 bed emergency department (ED), and 4 operating suites. The hospital is a non-profit community hospital designated as a level IV trauma center. YVMC with a 2012 budget of \$79,000,000 and a total staff of 540 received 7,572 emergency department patients in 2011. The ED as well as a 4 bed ICU, laboratory, and radiology provide service 24 hours per day. The ED receives patients from a variety of local and regional EMS systems. YVMC also provides a range of inpatient and ancillary hospital services including inpatient medical and surgery, obstetrics, outpatient surgery, laboratory, medical imaging and pharmacy services. The hospital maintains relationships with major medical centers on the Front Range including Medical Center of the Rockies, Swedish Medical Center, Denver Health, St. Anthony Hospital, and Children’s Hospital. YVMC utilizes both fixed wing and helicopter transport to transfer critical care patients. A *Consumer Reports* magazine survey released in 2012 ranked YVMC as the safest hospital of the 38 surveyed in Colorado. The criteria considered included rate of infections, re-admissions, complications, and mortality.

Training and public education is a priority of the hospital. North Park Hospital District should explore ways to utilize YVMC as a training resource. YVMC experience with patients transported by systems similar to NPHD offers an opportunity to receive valuable input as part of the district QA-QI process.

### Ivinson Memorial Hospital (Laramie WY)

Ivinson Memorial Hospital (IMH) is a not-for-profit general hospital located 65 miles from Walden in Laramie, Wyoming. The Albany County Hospital District owns IMH. IMH has 99 beds available including 4 ICU beds. IMH offers general medical services, and a few specialty services such as OB, urology, pediatrics, and general surgery. IMH is designated as a “community level” trauma center. While the Wyoming nomenclature is different, this would correspond to a “level 4” trauma center designation in Colorado. The emergency department sees approximately 11,000 patients per year and is staffed with single physician coverage 24 hours per day in 12-hour shifts, and with a mid-level provider from 10am to 10 pm.

Currently IMH transfers patients with needs unavailable at IMH to multiple other facilities including Cheyenne, WY for cardiac patients, Medical Center of the Rockies in Loveland, CO for severe trauma, and Swedish Memorial Hospital in Denver, CO for stroke patients. IMH is about to join the University of Colorado Health System, which includes University Hospital in Denver and Poudre Valley Hospital in Fort Collins, CO so these referral patterns, may change.

Most critical patients are transferred to other facilities by air, but if weather doesn't permit this, local Laramie Fire Department based EMS may transport with IMH nursing staff as attendants. No specific ground CCT is available.

#### Middle Park Medical Center (Granby & Kremmling)

Kremmling Memorial Hospital District, now doing business as Middle Park Medical Center (MPMC), is a 25 bed, critical access hospital system serving patients in Grand & Northern Summit County, Colorado since 1933 and at a family practice clinic in Walden since 2012. The hospitals in Granby & in Kremmling are both designated as a Level IV Trauma Centers. MPMC is supported in part by the Kremmling Memorial Hospital District, a Colorado special services district. The Kremmling emergency department is open 24 hours per day and is staffed with single physician coverage. The ED sees approximately 700 patients per year. No specialty services are offered above basic medical care on an emergent basis, though outpatient specialty clinics are available. The Middle Park Medical Center is affiliated with the Centura Health System and most transfers go to other facilities in the system, notably the St. Anthony's facilities. Though air transport is used 75% of the time for critical care transports out of the facility, Grand County EMS with a station in Kremmling does have some ground CCT transport capabilities when air transport is unavailable.

#### Jackson County Sheriff Communications Center

Emergency Services Dispatch for Jackson County is housed within, is funded by and is operated by the Sheriff's Office. The Dispatch Center is the 911 public safety answering point (PSAP) for Jackson County. Eight dispatchers staff the center with one dispatcher working at a time. The day shift has a backup dispatcher available since the Sheriff's Office Administrative Assistant is also a dispatcher. They dispatch for the Sheriff's Office, the Fire Department, EMS, DOW, Colorado State Forest and Colorado State Parks. The dispatch center handles between 700 and 900 calls per month with around 40 of those being 911 initiated. Fire and EMS personnel carry VHF radios. Community members commonly call EMTs directly at home for assistance with issues that do not rise to the level of urgency of an ambulance ride. Home visits that do warrant an ambulance ride are called in to dispatch for paging. Medical Flights are dispatched from the scene or from the Dispatch Center at the direction of the EMS team leader on scene.

Both 800 MHz and VHF systems are used. A gateway is not used. A backup generator is in place. CAD and EMD are not used. Difficulties in training dispatchers and perceived liabilities for EMD were sighted as reasons not to pursue that option. Cell coverage is present in Walden but is spotty around the county, as is radio coverage for both 800 MHz and VHF.



## Analysis of Dolores County EMS System Elements

Prior to and during the consultative team visiting the county, key participants from the countywide EMS response system and local health care facilities were asked to complete a survey rating their current assessment of the EMS services and relationships in the county. Consultants on the review team also participated in scoring after the site visit. The results from the various components of the survey are provided throughout this section of the report.

### Integration of Health Services

System Integration	10 = Strongly Agree 1 = Strongly Disagree											
Question	1	2	3	4	5	6	7	8	9	10	Don't Know	Rating Average
Various elements of the EMS and trauma care system are coordinated	0	1	3	2	0	0	0	2	0	0	0	4.38
EMS is well connected to the overall health care system	0	1	2	2	1	1	0	1	0	0	0	4.38
Public safety agencies cooperate effectively	0	0	1	2	1	0	0	3	1	0	0	6.13

Coordination between EMS Services is accomplished through hand-shake agreements. Three entities participate directly in delivery of EMS in Jackson County. The North Park Hospital District Ambulance Service is the primary EMS response agency and operates at an ALS/BLS level of care. North Park Fire Rescue operates a fire service model with a few BLS responders in the organization.

The Jackson County Sheriffs Office provides first responder EMS in the mix. In a multiagency EMS response, the Ambulance service is the lead agency; the fire department provides overall incident coordination through application of the Incident Command System and the Sheriff provides support as necessary.

Mutual / Auto Aid Relationships are not defined in the county response system through written agreements. It appears the working relationships of the three responding agencies are based on historical relationships, rather than written agreements. Other regional stakeholders such as state parks and the state forest service have indicated interest in defining response relationships through some sort of written mechanism, such as MOU's (memorandum of understanding), IGA's (intergovernmental agreements) and response protocols.

The Integration of EMS services with local healthcare / Public Health, specifically the local health care clinic is disjointed at best. There appears to be no written agreements, protocols or

established procedures to establish a relationship. In addition, there is limited contact between Public Health, clinic personnel and the local EMS responders in regards to treatment, education and coordination of patient activities.

Overall Medical Direction is in a state of flux as a new medical director is transitioning into the local system. Dr. Telk is expected to take the position as primary Physician at the clinic and provide medical direction to the Ambulance service and Fire Department. The outgoing medical director has provided service to the Hospital District for the last several years in a part-time capacity. In a review of current medical direction activities, there were several areas of concern by the visiting team. There appears to have been no formal training for current or prospective medical directors.

There are no written protocols for EMS responders, no chart reviews of EMS responses, no continuing education provided by the medical director or evaluation of EMS responders in the system.

Interagency QA / QI is currently not utilized in the NPHD EMS system.

There is no identifiable county or regional EMS council in Jackson County. The NCRETAC appears to be the lone agency that brings any functions of an EMS council to the county.

With the exception of EMS services provided by Southwest Memorial Hospital, there is no organized or ongoing connection between local EMS services and health care organizations in Dolores County. EMS connections do exist when needed between receiving hospitals and local EMS organizations. All local EMS organizations do have common medical direction. Some limited staff crossover also exists between Dove Creek Volunteer Ambulance Service staff and the Dove Creek Clinic.

Due to the isolated nature of local response entities, it does not appear that any effort has been made to standardize equipment between services. In particular, there is an unrealized opportunity to standardize equipment and procedures between the local clinic, fire departments, all local EMS agencies and air ambulance services.

In regard to inter-agency coordination, the geographic separation between Dove Creek and Rico makes cooperation between these two agencies mostly impractical. Both organizations, however, adjoin the Southwest Memorial Hospital EMS response area. Both services may also be required to interact with services in Montezuma, San Juan or San Miguel counties. The Dolores County Emergency Services Coordinator serves as an ongoing, effective coordination point between all local agencies. Overall, while limited coordination currently exists, there are no structural barriers to improved communication and coordination between agencies and all services share common challenges even though they do not share boundaries.

## Legislation and Regulation

Legislation and Regulation		10 = Strongly Agree 1 = Strongly Disagree										Don't Know	Rating Average
Question		1	2	3	4	5	6	7	8	9	10		
The County EMS Resolution provides a solid foundation for the EMS system		2	1	1	0	0	1	1	1	0	0	1	4.00
EMS organizations are in compliance with all applicable regulations		0	0	0	1	2	1	2	0	0	0	2	5.67
All participants in the EMS and trauma care system understand their roles		0	2	0	1	1	2	0	0	0	0	2	4.17
The EMS system is accountable to the public for its performance		0	1	1	1	1	2	1	1	0	0	0	5.13

Assigned to: Rob Handley

- Current Ambulance Licensing Resolution?
- Additional County EMS Requirements?
- Provisions for CCT Ground transport?
- County involvement in EMS System
- Active compliance programs (Medicare Billing / Safety Etc.)
- Compliance with DOLA requirements (budget submission, etc.)
- Public reporting / accountability

Counties in Colorado are required to license ambulance services and issue ambulance vehicle permits (C.R.S. 25-3-5-301). Counties are also authorized to adopt regulations and develop EMS system frameworks to meet or exceed the requirements contained in the state EMS regulations (6 CCR 1015-3).

Many counties establish their EMS frameworks and licensing policies through a resolution or ordinance. In many cases these resolutions also formally create EMS councils to advise the Board of County Commissioners on EMS issues. Based on research with the County Clerk, Board of County Commissioners and on-site interviews, it appears that Dolores County has never formally adopted a resolution addressing ambulance licensing or the local EMS system structure. Although no resolution exists, the Dolores County Board of County Commissioners does license ambulance services as required and arranges for annual inspections through the emergency operations coordinator.

The Dolores County EMS system, like many rural EMS systems in Colorado, uses a large number of emergency medical responders (EMR) and/or medical first responders (FR) throughout the county. These EMR/FR personnel have more limited training than certified EMS providers and in many cases these responders assist by driving ambulances or assisting EMTs with patient care. Many also participate in medical first response as fire or search and rescue personnel. While EMT training

systems, licensure and oversight are well-established through the Colorado Department of Public Health and Environment regulations, EMR/FR training and certification programs are less developed. A voluntary certification for EMR/FR is available through the Colorado Division of Fire Safety as well as through some non-profit organizations such as the American Red Cross and the National Ski Patrol. The Dolores County EMS systems appears to have sporadic access to EMR/ FR training programs and does not consistently utilize any of the available certification options.

## System Finance

System Finance	10 = Strongly Agree 1 = Strongly Disagree											
Question	1	2	3	4	5	6	7	8	9	10	Don't Know	Rating Average
The EMS System is adequately funded	2	2	1	0	0	1	0	1	0	0	1	3.29
The local EMS and trauma care system is sustainable over the long term	0	2	2	0	0	1	0	1	0	0	2	4.00
The public is willing to support EMS funding needs	1	0	2	0	0	0	0	3	0	0	2	5.17
Ambulance rates are reasonable	0	0	1	0	0	1	0	1	0	1	4	6.75

NPHD operates on a budget provided by a property tax mill levy and billing for services. The state EMS grant program has been accessed to provide additional funding for infrastructure. The funding sources provide adequate funding for the system as currently structured. North Park Hospital District is a Title 32, Special District. Property tax revenues received provides a relatively stable funding base. A decreasing population combined with current national and state economic challenges impacts property tax revenues. The lack of substantial commercial property combined with the impact of large ranches assessed at the agricultural rate limits available tax revenues. An aging population covered by Medicare and an increasing number of residents covered by Medicaid will continue decrease potential revenues due to the lower reimbursement rates. Anticipated changes to ambulance reimbursement that are expected to result from the Affordable Care Act will also have a potentially negative impact on funding. The Board of Directors is statutorily required to ensure the financial stability of NPHD. As required an annual financial audit by an outside entity is conducted. There were no negative audit findings relayed to the assessment team. NPHD has relied on two different outside billing services for several years. The Board of Directors has recently decided to provide billing as an in-house function. There were no negative comments received from the Board concerning the services provided or the collection rate by the billing services. The decision for the change is described as an opportunity to provide a local employment opportunity. The change has the potential to result in a decrease in collections.

NPHD employs one full-time paramedic with the title of "Supervisor". One part time employee serves as secretary and office staff for the Board. Although the EMT staff is called "volunteers" they are provided pay for being on call and paid a variable rate for responses, ground transports, and incidents resulting in helicopter transport. At a minimum a routine response consists of the Supervisor, one EMT, and a driver with no medical training. The District has a fleet of four type 1 ambulances. Utilization of the state grant program has ensured timely upgrades to the fleet. The ambulances are equipped with appropriate equipment. The NPHD occupies a newer building located adjacent to the North Park Clinic. The building allows all four ambulances to be parked indoors. There is space for equipment and supplies. A room adequate for group training is available in the building.

## Human Resources

Human Resources	10 = Strongly Agree 1 = Strongly Disagree											
Question	1	2	3	4	5	6	7	8	9	10	Don't Know	Rating Average
Our community has adequate numbers of EMS providers	1	2	2	1	0	1	0	0	0	0	1	3.00
Adequate numbers of EMS response units are available	0	0	3	0	0	1	0	3	0	0	1	5.57
EMS Providers are held in high regard by the community	0	0	1	0	0	1	0	3	0	1	2	7.17
People want to work or volunteer for EMS organizations	0	2	1	0	2	0	1	0	0	0	2	4.00
EMS providers are overworked	1	0	1	0	0	1	2	0	2	0	1	6.00
EMS providers have a high turnover rate	0	0	0	1	0	1	1	1	1	0	3	6.80

Assigned to: Rob Handley

- Adequate Number of Providers
- Existence of Staffing Plan / Targets
- Appropriate Coverage
- Reserve / Surge Capacity
- Scheduling
- Provider Mix (BLS / ALS)
- Use of other healthcare providers (non EMS Providers?)
- Current Recruiting Efforts
- Retention Programs in Place
- New member orientation / training / clearance procedure
- Management training (initial / ongoing)
- Organization development activities?

The North Park Hospital District Ambulance Service is currently comprised of approximately 20 volunteer members and is led by a full time paid Paramedic who fulfills the role of supervisor/director. Of the 20 volunteers, 2 are paramedics, 15 are EMT's, and 3 are drivers. These numbers would seem sufficient to manage their current call volume. It is claimed that there has never been an occurrence where the service was unable to staff a call for service.

A 24-7-365 call schedule is in place, maintaining staffing levels at 3 providers on 12 hour shifts. It appears that this schedule is mostly able to be filled with their current staffing levels. An "all-call"

system is used to manage surge capacity. All members are issued either VHF radios or pagers and can receive all EMS pages in the county.

There is a 100% ALS availability for every call for service. Our research indicates that the paid Paramedic attends every call. They maintain that if the paid Paramedic is unable to attend, one of the part time Paramedics would attend. There is no indication that non-EMS healthcare providers are used in everyday operations.

There is no formal recruitment and retention program in place for members. It appears that they manage their staffing needs on an on-going basis, and always are willing to take on new volunteers as they become available.

New member orientation is informal at best. Some members state that they have been thrust behind the wheel of an ambulance under emergent circumstances and 'drive like hell at 85 mph to the hospital'. One member, an EMT, states that he is the vehicle trainer and new drivers are assigned to him to 'train'. He describes taking them out in the ambulance and providing driving experiences on different surfaces, dirt, pavement, etc.

There has been no stated management training, either initial or on-going. Informal and 'customary' organizational efforts seem to be the rule. There is no evidence of any type of formal organizational development. Policies to this end are non-existent or severely lacking.

### Clinical Care

Clinical Care	10 = Strongly Agree 1 = Strongly Disagree											
Question	1	2	3	4	5	6	7	8	9	10	Don't Know	Rating Average
The EMS system has good clinical protocols	0	0	0	2	0	1	0	1	2	0	2	6.67
EMS protocols are coordinated between organizations	1	0	1	2	0	1	1	0	1	0	1	4.86
EMS and trauma care providers are well trained	0	0	1	1	2	0	1	2	0	0	1	5.71
EMS and trauma care providers are experienced	0	0	1	2	2	0	1	0	1	0	1	5.29
Capability exists to provide critical care inter-hospital transports	4	0	0	0	0	1	1	1	0	0	1	3.57

The North Park Hospital District doing business as Jackson County EMS provides Emergency Medical Services in Jackson County. The EMS agency is comprised of one full time employed Paramedic who also acts as agency director, one volunteer paramedic, and 8-15 volunteer EMT basics some of which are IV certified. While still considered volunteers by the North Park Hospital District, the staff is paid an on-call wage and a per-run stipend. The full time paramedic seems to be on call 24 hours a day, seven days a week and preferentially does all of the transports and all of the documentation. Most of the other volunteer staff are used primarily as support staff for the one paid paramedic. The other

volunteer paramedic and the full time paramedic are married, and though it does not seem to occur very frequently vacations by the couple would relieve the service of all ALS availability. The EMT-Basics are scheduled on 12 hour shifts, and 3 are scheduled each shift. Responses are reportedly prompt however there is no limit on the number of people who may respond and this has resulted in some crowding at scenes. As there are very few times when patients are transported without ALS, usefulness of ALS intercept by adjoining agencies during EMT-basic transport is unknown.

Patients are rarely transported to the local clinic, North Park Medical Center, due to the clinic's limited operating hours and lack of services. This may change in the future as the clinic wishes to upgrade these items. Walden is located approximately 65 miles from three medical facilities, each of which is a designated Level 4 trauma center with otherwise limited services. The nearest facility with advanced services is in Fort Collins, 100 miles away. As such most patients with concerns for significant trauma, cardiac, stroke, or other illness are routinely flown out of Jackson County for definitive care. This may occur in 25% of patients contacted by the EMS service. While there are a number of air transport agencies which cover the Jackson County area, it appears that Northern Colorado Med Evac out of Greeley is the preferred service. This may not be the closest service available and these referral patterns may need to be reviewed. Discussions with the receiving medical facilities in the area demonstrate very few patients who they receive from Jackson County who require flight out for further care. This may indicate that patients are being over triaged for air transport out of Jackson County.

The Jackson County Sheriff's office operates the county dispatch center, the single public service access point in Jackson County. Currently the dispatcher's have minimal emergency medical training, and receive no emergency medical dispatch training. There is no priority dispatching or any pre-arrival instructions available to callers. The EMS service is dispatched to calls with minimal information. All calls seem to go with lights and sirens responses. This method of routine response has been shown to present a greater danger to providers and the public than a benefit to patients. This will need to be reviewed when agency SOPs are written.

The clinical care provided by the EMS service is very well regarded by the community. Receiving facilities report frequent callbacks by the agency for follow up on patient condition. This certainly demonstrates concern for the patient, yet it is unclear how much this information is used for care review and quality improvement. While the agency supervisor has been performing this service for more than 20 years, the EMS service has yet to develop a set of medical protocols or standard operating procedures. As such actual performance indicators and protocol directed education is non-existent within the agency. While the full time paramedic may have a good understanding of clinical care, the supporting staff of EMT-Basics has become wholly dependent on the main paramedic to know what to do on scene and for basic patient care parameters. This further restricts some ability of the system to perform adequately without the full time person. How much this lack of protocols plays into the potential over triage of HEMS patients is unknown. On-line medical control does not seem to be used as a resource for decisions regarding patient care or destination. In addition, proper quality assurance and improvement (QA/QI) is incapable of being performed without a standard against which things may be compared. It is reported that the medical director does review all charts, but there is no identified QA/QI system.



The lack of standard operating procedures for the agency has also led to some concerns about patient care reporting system security and controlled substance storage and documentation. While the EMS service has used an electronic record for the last 10 years, the records are kept in an unsecure location. The lack of a controlled substance policy has led to inappropriate storage of controlled substances and it is unknown if proper records are being kept as required by the DEA. Items such as driver training, new provider orientation and procedures, and documentation requirements are also lacking. The EMT-Basics do not feel comfortable writing reports in the EMR as the main paramedic does all the report writing. Additional concerns are generated by not having a definition of what constitutes a "call" and when a report needs to be written. This leads us to conclude that not every call is being accounted for in the system. This creates problems not only for medical oversight and proper QA of the system, but for accurate resource management as well.

Education of the staff seems to be random and based more on what there is time for and not an identified QA/QI program. The main paramedic does most of the education for the EMT basics. Given his 24/7 call schedule there is little impetus to plan and give education over minimums. The agency has regularly scheduled cross training with the fire department the last Thursday of every month, but there is no regularly scheduled EMS meetings otherwise. The paramedics get their required education in ACLS/PALS by having teams come up from Weld County or by piggy backing onto clinic education. The addition of a paramedic on-line refresher course every 2-3 years seems to be the complete education for the ALS providers. Dan Smilkstein, MD, has provided medical direction for many years. It does not appear that the crews have any regular contact or education from the medical director. The lack of medical protocols makes it difficult to determine if advances in medical care are being effectively adopted by the agency in its current clinical care parameters. The crews have stated that increased educational opportunities including more scenario-based hands on education is their biggest wish to improve the service. There has also been frustration expressed on the part of the crew that requests for more education, responsibility, and autonomy have not been acted upon by the supervisor or the District Board. While the agency has been functioning in this manner for a substantial period of time, the above concerns mean that succession planning for provider turnover has been seemingly overlooked.

Few of the medics work in outside agencies, but those that do have seen what proper working education and procedural systems can do for agencies and are anxious to see how that could be applied in Jackson County. The pieces are all in place for the functioning of a proper system, it just needs to be codified and adhered to.

### Education Systems

Education	10 = Strongly Agree 1 = Strongly Disagree												
Question	1	2	3	4	5	6	7	8	9	10	Don't Know	Rating Average	
New members have access to EMS	1	1	2	3	0	0	0	0	0	0	1	3.00	

Training when needed												
Local EMS education is of high quality	0	1	0	0	1	3	1	0	0	0	2	5.33
EMS and trauma care providers have regular access to continuing education	0	2	1	1	0	2	0	1	0	0	1	4.43
Leaders in the EMS system are well trained in management functions	1	1	1	1	1	1	0	0	0	0	2	3.50

Initial training for first responder and EMT-basic is provided by Jim Rizor, paramedic supervisor for the hospital district. The training is sponsored **through ? community college**. The frequency of initial training for first responder and EMT-B seems to rotate on a three-year cycle. Paramedic level training is available outside of the county, with the most recent paramedic, one of two in Jackson County, being trained in a Texas program.

The only identified instructor for EMS in the county is Jim Rizor. There is EMS related training scheduled one evening per month with the fire department and is unclear if this qualifies for continuing education for the purposes of renew EMS certifications. There was a recent recertification program for the two paramedics delivered via distance learning at the ambulance headquarters in Walden.

State and National Registry testing is not conducted within the county and must be done at remote locations such as approved testing sites or at a community college setting **Community college district?**

The current use of the single EMS educator appears to be the only available option for continuing education of EMS providers in the county. There is interest within the ambulance and fire department providers to explore other options such as web-based training and importing instructors from outside the county. EMS providers in the Hospital District are allowed to attend outside conferences and training events based on approval by the Hospital District Board. It is unclear to what extent this occurs, there are two providers attending the State EMS training conference scheduled during the compilation of this report

Instructors qualified to teach specialty certifications for the EMS providers have historically been contracted from outside agencies. Since there are no training records to examine, it is difficult to assess the currency or effectiveness of such training.

Opportunities for EMS training outside of the county are diverse and plentiful. Historically, physicians from Laramie, WY have provided such opportunities. The hospitals in Laramie and Steamboat Springs offered their training facilities and training opportunities to the county and Hospital district EMS providers, during the Emergency Medical Services Consultative Visit

There is an absence of a training plan for EMS responders in the Hospital District. Also lacking is a responsible person for training, record keeping, and quality assurance of the training program. The

use of the medical director for continuing education training and monitoring of a quality management program for initial and continuing education is strongly encouraged.

Initial training for EMS providers in the Southwest region is conducted primarily through Southwest Colorado Community College in Durango. Southwest Colorado Community College is operated as a division of the Pueblo Community College system. The college has faculty members available in Montezuma and Dolores Counties who participate with local EMS services and hospitals. These instructors are active clinicians who provide EMT and EMT-Intermediate courses at various sites throughout the Southwest Colorado RETAC. A significant barrier to additional EMS classes is a minimum enrollment requirement of 10 students in order to conduct EMS classes. The small towns of Dove Creek and Rico are lucky to have four or five people willing to take a class at any given time. The travel time between Dove Creek and Rico is also too great to be easily traveled regularly in the event a joint class could be coordinated. Additionally, the required clinical rotations for these classes require students to travel to Southwest Memorial Hospital in Cortez or to Mercy Hospital in Durango. Once coursework is completed, applicants for state EMS Provider certification are required to travel to Farmington, NM to complete computer-based certification testing for the National Registry of EMTs. Overall, it is thought that this cumulative need for travel to complete an EMT certification process may be more than many potential volunteers are willing to undertake.

Continuing education is provided primarily by local ALS providers and the medical director. Continuing education credits are available through Southwest Community College. Throughout the year there are a variety of educational opportunities offered in the region, although it is unclear if these opportunities are coordinated or targeted to ensure participation from the more rural services, such as those in Dolores County.

## Medical Direction

Medical Direction	10 = Strongly Agree 1 = Strongly Disagree											
Questions	1	2	3	4	5	6	7	8	9	10	Don't Know	Rating Average
The Medical Director(s) participate actively in the system	0	0	0	0	2	0	2	2	1	0	1	7.00
The Medical Director(s) regularly monitor clinical performance	0	0	1	0	1	1	2	0	0	0	3	5.60
The Medical Director is consulted on EMS and trauma care system issues	0	0	2	0	0	2	0	0	1	1	2	6.17

Dr. Dan Smilkstein, a family practitioner who works primarily out of Steamboat Springs, currently provides medical direction for the service. Dr. Smilkstein has been seeing his Jackson County patients in Walden at the clinic for many years, but his office time has decreased since the clinic's takeover and staffing by Middle Park Medical Center. Dr. Smilkstein has been providing medical direction services for a number of years to Jackson County EMS and also covers the EMTs who are primarily associated with the Fire Department, but are still considered part of the EMS agency. However, the lack of any written agreements makes these delineations of duty and responsibility tenuous.

Despite many years at the helm of this agency, Dr. Smilkstein has not insisted on protocol development for the agency. He has access to all reports through the EMR, and he reportedly reads and reviews all calls. He has reported recalcitrance on the part of the agency supervisor to communicate and correct identified issues through chart review or by referral from receiving facilities. The lack of protocols also means there is no identified QA/QI system which would outline procedures for corrections and failure to comply.

Currently there is discussion going on with Dr. Lynette Telck, a family practitioner who is the medical director of the North Park Medical Clinic, about Dr. Telck taking over the medical direction of the EMS and Fire services. This would be an opportune time for the agency to come into compliance with protocols, SOPs, a QA/QI system, and written agreements with providers.

Public Education

Public Education				10 = Strongly Agree 1 = Strongly Disagree									
Question	1	2	3	4	5	6	7	8	9	10	Don't Know	Rating Average	
The public understands and supports the local EMS and trauma care system	0	0	3	0	0	1	1	1	0	0	2	5.00	
Regular efforts are made to inform the public about EMS and trauma care	3	0	1	1	2	0	0	0	0	0	1	2.86	
Regular efforts are made to inform policy makers about EMS and trauma care	1	1	2	0	0	1	2	1	0	0	0	4.63	

Assigned to: Rob Handley

- Participation in community events
- Standby services provided to fairs / rodeos / school sports
- g Health Fair participation?
- Annual report / newsletter?
- Relationship with local media?
- Subscription service?
- Recruiting events?
- Appreciation events?

The North Park Hospital District Ambulance Service has a fairly limited amount of public education provided.

The Service provides EMS standby services to local athletic events as requested and 'Pioneer Days', a local celebration of the Jackson County way of life.

They also provide assistance to the gHealth Fair event that is held in Walden.

With the exception of the annual *g Health Fair* event held in Dove Creek, it did not appear that any injury prevention or public health programs are regularly offered within Dolores County. Additionally, other than word of mouth, there are no ongoing efforts to educate the local community about the emergency services agencies. However, despite this absence of formal public education, there is a sense the community supports local emergency response organizations. The Dolores County Emergency Operations Coordinator also serves as an important link between local emergency response organizations and the county government.

## Public Access

Public Access	10 = Strongly Agree 1 = Strongly Disagree										Don't Know	Rating Average
Question	1	2	3	4	5	6	7	8	9	10	Don't Know	Rating Average
The public can easily access EMS services	0	2	0	0	0	1	0	2	2	0	1	6.29
High quality medical instructions are provided to callers	3	1	1	0	0	0	0	0	0	0	3	1.60
Sufficient EMS response is available quickly	0	0	4	2	0	0	0	1	0	0	1	4.00
Inter-hospital / inter-facility ambulance transport is readily available when needed	2	1	1	1	0	0	0	2	0	0	1	3.86

The 911 Public Safety Answering Point (PSAP) in Jackson County is the Dispatch Center at the Sheriff's Office. Eight dispatchers maintain 24/7/365 coverage. The survey reflects a perception by some that access to EMS is problematic however a greater number of respondents felt that access to EMS by the public is very good. Many residents know the home phone numbers of EMTs and the Paramedics and call them frequently with medical questions.

There is not an after hours phone at the clinic that links to PSAP or EMS but there is a sign informing those needing help to call 911. Cell coverage is adequate in the town of Walden but sporadic though out the rest of the county.

The survey reflects the reality that Emergency Medical Dispatch is not used in Jackson County. Implementing EMD may be easier than it is currently perceived to be.

The survey also indicates a less than average perception of the ability to provide a sufficient EMS response quickly. This may be due to the difficulties involved with recruiting and retaining EMTs. There was no indication that slow response was an issue. In fact EMTs or Paramedics are often called directly by patients and so, in those cases that turn out to be ambulance runs, EMS is already on scene when the call goes out.

EMS personnel carry VHF radios that receive pages from the PSAP.

Scheduled crews respond to calls. Off call EMTs frequently respond in addition to the on call crew in case extra hands are needed.

There is no protocol for air ambulance use. The Chief Paramedic responds to virtually all calls and the decision to fly or not to fly is made on scene.

The Fire Department responds on most EMS calls to provide assistance.

Survey respondents gave low scores for readily available inter-facility ambulance transport. It is unclear whether the issue is timeliness or availability.

### Communications

Communications	10 = Strongly Agree 1 = Strongly Disagree											
Question	1	2	3	4	5	6	7	8	9	10	Don't Know	Rating Average
Local cell phone coverage is adequate	0	3	3	0	0	1	0	1	0	0	0	3.63
EMS and trauma care organizations have good access to broadband internet service	3	0	0	0	1	0	0	1	0	1	2	4.33
Public safety agencies have an effective radio system	0	1	2	0	0	2	0	2	0	0	1	5.14

The North Park Hospital District (NPHD) utilizes a local VHF radio system for emergency communications and responder paging. The dispatch center is operated by the Jackson County Sheriff's Office. All NPHD responders are issued a portable radio. All ambulances are also equipped with 800 Mhz radios for access to the statewide Digital Trunked Radio (DTR) system for coordination throughout the region. Concerns were expressed by all emergency service responders with the coverage of the VHF radio system due to only having one tower located on the courthouse in Walden and the age of the dispatch system components. Cellular service is also inconsistent throughout the county. NPHD crews appear to be very familiar with the limitations and problem areas specific to VHF and cellular communication. The NPHD pays for use of the communication system. The team was unable to determine how the amount paid is calculated. Patient status reports during transport are provided to the receiving hospitals utilizing cellular service. No problems were reported with this process by the crews or the hospitals.

There are no dispatch protocols for the dispatching NPHD ambulances. A multi-year communications plan with specific goals is not in place.

Broadband availability is limited in the NPHD service area. Satellite based broadband and very limited service in the Town of Walden are the only systems available. The Walden system has a top speed of 1.5MBps. While not the best possible system it is adequate for utilizing on-line and video based education opportunities.

## Information Systems

Information Systems	10 = Strongly Agree 1 = Strongly Disagree											
Question	1	2	3	4	5	6	7	8	9	10	Don't Know	Rating Average
Transport EMS services collect and upload electronic patient care data to the state system	3	0	2	0	0	1	0	0	0	1	1	3.57
System performance data is regularly collected and analyzed	3	1	0	1	1	0	0	0	0	0	2	2.33
Information technology needs are being met within the EMS and trauma care system	3	1	1	1	0	0	0	0	0	1	1	3.14

Jackson County EMS has been using an electronic medical record system for the last 10 years using three different platforms. The agency started with Healthware Solutions, and then transitioned to Zoll, and in June of 2012 moved to the Colorado State Image Trend platform. Laptops are used in each ambulance and reports are generated enroute and printed via a mobile printer and paper charts left with the receiving facility. State required data compliance has been accomplished using electronic uploads. There is no desktop computer available at the agency's ambulance facility and office. There does not seem to be connection to any other local networks including the local clinic or receiving hospitals.

The agency's billing services were being outsourced to Weld County, but recently have been moved to Thompson Valley. While the district appears to be happy with this, there does not seem to be any feedback or education regarding proper charting to improve billing. Concern for keeping jobs locally has led to a move to re-start doing the billing in house. The hospital district has hired a person and are getting her the necessary education to start doing the billing for the district. We have expressed concern that the complicated nature of ambulance service billing with CMS makes this unlikely to be cost effective. However, there may be a position to coordinate billing, documentation, and data management within the agency while still keeping billing with a professional ambulance billing service.

While commendable that an EMR has been used for years, the true value of having such a system which may be used for data collection, data mining and QA/QI does not seem to be currently taken advantage of. In addition, while paper copies of all charts are made and stored for backup, currently the electronic data storage is being accomplished in a private residence. This will need to be remedied.



## Mass Casualty

Mass Casualty	10 = Strongly Agree 1 = Strongly Disagree												
Question	1	2	3	4	5	6	7	8	9	10	Don't Know	Rating Average	
EMS Agencies and facilities have written mass casualty response plans	0	1	1	0	0	0	0	1	0	1	4	5.75	
MCI plans are regularly tested by all organizations	2	0	0	2	1	0	0	1	0	0	2	3.83	
EMS and trauma care leaders are aware of local and state emergency management efforts and programs	0	1	1	0	3	0	0	1	1	0	1	5.29	

The County Administrator serves as Director of Emergency Management in Jackson County and he takes the lead role in emergency planning for the county. Mass Casualty Incident plans are located within the Local Emergency Operations Plan and the Public Health Emergency Operations Plan. As EM Director, he manages the planning aspects of incident preparedness and supports but does not interfere with operations level responders. Fire and EMS exercise regularly together on the local level and regional exercises are attended by some as they are available. The Emergency Operations Center is located in the Administrator's Office with the backup EOC at the Court House. The Administrator prefers utilizing his office because the Sheriff's Office / Dispatch Center / Jail is located in the Court House building and it would become quickly congested. There is no Surge Plan in place, however the North Park Clinic does have plans for supporting and stabilizing patients from a mass casualty incident prior to transport to higher level facilities and plans for temporary mass fatality storage.

## Prevention

Prevention	10 = Strongly Agree 1 = Strongly Disagree											
Question	1	2	3	4	5	6	7	8	9	10	Don't Know	Rating Average
An analysis of local injury and illness data is performed regularly	2	1	1	1	0	0	0	0	0	0	3	2.20
Prevention programs are developed based on local needs	3	0	2	1	0	0	0	0	0	0	2	2.17
Prevention programs are regularly offered to the community	4	1	0	1	1	0	0	0	0	0	1	2.14

Injury prevention efforts and programs for the public are not currently a priority in the North Park Hospital District (NPHD) EMS system. The majority of trauma incidents appear to be related to the highways and recreational areas utilized by non-district residents limiting the impact of a local injury

prevention program. NPHD staff participates in the *9 Health Fair*. The staff reported an estimated 300 participants in the 2012 health fair. NPHD also participates in the annual high school career day. The opportunity to collaborate with the local healthcare clinic provides opportunities for additional community outreach.

For the responders of NPHD there is no established injury prevention program to ensure their safety. Community stakeholders and NPHD staff expressed concerns about scene safety issues.

### Evaluation

Evaluation	10 = Strongly Agree 1 = Strongly Disagree											
Question	1	2	3	4	5	6	7	8	9	10	Don't Know	Rating Average
Each EMS organization has a defined and ongoing quality improvement program	2	0	2	0	0	2	0	0	0	0	2	3.33
Quality improvement findings are integrated into the EMS and trauma care system	2	1	1	0	2	0	0	0	0	0	2	2.83
Quality improvement activities are coordinated and communicated between services	3	1	2	0	1	0	0	0	0	0	1	2.29

No pre-hospital research is currently being conducted within the Jackson County EMS System. While the ability to collect data has been available for years, it does not appear it is being done for QA/QI purposes. The system is on the Image Trend EMR platform, assuming response data is being entered, and is available for review by the agency, medical director, RETAC and State. Opportunities for research may present themselves in the future, but given the low volume of the system it may be better to focus on QA/QI activities first.

## Research

Research	10 = Strongly Agree 1 = Strongly Disagree										Don't Know	Rating Average
Question	1	2	3	4	5	6	7	8	9	10		
Evolving EMS and trauma care research is incorporated in the local EMS system	3	0	1	0	1	0	0	0	0	0	3	2.20
Medical Directors and Leaders are aware of the latest EMS and trauma care research	0	1	1	1	0	0	1	0	1	0	3	5.00
Local EMS and trauma care organizations regularly participate in system research	4	2	0	0	0	0	0	0	0	0	2	1.33

However, if the data from the last 10 years is still available and searchable there may be some historical data analysis, which could provide opportunities for publishable research. This could be a very interesting data set as rural EMS research is extremely lacking in the current literature.

## Overall Effectiveness

Overall Effectiveness Research	10 = Strongly Agree 1 = Strongly Disagree										Rating Average
Question	1	2	3	4	5	6	7	8	9	10	
Overall Effectiveness of EMS System	0	0	1	3	3	0	2	0	0	0	4.89

Assigned to: Sean Caffrey

The overall opinion of local stakeholders and reviewers is that the Dolores EMS system is marginally effective. While this overall opinion is not favorable, it appears to indicate that the EMS system could be significantly improved. Analysis of individual system elements however, reveals that the system is currently able to meet local needs effectively. It is unclear however, if the system would continue to perform adequately in the face of a major setback or growth pressures.

## Dolores County EMS – A Vision

Assigned to: Sean Caffrey unless someone else wants to try creative writing?

*At 5:00 p.m. on Friday Aug. 14, 2015, AEMT Roger Dunton and EMR Jane Smith are checking their ambulance as they come on duty for their weekend ambulance shift in Dove Creek. Roger and Jane arrive just as the EMS services manager, Donna Johnston, is leaving for the day. Donna, an employee of the newly created health services district, is responsible for EMS and ancillary services including lab and radiology services recently upgraded at the local clinic. Roger is a full-time employee of Southwest Memorial Health System who lives in Dove Creek. Jane works full-time for the Dolores County RE-2 School District. The ambulance is owned, equipped and maintained by the Dove Creek – Egnar Health Services District and is operated via a contractual arrangement with Southwest Memorial Health System. All EMS responders in both Dove Creek and Rico are employed by the hospital and are paid an on-call rate plus an hourly wage during responses. Roger checks in with EMS Supervisor Brenda Cahone in Cortez once their vehicle check is complete. Brenda is responsible for the two units on-duty in Montezuma County as well as the on-call crews in Dove Creek, Dolores and Rico. Following four recent EMT classes in Dolores and Montezuma counties since 2012, each town in Dolores County as well as the town of Dolores now has a cadre of 6-10 EMTs supported by additional SWMH staff who live in those areas that can sign up for on-call time. In many instances these EMS responders are also local volunteer firefighters.*

*At 6:30 p.m. a call is dispatched for a semi-trailer rollover on U.S. Highway 491 near the Utah border. In addition to the Dove Creek ambulance, the Dove Creek Volunteer Fire Department and EMS personnel from Monticello are requested as automatic mutual aid. As the Cortez communications center receives acknowledgment from the Monticello ambulance on the digital-trunked radio system, the Dolores on-call crew is paged to move up to Dove Creek in the event additional assistance is needed. The EMS supervisor starts toward the incident and an on-duty EMS unit from Cortez is moved up to Dolores to assist with overall coverage. At 7:02 p.m. the Cortez communications center receives a request for medical assistance for a shortness of breath call at the Rico gas station. As the on-call crew in Rico makes its way to the station to pick up the ambulance, the Cortez-based crew in Dolores responds to the Rico incident for ALS support. In the event transportation is required, the patient will most likely request to be seen at the new Telluride Hospital 22 miles away in Mountain Village. Regardless of the outcome of these calls, Southwest Memorial will provide EMS billing services and manage the payroll for all of these calls.*

## Summary of Recommendations

Type	Recommendation
Short-Term	Implement Improved Safety Practices
Short-Term	Establish Medical Oversight and Protocols
Short-Term	Assure Regulatory Compliance
Short-Term	Establish Key Organizational Policies
Short-Term	Develop a Well Informed and Cohesive Board
Short-Term	Define and Structure Key Roles
Short-Term	Consider a District Administrator
Medium-Term	Improve Health Care Connections
Medium-Term	Maintain EMS Billing Capability
Medium-Term	Further Develop Volunteer Organization
Medium-Term	Formalize Tiered ALS / BLS Response
Medium-Term	Improve Continuing Education Opportunities
Medium-Term	Develop Recruitment and Retention Program
Medium-Term	Increase Use of DTR Radios
Long-Term	Conduct Strategic and Succession Planning
Long-Term	Update Service Plan and Structure
Long-Term	Improve Emergency Medical Dispatch
Long-Term	Consider Future Organization Options

## Short-Term Recommendations (1 Year)

### Implement Improved Safety Practices

The North Park Hospital District (NPHD) ambulance crew members are an essential community resource. Protection of these human resources must be a priority for the local emergency response system. During the course of the review, it became apparent to the review team that the areas of highway safety, infection control and vehicle operations would benefit from increased attention.

Currently, it does not appear that NPHD crew members have access to high visibility safety apparel required by [American National Standards Institute \(ANSI\) Standard 207](#) (2011 Edition). As would be expected, NPHD crew members frequently provide emergency care in and around roadways. Considering the hazards associated with working on high speed two-lane highways in mountainous areas, the review team strongly recommends this equipment be made available to crew members. The team further recommends this safety equipment be deployed in conjunction with a multi-agency policy on scene and traffic management. Additional background and guidance on policy development for this topic can be found at: [www.respondersafety.com](http://www.respondersafety.com).

While it was apparent that appropriate infection control and body substance isolation equipment was available to NPHD crew members, it did not appear that policies had been developed or that regular training of the crew had occurred regarding the federal Occupational Safety and Health Administration (OSHA) 29 CFR 1910.1030 standard on bloodborne pathogens or the OSHA 1910.134 standard on respiratory protection. Considering that EMS providers are often exposed to hazards from both bloodborne diseases and respiratory illnesses transmitted through the air it is essential responders have the tools, training and administrative support structures needed to protect their long term health from these potentially debilitating and deadly illnesses. Training programs, including online programs, on this topic as well as model policies are available from a variety of sources including the [National Safety Council](#)(NSC), [private organizations](#) and [insurance carriers](#).

Additionally, and perhaps most importantly, it was noted that the NPHD does not have a program in place to train drivers in the operation of ambulance vehicles. Ambulances exceed 12,000 pounds in gross vehicle weight, are often operated at high speeds and often carry passengers that are unable to use conventional seat belts. As such, it is imperative that vehicle operators receive appropriate training and ongoing monitoring regarding safe emergency vehicle operations. The review team recommends a comprehensive training program be instituted for all current and future NPHD crew members. Programs are available from a variety of sources such as [NSC](#) and [insurance carriers](#) listed above. A number of vendors also utilize the publicly available [Emergency Vehicle Operators Course \(EVOC\)](#) and Colorado is also home to specialized [winter driving programs](#) that are available nearby. In addition to training, a number of EMS organizations in Colorado have deployed [vehicle monitoring systems](#) that are intended to assist emergency vehicle operators in better understanding and controlling the forces involved in emergency vehicle operations. These systems have been required in all state grant funded ambulances as of 2011.

### Establish Medical Oversight and Protocols

During the onsite portion of the consultation, the team was made aware that the current EMS Medical Director, Dr. Dan Smilkstein, was interested in transitioning EMS oversight duties to another physician. It was hoped that those duties could be transitioned to local physician, Dr. Lynette Telck, at some point in the near future. It was further discovered that North Park Hospital District (NPHD) leadership had not invested substantial energy in the development of prehospital care protocols or quality improvement systems. This is particularly concerning considering that NPHD providers are regularly called upon to provide medical advice and care in both emergency and non-emergency situations. As such, clear protocols and communications mechanisms with local health care resources with physician direction are essential for the proper care and ongoing safety of patients.

Considering that protocols, physician oversight and ongoing quality improvement programs are required by both the Jackson County and state regulations pertaining to EMS practice (6 CCR 1015-3, Chapter 2), the team believes the transition of medical director responsibilities affords an excellent opportunity to implement the required medical oversight elements for the Jackson County EMS System. Templates for both prehospital clinical protocols and quality improvement procedures applicable to emergency response are readily available from a number of sources, including neighboring communities, and would require limited adaptation. Protocols and ongoing review of non-emergency care provided by NPHD members would be a more specialized, but no less important endeavor.

Overall, the team strongly recommends that NPHD sponsor the new Medical Director's acquisition of specialized training regarding EMS medical direction, such as the program offered by the [National Association of EMS Physicians](#) which provides an excellent overview of Medical Director responsibilities. The team also recommends the medical director participate in the regional medical direction networking and mentoring opportunities available through the Northeast Colorado RETAC or the adjoining Northwest RETAC.

### Assure Regulatory Compliance

Considering the North Park Hospital District is a small service with a volunteer board of directors and minimal administrative staff, it is apparent that a number of areas concerning regulatory compliance can be improved. Improvement in these areas will substantially reduce financial and organizational risks to the NPHD itself as well as its officers and directors. In particular, the review team recommends the further development of human resources, payroll, controlled substance, and medical records procedures as soon as possible.

Regarding human resources policy, the NPHD was recently connected to a sexual harassment claim in conjunction with North Park Fire Rescue. While NPHD did not incur a financial liability as a result of this claim, it should be viewed as a wake-up call to improve district's policies related to equal employment opportunity, non-discrimination, workers compensation and other personnel procedures. While the team found no immediate issues in these areas, it was clear that the absence of policies, or even a common understanding in these areas was a potential liability. Significant

resources are available to assist with these issues including the [U.S. Equal Employment Opportunity Commission](#), [Mountain States Employers Council](#), and [EMS-related law practices](#).

It was also clear to the review team that the NPHD had a fairly complex staffing arrangement involving paid employees as well as volunteer members who received compensation for on-call time as well as compensation for ambulance response. It is recommended that these practices be reviewed by an advisor specializing in wage and hour law as the compensation programs in use by NPHD are subject to a variety of federal, state and tax laws. Failure to effectively comply with these regulations could lead to hefty fines and payment of wages owed. Additional information is available from the [Colorado Department of Labor and Employment](#), the [U.S. Department of Labor](#), and [industry groups](#).

Management of controlled substances (medications) was also an area of concern to the review team. Fortunately, with only a limited number of advanced life support providers, there are very few individuals within the NPHD authorized to administer controlled substances. The authorization for EMS providers to acquire and administer controlled substances, however, is directly connected to the physician's registration with the [U.S. Drug Enforcement Administration](#) and compliance with [state pharmacy laws](#). In particular, tracking of medication supplies and administration is required and often subject to vigorous enforcement.

Medical records was an additional area of concern for the review team. While the consultants were pleased to discover that patient care records were being acquired through the ImageTrend electronic reporting platform and uploaded to the Colorado Department of Public Health and Environment as required by regulation, it was not clear that written and previous electronic patient care records were being stored appropriately and that safeguards were in place to ensure compliance with the requirements of the [Health Insurance Portability and Accountability Act \(HIPPA\)](#). The review team was also unclear if records were being stored, secured and made available to patients upon request in compliance with state law.

### Establish Key Organizational Policies

In addition to the recommendations above, the review team recommends that the North Park Hospital District (NPHD) institute key organizational policies and procedures in order to clarify expectations, procedures and controls for a variety of activities. In particular, it was noted that a volunteer handbook may have existed at some time in the past. It was also noted that payroll procedures and meal reimbursements were not well defined and caused some concern in the past. This concern, if not effectively handled through the development and adoption of standard policies and procedures often leads to unnecessary stress within the organization and between members. It was further noted that basic expectations of employees and volunteers were also not defined or articulated. This is a common issue in rural and/or volunteer organizations where it is thought that rules will drive employees or volunteers away. To the contrary, clear expectations, equitable treatment and appropriate accountability often improves morale and improves recruitment and



retention activities. The team therefore recommends the NPHD implement the following key policies:

- A volunteer member handbook
- A new member orientation checklist
- Regular vehicle checks
- Responder scheduling
- Response procedures
- Response documentation
- Payroll and timekeeping procedures and approval
- Reimbursement procedures

In addition to these items it is further recommended that the paid employees of the district, including the crew supervisor and the board secretary have established employment contracts with the board of directors that clearly delineate roles, responsibilities, participation and compensation details that will allow for ongoing accountability.

#### Develop a Well Informed and Cohesive Board.

All public organizations, particularly those that are tax funded and involved in emergency response activities, require an effective governance structure. Unlike other types of governmental oversight, special districts organized under Colorado Revised Statutes Title 32 are subject to administrative requirements that differ from municipalities, counties or school boards. The delivery of ambulance service also requires specialized understanding of both the health care and emergency response environments. As such, it is important that NPHD board members receive appropriate orientation and training on their roles and responsibilities. Board members must also commit to a reasonable level of ongoing education to understand the dynamic EMS environment that the NPHD operates in. Organizations such as the [Special District Association](#), the [EMS Association of Colorado](#) and national EMS organizations such as the [National EMS Management Association](#), [American Ambulance Association](#) and the [International Association of Fire Chiefs – EMS Section](#) exist to support EMS organizations and their leadership through education, advocacy and ongoing communications. The reviewers strongly recommend board members consider membership in one or more of these organizations and seek ongoing education in current EMS practices in order to be better prepared to address issues affecting NPHD. Ongoing technical assistance is also available from the [Colorado Department of Local Affairs](#) and the [Colorado Department of Public Health and Environment](#).

In addition to being well informed, it is also essential to that the NPHD develop a cohesive governing body through the establishment of a common understanding of the NPHD mission, cultural norms and a strategic vision for the organization. While this common understanding may change over time, particularly as board members change, it is essential to develop a common understanding where the organization is going, and the implications of change on the direction of the organization. The NPHD does not appear to have done any of this type of foundational work in recent years and the team strongly recommends that a facilitated strategic planning session be undertaken by the board.

### Define and Structure Key Roles

Currently there are four roles delineated in the North Park Hospital District organization that include:

- Board Member
- Board Secretary
- Crew Supervisor / Paramedic
- Medical Director
- Billing Specialist
- Volunteer Responder

As discussed earlier, clear expectations, job descriptions and accountability associated with each of these roles is not well defined. As such, the NPHD organization appears to operate mostly on a reactionary basis with most routine financial and administrative duties assigned to the part-time board secretary. It is unclear what the responsibilities of the crew supervisor / paramedic are. While this position is clearly involved in medical response and response supervision, the position does not appear to include administrative or managerial duties to any significant extent. The medical director also does not appear to have been actively involved with the organization in recent years. Furthermore, volunteers are further unclear on their ongoing responsibilities and rely mostly on the supervisor for direction. The billing specialist is a new role currently being developed following a recent board decision to in-source ambulance billing.

In addition to the development of the board members noted above and the establishment of volunteer responder guidelines also noted, the team strongly recommends that job descriptions be developed for both the Board Secretary and Crew Supervisor / Paramedic and Medical Director be established. It is further recommended that these positions be established as contract employees of the district with authority, expectations and performance criteria and compensation details clearly established in those contracts. The billing specialist role will be discussed in more detail later.

The team further recommends that the board have a discussion with the crew supervisor / paramedic to determine if this position will be responsible for key administrative, policy development, human resources, billing and compliance matters, or if these essential responsibilities are best left to another position. Based on the team's assessment, the crew supervisor / paramedic position appears to be almost purely clinical and operational in nature with significant responsibilities being left unattended.

### Consider a District Administrator

Considering the inability of a Board of Directors to directly manage the organization on a daily basis, and considering the absence of administrative responsibilities assigned to the crew supervisor / paramedic, the team believes the district board should consider the appointment of a district administrator to be accountable for the overall administration and operations of the district. This position, if established could have a significant role in developing the policies, procedures, protocols and systems that are referenced above. This position could also help establish the ongoing performance requirements and accountability systems for other NPHD staff. Finally, considering the stated desire of the current crew supervisor / paramedic to maintain a clinical focus, the team did not

see an inherent conflict of duties and believe the current crew supervisor / paramedic may be more effective in a chief paramedic type operational role. The review team was undecided regarding if this type of position would need to be permanent. While it was clear a number of months of work would be required, a temporary or contract appointment may be adequate to address the most of urgent concerns while further organizational development occurs.

## Medium Term (1 -2 Years)

Medium-Term	Improve Health Care Connections
Medium-Term	Maintain EMS Billing Capability
Medium-Term	Further Develop Volunteer Organization
Medium-Term	Formalize Tiered ALS / BLS Response
Medium-Term	Improve Continuing Education Opportunities
Medium-Term	Develop Recruitment and Retention Program
Medium-Term	Increase Use of DTR Radios

### Improve Health Care Connections

The North Park Clinic and the North Park Hospital District (NPHD) are currently co-located on the same campus in Walden and are the only two providers of medical care in Jackson County. The clinic, currently affiliated with the Middle Park Medical Center (MPMC) provides a variety of primary health care services most weekdays with a combination of physicians and physicians assistants, many of whom live in the community. NPHD staff, particularly advanced life support providers, have also evolved into after-hours care providers for the community. Considering that EMS Providers do not receive formal training in primary health care and are not legally able to be independent care providers in Colorado, the team recommends that NPHD and the North Park Clinic increase their level of collaboration regarding how to appropriately cross refer patients and ensure that local health care is physician directed and supervised. The review team further recommends that protocols, data collection, follow up and quality improvement mechanisms for community care services also be developed. In time, it may also be appropriate for these organizations to jointly explore an EMS based community health services (community paramedic) model to further support the health care needs of the community over time. The Colorado Department of Public Health and Environment is currently in the initial stages of developing a regulatory framework to allow EMS providers to safely and appropriately operate in a community health environment and Jackson County would be a more than suitable location for this type of EMS / primary care collaboration.

In addition to collaboration on community health care, the North Park Clinic, as well as other facilities operated by MPMC, offer a clinical education opportunity for NPHD providers. In particular, the EMTs at NPHD have little individual opportunity to assess and care for patients. This is the result of both low ambulance call volumes and procedures that encourage response by numerous NPHD members. In order to improve the clinical skills of NPHD members, the team recommends NPHD pursue an agreement to allow NPHD providers to assist with clinical care in a supervised fashion at

MPMC facilities. Ideally, this clinical care would be accompanied with associated learning objectives to ensure a high quality educational and clinical continuing educational experience. Should the model be successful with MPMC it could also be explored with the Iverson and Yampa Valley hospitals.

#### Maintain EMS Billing Capability

For a number of years, billing for ambulance response and transport services provided by the North Park Hospital District were provided by Weld County Paramedic Services through an arrangement originally brokered by the Northeast Colorado RETAC. With the transfer of Weld County Paramedic Services to the Banner Health System in early 2012, billing support for outside agencies including NPHD was discontinued. At the time of the review, Thompson Valley EMS in Loveland was providing billing support services to the NPHD as an interim measure. A vigorous debate had also been underway within the NPHD Board of Directors regarding relative merits if in-house or outsourced billing services. It was further apparent that as of November 2012, the NPHD had made a decision to transition to in-house billing services and had identified an individual to provide those services.

Considering that EMS-related billing services is a complex endeavor involving a large number of federal and state regulations, multiple insurance providers, regulated collection practices, complex information technology requirements and a variety of customer service issues, the team cautions the NPHD to begin any attempts at in-house billing in a slow and thoughtful manner. Additionally, during the years it will likely take any individual to become expert in billing and collection management, the district is likely to see a significant drop in billing revenue.

Provided the district leadership is determined to move the billing function in house, the team strongly advises the NPHD enter into a partnership with an established EMS agency or billing service to ensure that that NPHD receive appropriate initial and continuing training in billing practices. Such a partnership would also be useful to provide coverage to the billing function should a single employee be absent for an extended period or choose other employment. The district is also advised to commit resources to allow the billing specialist to travel to training events. A number of venues are available for this training including [EMS law firms](#) and the [American Ambulance Association](#). The team does not feel that it would be effective or advisable to simply allow the billing specialist to learn on the job as this is a very specialized function not often undertaken by even the largest of EMS services.

#### Further Develop Volunteer Organization

Likely due to time constraints, day-to-day management concerns, the lack of formal training in leadership and organizational development as well as other pressing concerns, it does not appear that any significant efforts have been undertaken to develop the volunteer organization that provides the lion's share of ambulance staffing within Jackson County. As expected, many NPHD team members expressed significant passion for EMS and a dedication to the NPHD mission. However, they often appeared unclear on their roles and responsibilities within the organization, and what they could do to move the organization forward. The team believes this is a further

manifestation of the absence of strategic planning and administration noted earlier. While it appears there are often efforts to build comraderie through social events and “after-action meals” these events do not substitute for effective organizational development. Successful volunteer organizations, particularly large scale ones such as the American Red Cross and Salvation Army, have invested significant time and effort in defining volunteer roles, clearly articulating expectations to volunteers, evaluating volunteer participation, and involving volunteers in organizational decision making.

During the on-site consultation, the Southwest Memorial Hospital Emergency Department was actively testing a system to allow for the transmission of electrocardiogram (ECG) information directly from cardiac monitors deployed with EMS units to the emergency department in Cortez. This transmission capability creates the potential for EMS providers at all levels to obtain patient ECG information that can be sent to the emergency department for interpretation. Absent this capacity, additional training of EMS providers to the EMT-Intermediate or Paramedic levels would be required in order to perform advanced interpretation. Based on this advanced interpretation capability, it would be possible to determine the nature of a cardiac emergency and develop a protocol to identify and treat an S-T segment elevation myocardial infarction (STEMI). Most STEMI protocols attempt to direct patients as quickly as possible to a medical facility with advanced cardiology services. In the case of southwest Colorado, these types of services would only be available at the hospitals in Durango or Farmington, NM. Based on this protocol, decisions could be made during the EMS encounter to determine appropriate intermediate or final destinations for cardiac patients in need of these advanced services. Effective implementation could reduce the time to definitive care by hours. The reviewers strongly recommend the implementation of this technology in conjunction with an appropriate protocol. This capacity could also be expanded to the Dove Creek Clinic, Telluride Medical Center and/or San Juan Hospital in Monticello, UT in the future.

#### Formalize Emergency Operations Coordinator Position

In the past few years Dolores County has utilized grant funding from a variety of sources to enhance its Emergency Operations Coordinator position. The position performs the statutory emergency management functions delegated to county governments and has also been used to assist in the coordination of emergency response agencies within and adjacent to Dolores County. This position, while part-time, is also the only paid position dealing with emergency response issues outside of law enforcement in the county. As such, it has become a critical link both within and outside of the local emergency response community. The position also interacts closely with multiple regional planning efforts in emergency management, incident management, wildfire, EMS and trauma care. It is unclear, however, if Dolores County will be able to sustain this position over time in the absence of external funding. Understanding the ongoing value of this position, particularly in the context of a mostly volunteer emergency response system, it is recommended that the county government continue to invest in the development and maintenance of this position. The review team further recommends the duties and responsibilities of the position be formalized and adjusted by the BOCC in consultation with local response agencies.

### Develop Integrated Continuing Education and Quality Improvement Programs

Training and Education is the foundation of an EMS organization's continued success. Educational programs can also serve as a recruitment, retention and public education tool. All Dolores County EMS services demonstrated a desire for enhanced continuing education (CE) opportunities. It is recommended that all local EMS services, including SWMH EMS and local fire districts that provide first response, develop a unified training plan and schedule. A training file should be established for each volunteer member that should be kept by either the response organization or a local CE education group. The overall training plan should be sufficient to ensure EMS providers have enough continuing education to easily renew their Colorado and/or National Registry of EMTs certificates. Additionally, The Rico FPD may wish to consider a partnership with CE activities in Telluride. Dove Creek area services may also wish to coordinate medical continuing education opportunities with the Dove Creek Clinic. As noted earlier, a mobile cache of EMS training equipment would be helpful to this activity. Finally, Online EMS education programs may be worth exploring as a useful and convenient CE delivery method.

Due to the recent retirement of the physician that had historically supervised EMS at the Rico Fire Protection District, Dr. Mark Turpen will be serving as the physician medical director for all ground ambulance services that operate in Dolores County by early 2012. Dr. Turpen is also actively involved with EMS oversight in Montezuma County and with the TriState Care Flight air ambulance program located in southwest Colorado. This integration of local medical direction also coincides with the development of a regional medical direction program sponsored by the Southwest RETAC. This combination of events creates a unique opportunity to standardize the delivery of care in the area through common clinical protocols and further presents an opportunity for multi-county cooperation on clinical quality improvement activities. This opportunity is enhanced by the ongoing deployment of the statewide EMS data collection system, maintained by ImageTrend Inc. that will allow for improved medical director access to ambulance run reports. The team recommends that efforts be directed to providing each local EMS agency with an updated set of common clinical protocols and to the development of a standardized clinical quality improvement program. To the extent possible, this system should develop common audit filters that are coordinated with SWRETAC quality improvement efforts.

### Consider further integration and Improvement of Dispatch Services

Currently, EMS dispatching responsibilities in Dolores County are shared between the Dolores County Sheriff's Office and the Cortez Communications Center. The Dolores County Sheriff's Office dispatch center in Dove Creek operates for limited hours during the day with on-call staff available in the evening and overnight hours. The Cortez center receives most incoming requests for EMS services and either forwards the request to Dove Creek, or directly dispatches units in the Rico area. There are also some instances where calls are received by San Miguel County, which has the ability to coordinate requests as needed. Currently dispatching in Dove Creek is handled through a phone tree system by the Dolores County Sheriff's Office. Rico utilizes a VHF radio-paging system.

The review team recommends that Dolores County consider consolidating dispatch of EMS services in a single communications center. Consolidation would allow one center to be familiar with EMS

response protocols and services countywide. While Cortez is an obvious choice for this service, Dove Creek or San Miguel County could also be utilized. The team also recommends implementation of a radio or Short Message Service (SMS) text messaging system be used to notify multiple potential responders of an EMS request simultaneously in the Dove Creek and Egnar areas. Simultaneous notification will likely significantly shorten EMS response times.

The team also strongly recommends increased use of the statewide DTR radio system by all responders in the county. Unlike local radio systems, this system would provide coverage to most areas where Dolores County EMS units might travel including Cortez, Monticello, Durango and Telluride. Current DTR coverage maps (see Appendix B) indicate that the system, while subject to dead spots, may provide the most comprehensive coverage of Dolores County and neighboring areas of any radio or cellular system. DTR equipment has also decreased in price in recent years and in many cases is an eligible purchase in multiple grant programs.

### Establish Response Schedules

Both Dove Creek Volunteer Ambulance Service (DCVAS) and the Rico Fire Protection District (Rico FPD) have a limited call volume and limited response staff. As a result of this combination, formal mechanisms do not exist to schedule response staff to provide response coverage during certain blocks of time. Instead, paging and phone tree mechanisms are used to notify response staff when a request is received. While this system has historically proven effective, it can produce delays while sufficient responders are located and confirm their response to the dispatch center. It is also possible a situation could develop where no responders are available. Both delays in the assembly of responders, or the potential absence of responders, is a situation that can cause great stress to dispatch centers that are simultaneously attempting to assist and reassure callers while hunting for available responders. For this reason, it is recommended that at a minimum both DCVAS and Rico FPD develop a duty officer system whereby the dispatch center is aware of a designated person at the response agency to contact at any given time to handle response, coordination or administrative issues that may arise through the dispatch center. Additionally, it would be ideal for both organizations to work towards a system where both a duty officer and/or response crew(s) could be identified to the appropriate dispatch centers via a schedule to reduce dispatch delays and reassure the dispatch centers that individuals are available for response.

### Increased Public Education and Participation in Prevention Programs

As is the case with most volunteer emergency response organizations, responders in Dolores County are held in high regard by the community. The community, however, often does not understand the underlying system that provides responders to their door in a time of need and may not know who many of the volunteer responders in the community are. In addition, EMS services are well positioned to act as ambassadors for safety and health issues in the community, particularly in the area of injury prevention. Considering this, it is important that EMS services, even volunteer services, commit the time and resources to regularly interact with the community through events such as school programs, open houses, and health fairs.



Additionally, the delivery of CPR and First Aid programs to the community is a strategy to build, market, and demonstrate to the public the value of the local EMS program. CPR and First Aid are useful programs to introduce the community in what to do in an emergency. These programs can span middle school students through senior citizens and simultaneously offer the EMS agency the opportunity to showcase their services.

Local EMS services should also make a point of being present to provide medical standby services at local school sporting events or other local events such as rodeos, fairs and festivals. While it is clear both Dove Creek Volunteer Ambulance Service and the Rico Fire Protection District do participate in these types of events, it is recommended that each organization develop an ongoing strategy to participate in and/or develop appropriate community events to showcase their EMS activities.

## Long Term Recommendations (2 or More Years)

Long-Term	Conduct Strategic and Succession Planning
Long-Term	Update Service Plan and Structure
Long-Term	Improve Emergency Medical Dispatch
Long-Term	Consider Future Organization Options

### Consider Rico Area Inclusion into Telluride Area Services

It was clear to the review team that many residents of the Rico area have an employment affiliation with the Telluride area. It was also discovered that most Rico area residents took advantage of health care and other basic services located in Telluride. The Telluride Medical Center is currently a level V trauma center providing emergency, urgent and primary care services. Telluride Medical Center is governed by a health services (hospital) district that also plans to begin construction of a hospital in the next 5 – 10 years. Considering that Rico residents already use Telluride Medical Center services, and would likely also use it as their local hospital, the team strongly recommends Rico town officials approach the Telluride Hospital District board of directors to discuss inclusions into the district. As of 2006, the district assessed a modest levy of 2.577 mills to support the operations of the medical center. Considering that this levy already raises well over \$1 million annually in the Telluride / Mountain Village area, the addition of Rico would be logical from a service area perspective and would allow Rico residents to buy into health care services at a much better value than if the Rico area attempted to provide these services on a stand-alone basis.

In addition to participation in the hospital district, participation of the Rico area in the Telluride Fire Protection District (Telluride FPD) may also be worth examination. Although inclusion in the Telluride FPD would be a complex undertaking that would require the legal inclusion or dissolution of the Rico FPD, the review team thought this might be an interesting idea since the Telluride FPD is already structured as an umbrella organization that operates two volunteer fire departments (Telluride and Placerville) and one volunteer ambulance service. In addition to supporting these volunteer responders, Telluride FPD further provides paid administrative support, fire prevention services, as well as some paid paramedic support with a budget of approximately \$2.0 – 2.5 million annually. As of 2007, Telluride FPD services were provided for less than 3 mills as compared to the Rico FPD mill levy rate of 5 mills. Considering this decentralized, adequately funded and volunteer-focused arrangement is already in place in the neighboring Telluride area, it seemed logical to recommend an analysis of including Rico which operates on a very similar volunteer model with a substantially lower budget. It also did not go unnoticed to the team that participation in both the Telluride Hospital and Fire Protections Districts could be accomplished at a cost equivalent to what is already being spent for the Rico FPD.

### Explore the Feasibility of a Dove Creek Health Services District to include Egnar

The Dove Creek Clinic has provided essential medical services to western Dolores, Montezuma and San Miguel counties for a number of years as a successful community-based non-profit organization. The clinic enjoys a cooperative relationship with larger health care systems in Cortez and Monticello while remaining an independent organization focused on the Dove Creek area. Lately, the clinic has developed a staffing arrangement with physicians from San Juan Health Services District in Monticello. Health care services available at the clinic have been maintained, and in some instances expanded, over the years. Additional financial support is also provided to the clinic through governmental and private grants. Although this organizational and financial model has worked well in most instances, it is unclear if the clinic would continue to be sustainable in the event of significant staff turnover, or if outside grant funding were to decrease substantially.

Considering this situation, it would be reasonable for the governing board of the Dove Creek Clinic to explore the feasibility of establishing a health services district. A special taxing district would create a community-based governmental entity with a locally elected board of directors. Considering the current service area of the clinic, the district boundaries could include most areas served, including western San Miguel County. Many of these types of districts exist throughout rural Colorado and many operate in conjunction with affiliated non-profit organizations that may also be designated as community clinics or federally qualified health centers (FCHQs). If approved by the voters within the district, additional funds could be made available through either a property or sales tax assessment that could be used to maintain and/or expand services.

A local health services district could also be used as a mechanism to integrate or expand services over time, including but not limited to assisted living, long term care, acute care services or ambulance service. In the event the Dove Creek Volunteer Ambulance Service (DCVAS) desired or required public funding in the future, participation in a unified health services district would be preferable to the establishment of an additional governmental entity. Opportunity could also be available to organize a publicly supported ambulance service through the county government, town government, or a fire protection district. While it is unclear if this type of arrangement would be attractive to the community or the clinic governing board, the ongoing and increasing need for local healthcare services may be worth the analysis of a publicly governed and funded organization. Health services districts already exist to support medical services provided in the region such as The San Juan Health Services District, Southwest Memorial Health System, Telluride Medical Center and Upper San Juan Health Services District.

### Explore Joint Operating Agreement with Southwest Memorial Hospital EMS

Currently Southwest Memorial Hospital EMS (SWMH EMS), the Dove Creek Volunteer Ambulance Service (DCVAS) and the Rico Fire Protection District (Rico FPD) provide EMS response to portions of Dolores County. Overall, SWMH EMS runs over 1,100 calls annually system-wide, DCVAS runs approximately 130 and Rico FPD around 25. All three agencies operate under the same clinical supervision of Dr. Turpen using similar protocols and quality improvement systems. All three services currently provide capital equipment, recruit and develop staff, pay operating costs and

arrange for repair, dispatch and billing services. Additionally, many Rico area patients are transported by SWMH EMS at some point during their EMS encounter.

Although it would be premature to suggest that only one service could more efficiently provide EMS throughout Dolores and major portions of Montezuma counties, it would be reasonable to suggest that shared services, particularly staffing and administrative support, could be centralized through SWMH EMS. While joint billing arrangements have already been discussed, other areas that could be contracted through or integrated with SWMH EMS include staffing, repair, supplies and communications. For example, current volunteers at DCVAS and Rico FPD could be employed on an “as needed” basis by SWMH EMS and could be activated as employees to respond when needed with DCVAS or Rico FPD equipment. These employees would have the benefits of training and orientation in the busier SWMH EMS system and could also occasionally work shifts on current SWMH EMS units. Additionally, SWMH EMS could treat DCVAS and Rico FPD EMS vehicles as part of its fleet and could standardize equipment across the unified system. If unified billing were to be established, a mechanism to automatically fund employee and operational support would also exist.

## Appendix A

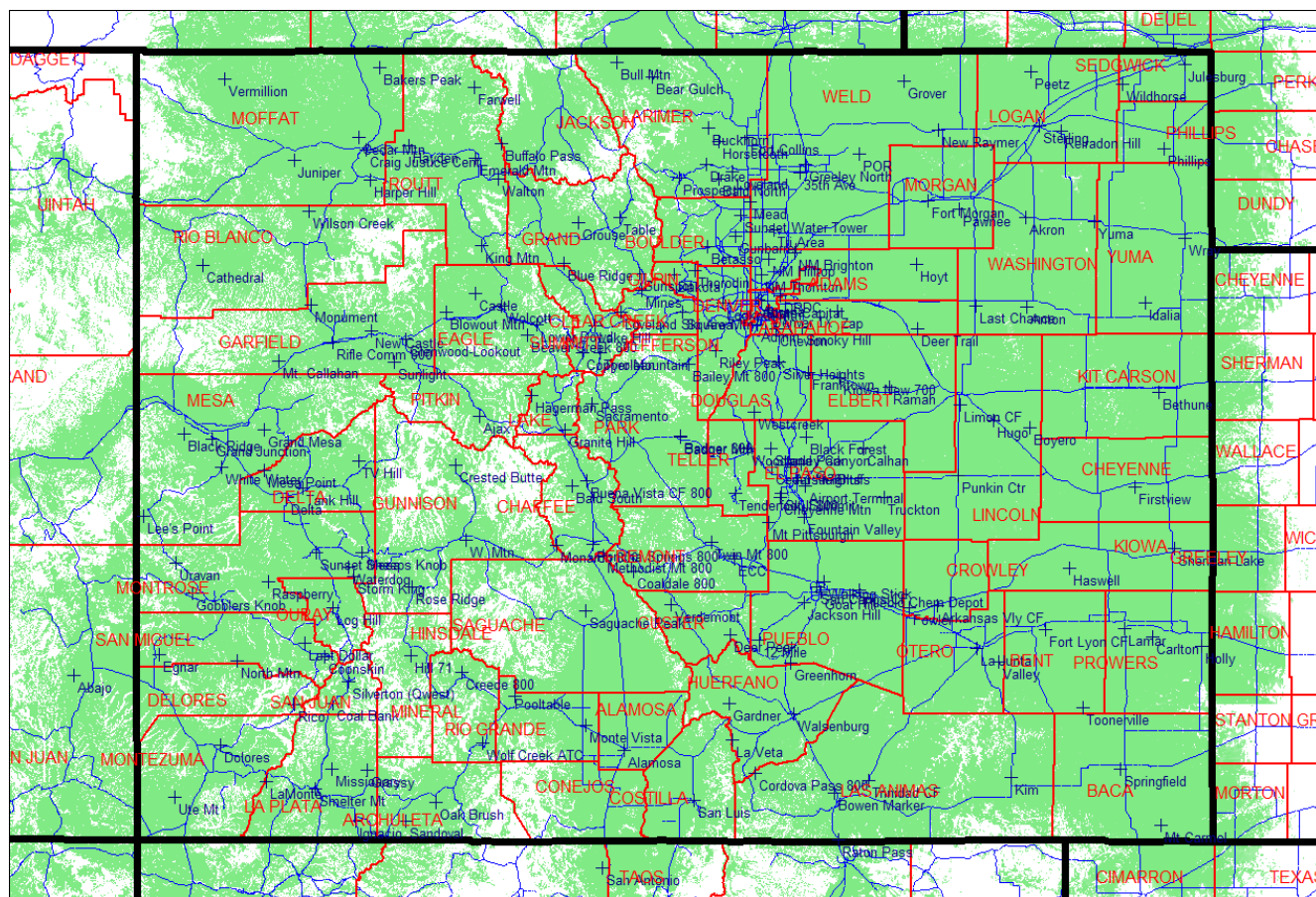
### List of Stakeholders Interviewed

Dolores Board of County Commissioners  
Dove Creek Volunteer Ambulance Service  
Rico Fire Protection District  
Southwest Memorial Health System  
Dove Creek Clinic  
Dolores County Sheriff's Office  
Egnar Fire Protection District  
Dove Creek Fire Protection District  
Pleasant View Fire Protection District  
San Miguel County Sheriff's Office  
San Juan County EMS – Utah  
San Juan Health Services – Utah  
Town of Rico  
Telluride Fire Protection District  
Telluride Medical Center  
Utah Department of Health – Bureau of EMS  
Mark Turpen, MD  
Michelle Flemmings, MD  
Todd Parisi – Dolores County Emergency Operations Coordinator  
Nancy Falleur – Southwest RETAC

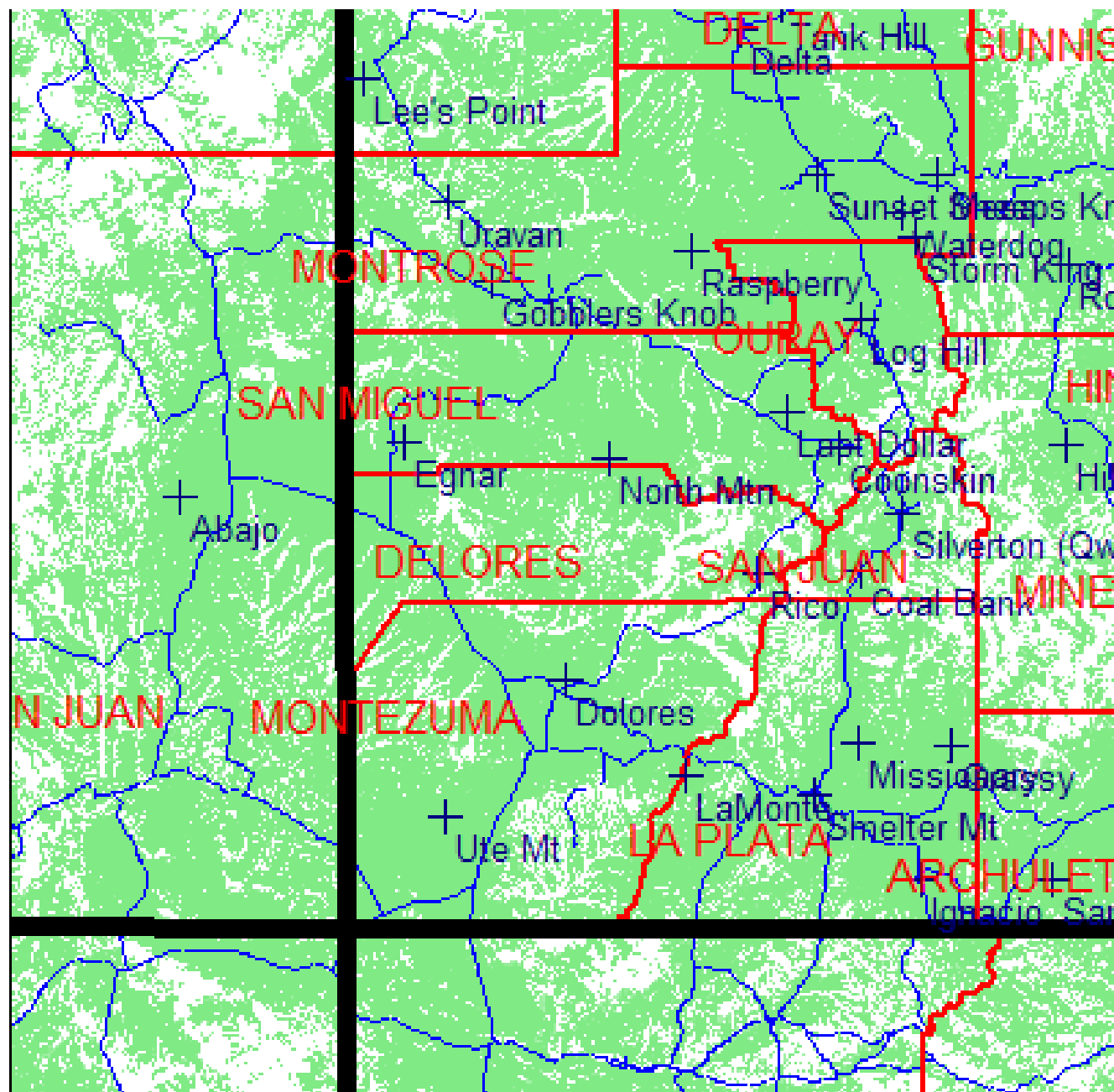
## Appendix B

### DTR Radio System Coverage Maps

#### Statewide Composite Coverage

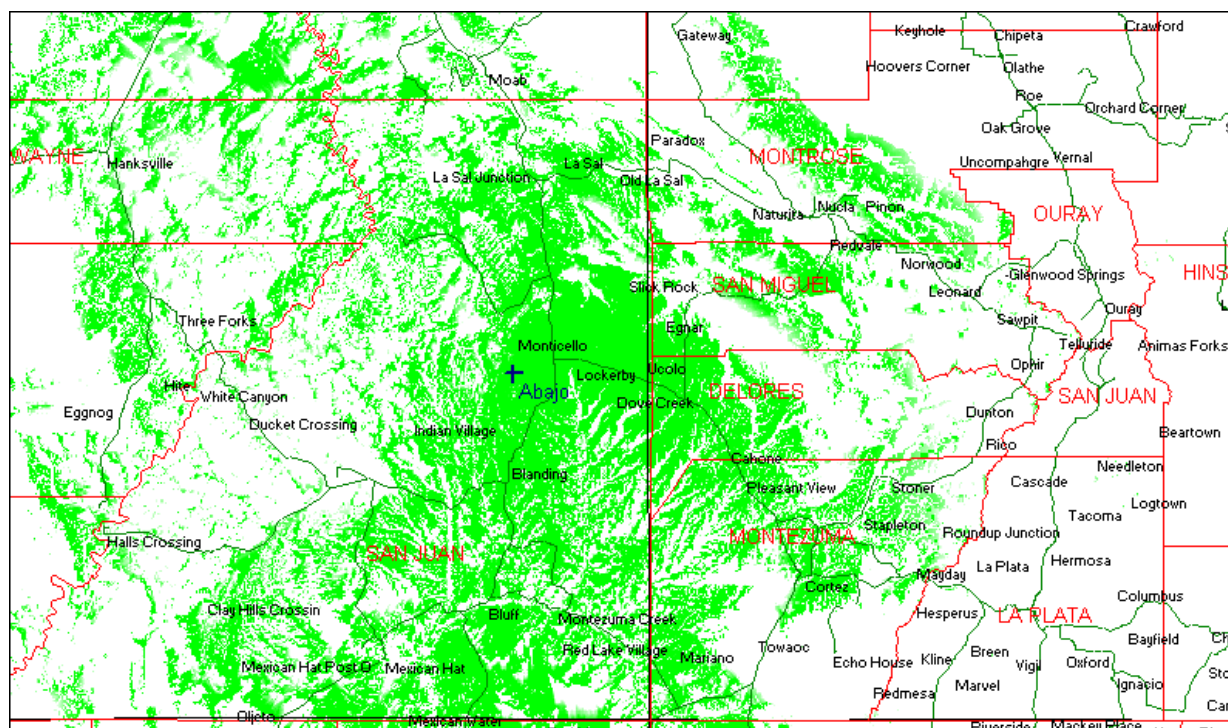


# Local Area Radio Coverage and Radio Sites



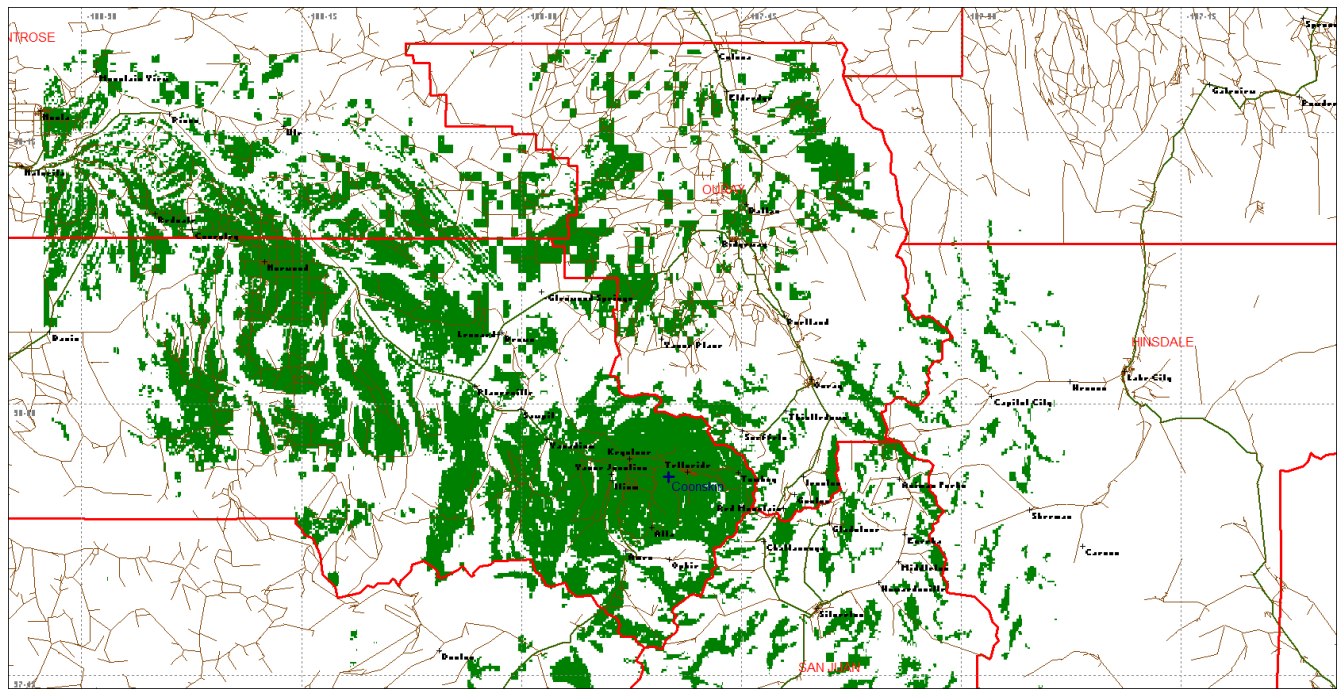


### Abajo Site (Located in San Juan County, Utah)

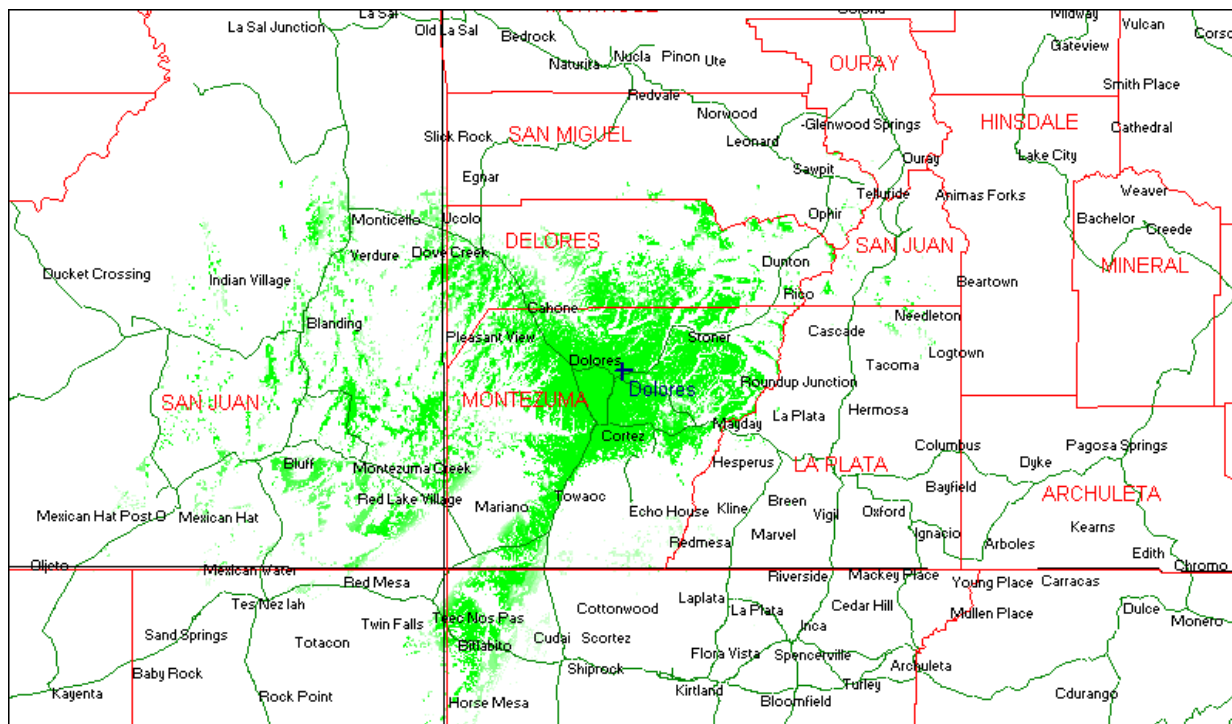




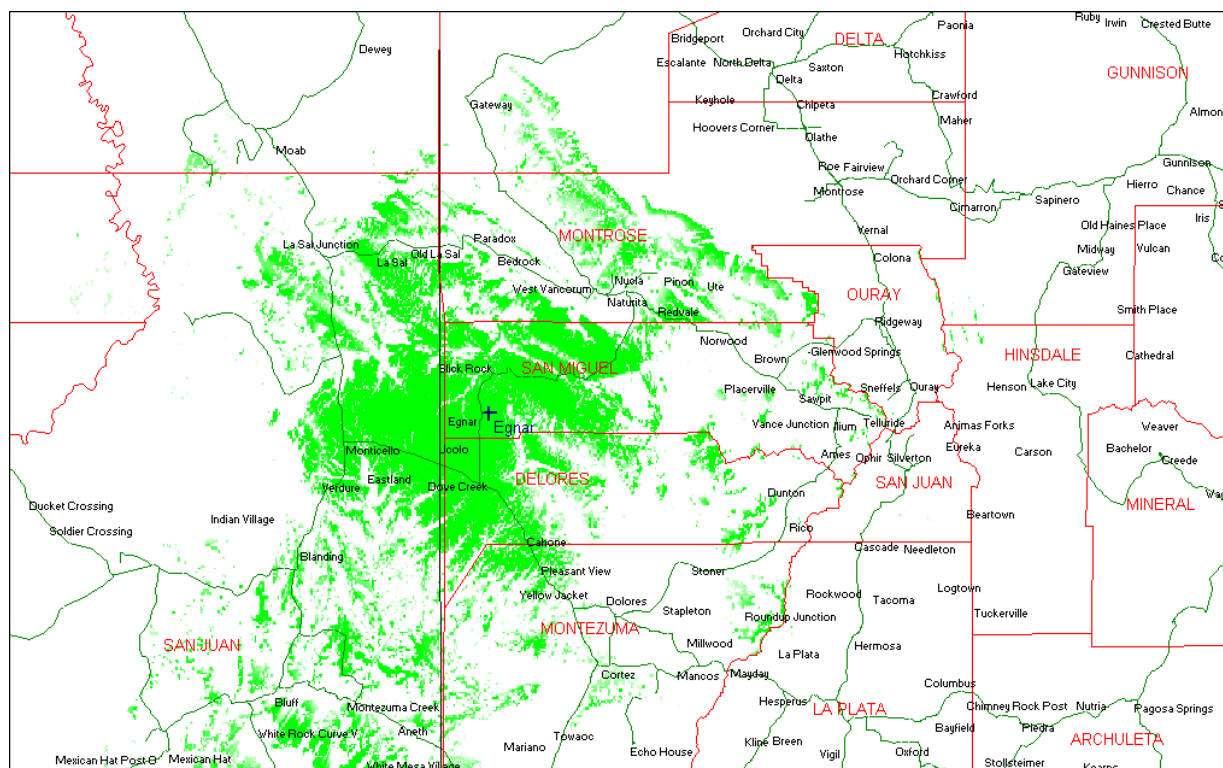
## Coonskin Site (San Juan County)



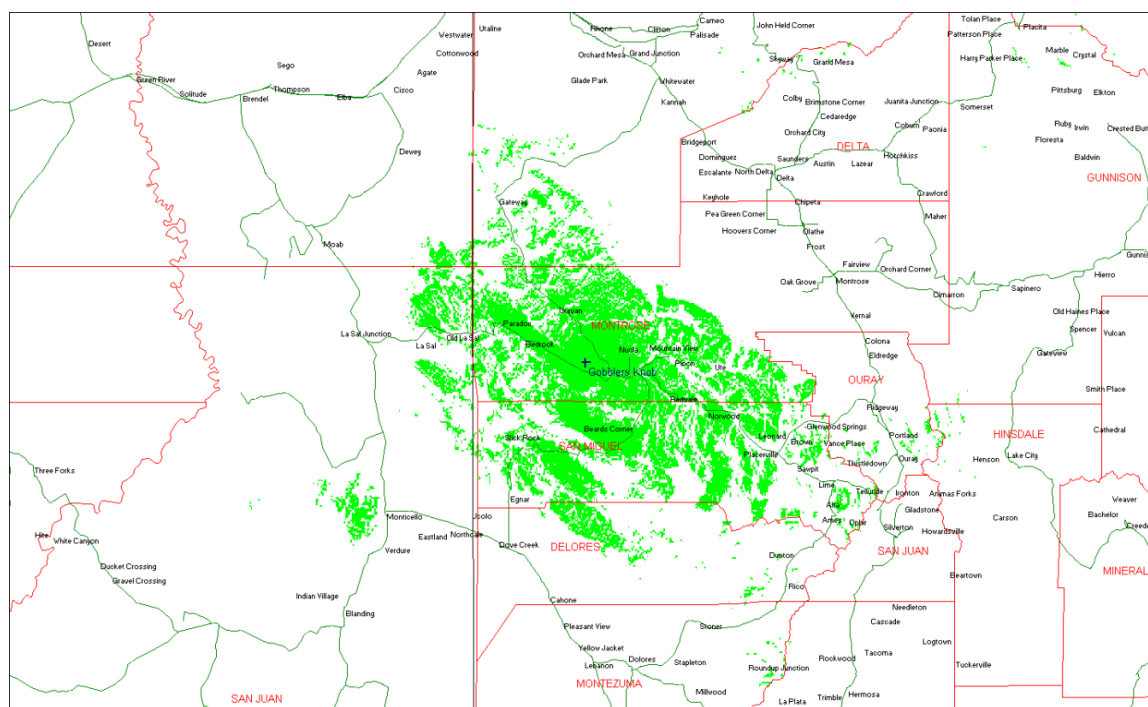
## Dolores Site (Montezuma County)



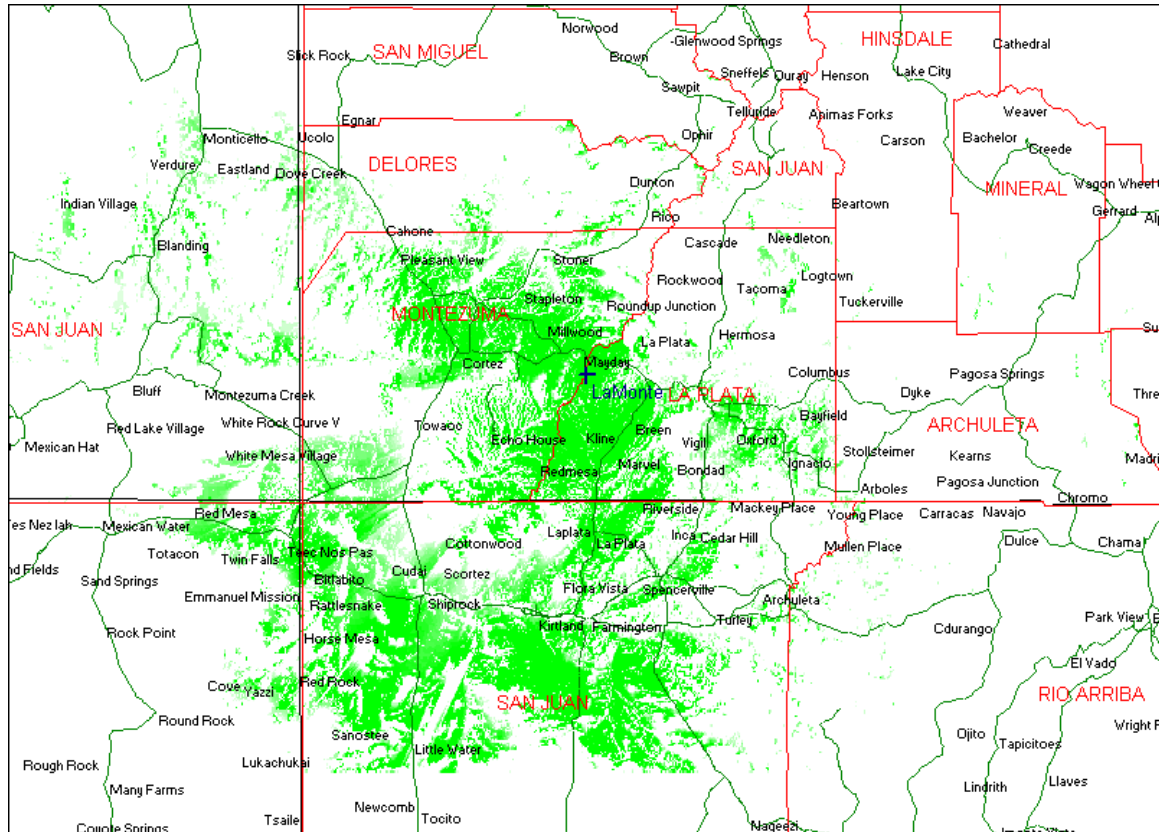
### Egnar Site (San Miguel County)



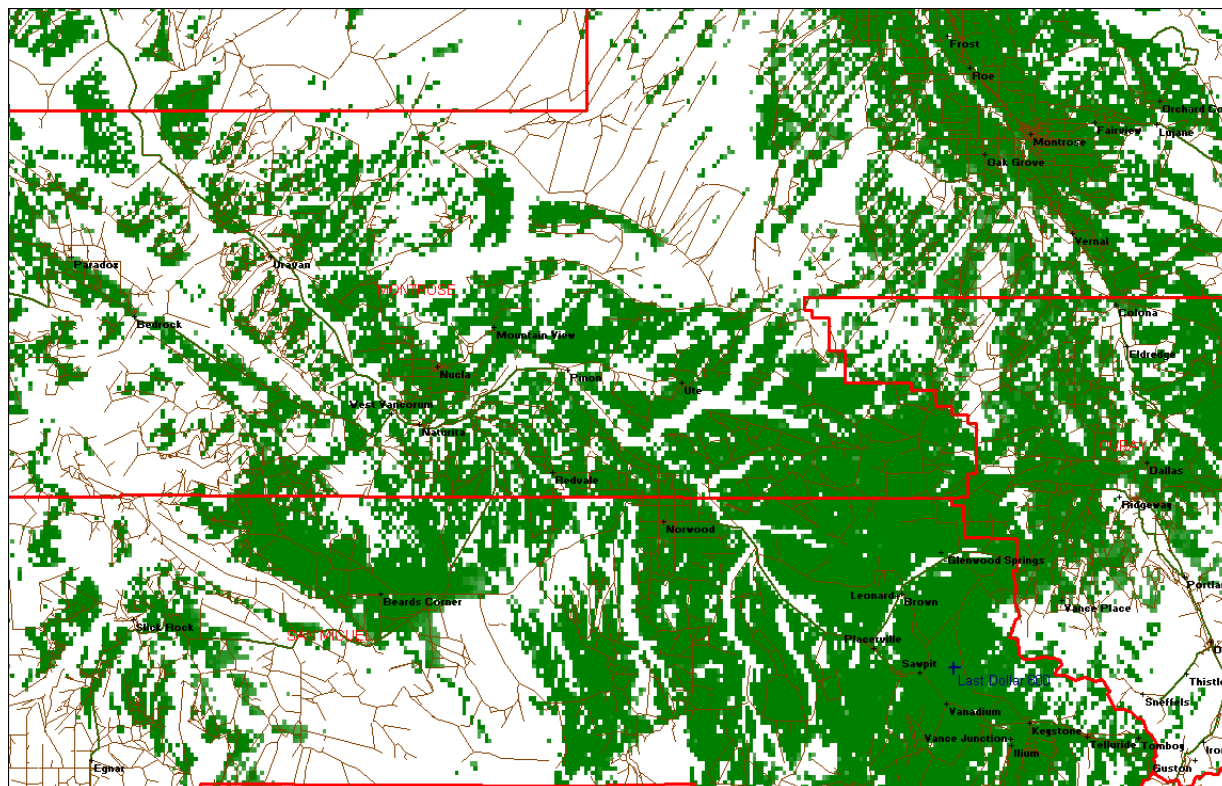
### Gobblers Knob Site (Montrose County)



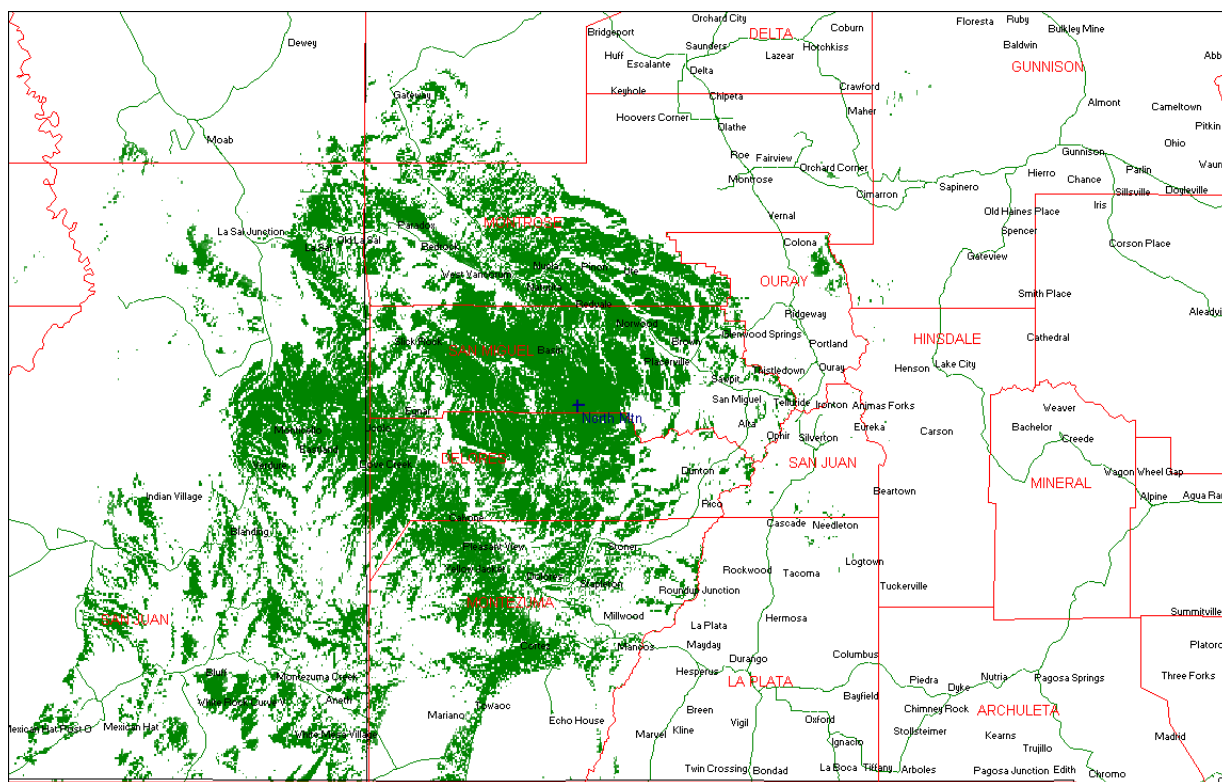
La Monte (Montezuma County)



### Last Dollar Site (San Miguel County)

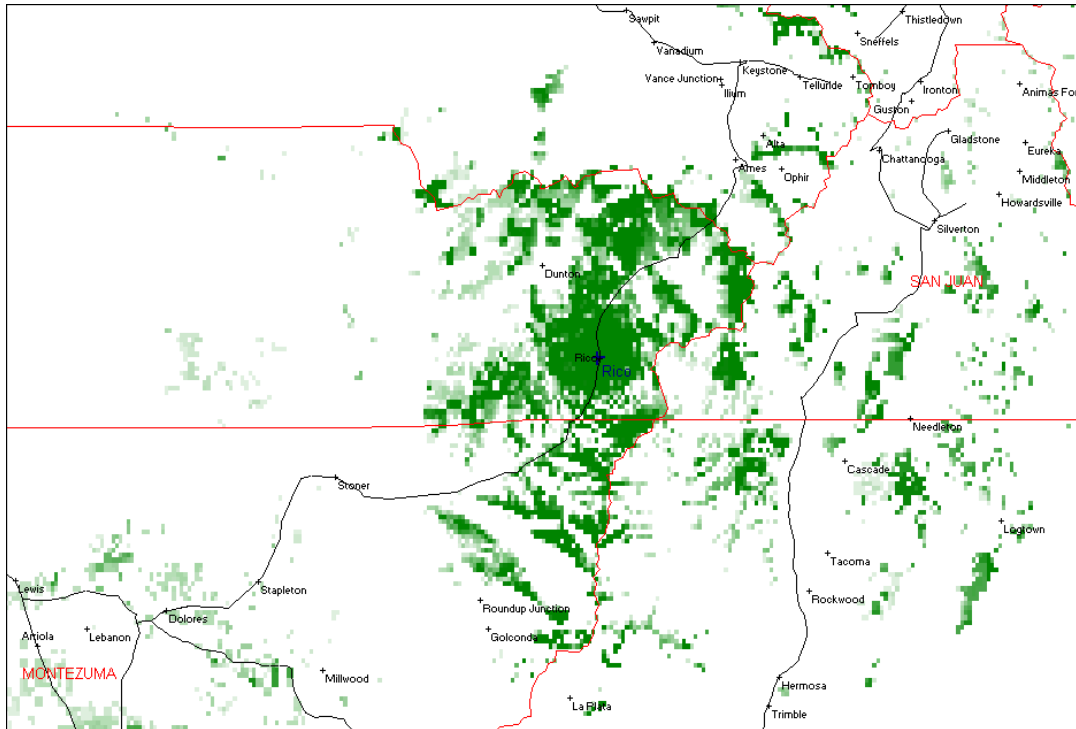


### North Mountain Site (San Miguel County)

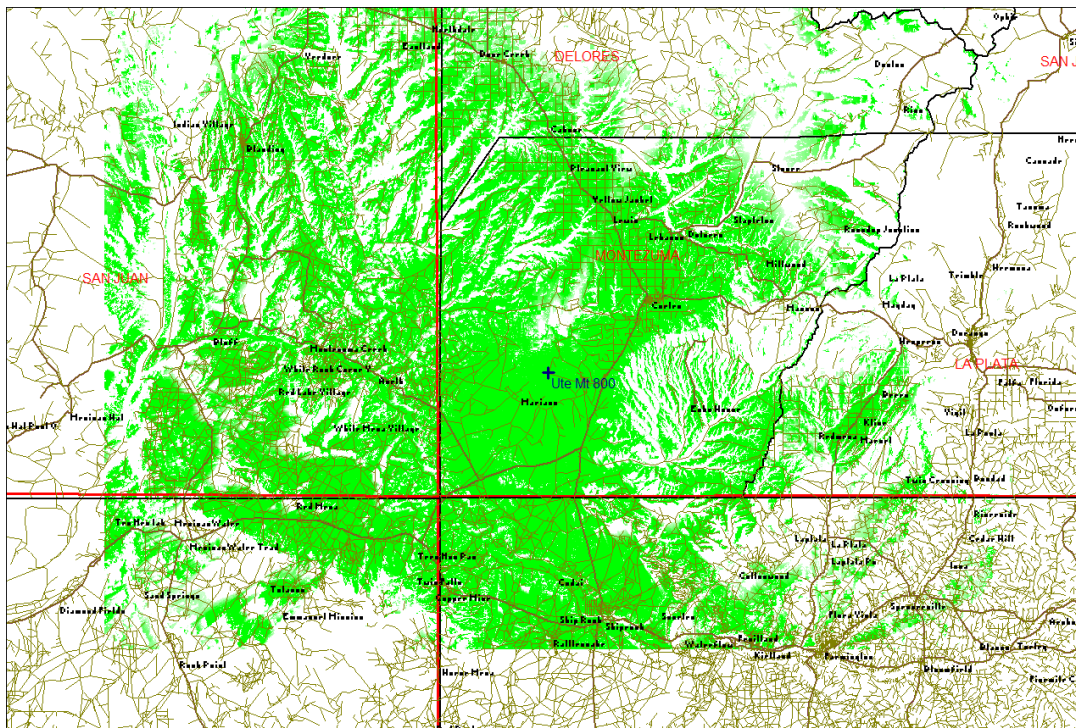




## Rico Site (Dolores County)



## Ute Mountain Site (Montezuma County)



## Appendix C

### Assessment Team Biographical Information

#### Jeff Dyar

Insert Bio Here

#### Jerry Gray

Insert Bio Here

#### Bill Hall, MD

Bill Hall, MD was transplanted to Lake City Colorado in 1972 at the age of 7. He became involved in EMS by getting an EMT-Basic certification and working with the local ambulance while living in Telluride in 1989. He went on to become one of the first ALS providers (EMT-I) in Telluride. He obtained his EMT-Paramedic prior to entering medical school at The University of Colorado in 1995. After finishing his residency in Emergency Medicine at Parkland Hospital in Dallas, TX, Dr. Hall began his career in Emergency Medicine at St. Mary's Hospital in Grand Junction, CO where he continues to work today. While caring for patients in the ED has been his primary focus, he has never lost sight of his EMS roots and has acted as Medical Director for the Mesa County EMS System, The Nucla-Naturita Ambulance Association, the Paradox Valley Ambulance Association as well as overseeing three National Parks: The Colorado National Monument, Arches/Canyonlands, and Capitol Reef. Dr. Hall is also currently the Regional Medical Director for the Northwest RETAC area. Dr. Hall has served on many State committees including the State EMS and Trauma Advisory Council, the Medical Advisory Group and currently sits on the Emergency Medical Practice Advisory Council which advises the Colorado Department of Health on EMS related issues. Dr. Hall is currently Board Certified in Emergency Medicine (ABEM) and has applied to take the first ever Board Certification test in Emergency Medical Services to be given in the Fall of 2013.

#### Rob Handley

Insert Bio Here

#### Paul Mattson

## Insert Bio Here

### Ray K. Jennings Jr.

Ray is the chief of EMS and emergency manager for Grand County Government since 2003. He has 29 years of experience in EMS as well as previous experience in the fire service, law enforcement and emergency management. Ray began his career as a volunteer firefighter and was given the opportunity to attend EMT-Basic training. Finding a new frontier to explore, he used his EMT training in the U.S. Army where he developed an EMT training program in conjunction with the local Vo-Tech to train sergeants as EMTs to help wounded and ill soldiers. Ray received an Army Commendation Medal for lifesaving and an Army Achievement Medal for system design. After completing his tour of duty, Ray returned to Texas and obtained his Paramedic certification from Tarrant County Junior College. This opened the door for him to pursue his career in EMS. During his tenure, Ray has worked for Hospital Based EMS, private EMS and public EMS and fire agencies. He has previously held positions as a fire marshal, a fire lieutenant, reserve sheriff's deputy, paramedic field trainer and an instructor /trainer for initial training and continuing education programs. Ray's primary toolbox includes system design and overhaul to grow failing EMS systems. As a manager, Ray has led public and private organizations made up of paid professionals and volunteer professionals. He has completed various training and educational programs as well as taught many programs during his career. Ray is a current member of the State Emergency Medical and Trauma Services Advisory Council and served on a number of committees. He also has been a speaker for the Northwest Leadership Conference. Ray was awarded the EMS Administrator of the Year for Colorado and has been the chief of two ambulance services that have won the Colorado Ambulance Service of the Year and Texas Ambulance Service of the Year. He is a member of multiple EMS societies. Ray holds current certifications from the National Registry of EMTs as a Paramedic, Texas Department of Health as a Paramedic and Colorado EMTS Section as a Paramedic.

### Matthew Lindsay

Matthew Lindsay is the EMS Coordinator for Southwest Memorial Hospital EMS in Cortez, CO. Matthew started his education in EMS in 2000 by taking a First Responder and Fire Fighter 1 Class in high school. In the summer of 2001, Matthew became a volunteer fire fighter for the Cortez Fire Protection District and was later certified as an EMT. In 2003, he was certified as an EMT-Intermediate and was hired by Southwest Memorial Hospital. Since 2004, he has worked his way up to the paramedic level, and in 2009 was promoted EMS Coordinator for Southwest Memorial Hospital. In 2011, he passed the Critical Care Paramedic Course and was promoted by Southwest Memorial Hospital to manage the ambulance service. When not working full time at Southwest Memorial Hospital, Matthew continues to volunteer with Cortez Fire Protection District and works as a relief paramedic for Ute Mountain Ute Tribe Fire / Rescue and San Juan Regional Medical Center Air Care as a flight paramedic. When not working, Matthew enjoys golfing and teaching EMS courses for Southwest Colorado Community College and Southwest Memorial Hospital Training group.

Matthew is an active board member for the Southwest Regional Trauma Advisor Council and the president of the Montezuma County EMS Council.

#### Terry Nimnicht

Terry Nimnicht spent his career in executive positions in the managed care industry. Having retired to a ranch in south central Colorado, he spent the last five years managing the West Custer County Hospital District.

#### Larry Reeves

Larry Reeves started his 22 years of EMS in 1989 as an EMT Basic for the Crowley County Volunteer Ambulance Service. A father of four, Chad, Jessica, Jennifer, and Brandon: Larry balanced a construction company, family and education classes to complete his EMT Paramedic in 1997 and became Nationally Registered. At that time, he started as the director of the Crowley County Ambulance Service. Then in 1999, the county hired him full-time, as the director of the Crowley County Department of Emergency Management. In this capacity, he oversees the emergency operations within the county, including ambulance operations, fire rescue response and operations, emergency planning and public warning systems.

Larry lives in Ordway, Colorado with his wife Cheryl. He serves on the EMS Advisory Committee for Otero Junior College, and is their Instructional Coordinator for EMS classes. He teaches EMT Basic and Intermediate courses, and is a BLS, ACLS, and PALS instructor and course coordinator, through Colorado Advanced Life Support. He is the Medical Unit Leader for the Eastern Colorado Incident Management Team. Larry was a member of the Area Trauma Advisory Committee for the lower Arkansas Valley and was instrumental in the formation of the Southeast Colorado Regional EMS and Trauma Advisory Council (SECRETAC) in 1996. He has fulfilled several officer positions on it including treasure, vice chair and chairman. He is a member of the State Emergency Medical and Trauma Services Advisory Committee (SEMTAC) as a representative of volunteer providers and is currently the chairman of the Crowley County E911 Authority Board.

#### Kim Schallenberger

Kim Schallenberger has been a volunteer EMT Basic since 1996 with Cheyenne County Ambulance Service and a volunteer firefighter for nine years prior. He accepted the position of Regional Coordinator for the Plains to Peaks Regional EMS and Trauma Advisory Council (PTPRETAC) in 2001. Since then, Kim has facilitated the activities of the region in addition to working on numerous statewide projects. He was a member of the Ground Ambulance Licensing Task Force (2004), has been a member of the State EMS Safety Summit planning committee (2008-2011), was active in the passage of SB 009-02 (2009), is a member of the State Trauma Advisory Committee (STAC) formed to assist rural trauma centers (2011), and has been a voice for all stakeholders in the region regarding EMTS rule changes.



As the Regional Coordinator for the RETAC, Kim has written and administered numerous Regional grants for training and equipment. He is the project manager for the Plains to Peaks Rural EMS/Trauma Conference that after 10 years has provided BLS focused education for hundreds of volunteer emergency responders. Kim has worked closely with agencies and statewide stakeholders on various recruitment efforts including a successful website promoting the industry. Other areas of focus for the Region have included: enhanced CQI and medical direction, injury prevention and trauma facility education.

Kim grew up on and later operated a ranch north of Wild Horse in Cheyenne County. He and his wife Rhonda have three grown children and three grandchildren. EMS is a family tradition as all members of the family grew up in EMS and volunteered for Cheyenne County Ambulance Service.

#### Sean Caffrey, MBA, CEMSO, NRP

Sean Caffrey served as the project manager and editor for this project. Sean is the EMS System Development Coordinator for the EMS and Trauma Services Section of the Colorado Department of Public Health and Environment. Sean previously served as the director of the Summit County Ambulance Service, a county-based governmental enterprise, located in Frisco, Colorado. Sean has been a paramedic since 1991 and is certified as a Chief EMS Officer (CEMSO) through the Center for Public Safety Excellence. He received a BS degree in Emergency Services Administration from the George Washington University in Washington, D.C. and a Masters in Business Administration from the University of Denver. Sean currently serves as the Treasurer of the National EMS Management Association (NEMSMA) Inc. Sean's experience includes service in volunteer, hospital-based, fire service, governmental and private-sector EMS providers. Sean also represented governmental EMS providers on the Colorado State Emergency Medical and Trauma Services Advisory Council, served as Secretary/Treasurer for the Central Mountains RETAC and President of the EMS Association of Colorado, Inc. Sean has been instrumental in developing EMS management education programs at the local, state and national levels. He has led previous EMS assessment projects in the San Luis Valley, Park County, Fremont County, Kit Carson County, Las Animas County, Dolores County and Logan County, Colorado.