

SafeTechSolutions

Final Report

**ASSESSMENT
OF
EMERGENCY MEDICAL SERVICES
IN
BURNS, WYOMING**

October 2020



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Executive Summary

As operating today, Burns EMS (BEMS) is not long-term sustainable. The organization, like many rural and remote Emergency Medical Services (EMS) agencies across Wyoming, and the nation, is at a crossroads, one in which the path forward will require difficult decisions, community education, a powerful story, and prepared, rested, and empowered leadership. BEMS is experiencing a slowly evolving crisis, a crisis made up of many components, including a national change in people's willingness and availability to volunteer, the increasing demands of clinical care, regionalization of healthcare, ever-decreasing reimbursement paired with ever-increasing costs of readiness and operations, the decline of rural communities, the population shift to urban and suburban communities, and the transport distances between Burns and Cheyenne.

Recognizing these challenges, the leader of BEMS elected to apply for an agency assessment offered by the Wyoming Office of EMS. The focused assessment resulted in six major recommendations built from 14 key observations. These recommendations were:

1. **Transition Burns EMS to a new response model.** (Honor local pride, ownership, and investments while leveraging knowledge and expertise. Match the new model with the reality of the current response model.)
2. **More deeply understand and accept the needs of the current EMS system.** (This includes what is desired by the community, what is financially sustainable, and how to govern the system and maintain strong partnerships.)
3. **Formalize the current EMS System.** (Remove any adverse consequences for AMR's dual response, memorialize the practice in the contract, incentivize the practice.)
4. **Create a community-wide shared vision for EMS.** (All stakeholders, shared operational and clinical expectations, assess willingness to pay.)
5. **Participate in creating a Laramie County EMS System for 2021 and beyond.**
6. **Ensure data is gathered and used to its full potential.** (Document all responses, and clearly document responses versus transports.)

The 14 key observations were:

1. The organization has structure, expectations, and the right blend of club and business.
2. An EMS system already exists within Laramie County, though it is informal.
3. As operating today, Burns EMS is not sustainable.
4. EMS is a vital and desirable element of healthcare and quality of life.
5. Workforce recruitment and retention is and will likely continue to be a major challenge.

6. There is a lack of consensus around the specifics of EMS in Eastern Laramie County: who funds it, who ensures the provision of service(s), who governs it, and who operates it.
7. The current collaboration between Burns and AMR, through the EMS Joint Powers Board, is ensuring there is the provision of EMS in the area served by Burns.
8. AMR's current contract may be creating a disincentive for AMR to dual respond.
9. There is perceived lack of fairness in how the financial burden of providing EMS is shared.
10. Some of the structures and practices of an integrated countywide EMS system are already in place.
11. Current operations may not be in compliance with state law.
12. Gathering and leveraging data may be helpful and will likely be essential.
13. The relationship between Burns EMS and other organizations appears strained.
14. There seems to be a large variance between EMS responses, data submitted to WATRS, and the EMS billing agency.

While the path forward may be difficult and emotional, it will likely result in EMS in Burns, Wyoming, being long-term sustainable, reliable, and viable. In order to accomplish this, it will be necessary for BEMS to transition the provision of EMS to be part of a larger EMS system in Laramie County, Wyoming, as well as become a medical first-response organization. The current EMS organization and personnel could provide a critical service to their community by providing medical first response as part of the larger EMS system.

Leadership and leaders will be critical in aiding the community through a transition such as the one recommended. In this area, Burns, Wyoming, is truly blessed. Throughout the assessment process, it was clear that the community and its leaders were critically aware of the need for EMS in their community and the reality that as operating today, EMS was not sustainable. Leaders were willing participants in embarking on the hard but essential path forward.

I. Introduction & Methodology

SafeTech Solutions, LLP was contracted by the Wyoming Office of Emergency Medical Services (EMS) to conduct an assessment of the EMS service in Burns, Wyoming. The service works in conjunction with three other ambulance services: Pine Bluffs, Burns, and the ambulance contractor in Cheyenne, American Medical Response (AMR). These services make up an informal EMS system in Laramie County Wyoming. SafeTech Solutions is an EMS consulting firm with extensive expertise evaluating EMS organizations and assisting in the development of rural ambulance services and systems. SafeTech Solutions has worked with rural Wyoming EMS agencies for many years through its EMS Leadership Academy and previous assessments throughout the State of Wyoming.

The goals of the BEMS assessment were to:

- Evaluate the sustainability, reliability, and long-term survivability of EMS in Burns, Wyoming;
- Look for organizational components that are working well; and
- Make recommendations for change and improvement that would aid in the long-term sustainability, reliability, and survivability of EMS in Burns, Wyoming.

The scope of the assessment was limited and was not an audit of operations, finances, or clinical performance. Air medical service was not part of the assessment. All data was provided by the services themselves; SafeTech Solutions attempted to validate the information and, when needed, asked for supporting data to validate or invalidate the data provided.

Methodology

SafeTech Solutions' assessment team used a process of inquiry and investigation that capitalizes on the firm's extensive understanding of rural EMS systems. Its principal gathered quantitative and qualitative data through research, site visits, and interviews. One consultant, Partner Aarron Reinert, visited Burns, Wyoming, to review documents and data, conduct interviews, and assess operations, in addition to broadly evaluating the ambulance organizations (organizational structure, leadership, clinical care, and operations).

Over two days of in-person and phone interviews we conducted, these interviews included:

- BEMS supervisor;
- BEMS volunteers;
- Burns town mayor;
- Two members of the town council;
- Fire District 6 Chief;
- Fire District 4 Chief;

- Three county commissioners;
- Two medical directors;
- Representative from the Laramie County Sheriff's Department;
- Five members of the Laramie County EMS Joint Powers Board;
- AMR site leader;
- Cheyenne Regional Medical Center clinical leaders;
- Laramie County EMS Joint Powers Board contract administrator; and
- Laramie County Combined Communications Center (LQuadC) leadership.

SafeTech Solutions paid special attention to the social, economic, demographic, cultural, and political issues in the wider area, carefully analyzing data and making its recommendations based on industry best practices, as well as what is meaningful, measurable, and actionable. This report summarizes the key findings, observations, and recommendations for the EMS service in Burns, Wyoming.

To the best of SafeTech Solutions' abilities, the data has been verified and validated and believed to be materially correct, unless stated otherwise, as presented by the leaders of BEMS.

II. Overview of Burns, Wyoming

Burns, Wyoming, which sits east of Cheyenne, started out as a railroad siding with a water tank along the Union Pacific Railroad — called Burns Station.¹ Originally platted in 1907 as the Town of Luther in honor of Martin Luther, the location was later marketed as New Berlin. The area was first settled by German immigrants who practiced the Lutheran faith, who had traveled from the East for the opportunity at a better life.²

The Town of Luther prospered, having a bank and other businesses, one being the *Golden Prairie Herald*. Passenger trains also stopped at the station located in the town four times a day.³ Originally, the area around Burns, Wyoming, was occupied by various Native American tribes who hunted buffalo and other game in the area.⁴

Before becoming Burns in 1910, the town was also at the center of the Golden Prairie District, an agricultural area that provided dairy products to Cheyenne. In addition, the town of Burns was once a shipping point for stock growers. Burns was incorporated in 1916 and lies between the communities of Egbert and Hillsdale.⁵

Located in Eastern Laramie County in the southeast part of the state of Wyoming, Burns is one of three towns in Laramie County, in addition to the city of Cheyenne, which is in the Cheyenne, Wyoming, Metropolitan Statistical Area. The other two towns are Pine Bluffs and Albin.

Telephone service came to Laramie County in 1882.⁶ Electricity did not follow until 1940 with the construction of a substation in Carpenter.⁷ Burns is in Laramie County School District #2 and is home to West Elementary School, Burns Elementary School, and Burns High School, which serve the educational needs of the community.

¹ "The Pacific Tourist":

<https://books.google.com/books?id=nbsUAAAYAAJ&dq=The+Pacific+tourist.+J.R.+Bowman%27s+illustrated+transcontinental+guide+of+travel+from+the+Atlantic+to+the+Pacific+Ocean&pg=PA61v%3Donepage&q=&hl=en#v=onepage&q=The%20Pacific%20tourist.%20J.R.%20Bowman's%20illustrated%20transcontinental%20guide%20of%20travel%20from%20the%20Atlantic%20to%20the%20Pacific%20Ocean&f=false>

² "Wyoming Places":

[https://web.archive.org/web/20160923025238/http://wyomingplaces.pbworks.com/w/page/12714697/Burns%2520\(Laramie\)](https://web.archive.org/web/20160923025238/http://wyomingplaces.pbworks.com/w/page/12714697/Burns%2520(Laramie))

³ WyoHistory.org: <https://www.wyohistory.org/encyclopedia/laramie-county-wyoming>

⁴ Travelwyoming.com: <https://travelwyoming.com/cities/pine-bluffs#:~:text=The%20Cheyenne%20and%20Arapahoe%20tribes,for%20tools%20and%20hunting%20supplies>

⁵ "Wyoming Places":

[https://web.archive.org/web/20160923025238/http://wyomingplaces.pbworks.com/w/page/12714697/Burns%2520\(Laramie\)](https://web.archive.org/web/20160923025238/http://wyomingplaces.pbworks.com/w/page/12714697/Burns%2520(Laramie))

⁶ "Hello? Can You Hear Me? Laramie Gets Telephones — 1882": <https://www.wyoachs.com/larmies-living-history-businesses/2018/4/17/hello-can-you-hear-me-laramie-gets-telephones1882#:~:text=On%20midnight%20December%2017%2C%201921,the%20most%20adverse%20weather%20conditions>

⁷ WyoHistory.org: <https://www.wyohistory.org/encyclopedia/rural-electrification-changed-farm-life-forever-wyoming#:~:text=On%20May%2011%2C%201940%2C%20when,people%20showed%20up%20to%20celebrate>

While Burns, Wyoming, does not offer anything in the way of medical facilities, its close proximity to Cheyenne gives residents and visitors to the area access to top-notch care.

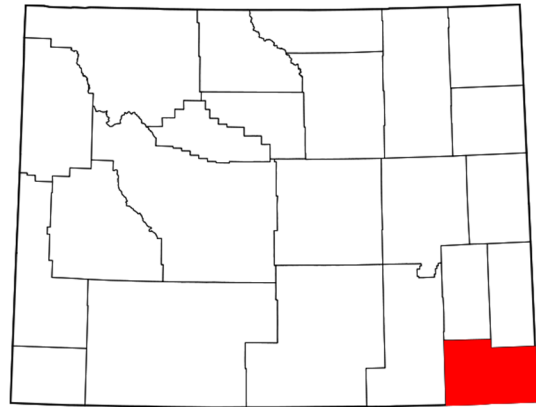
Summary of Burns, Wyoming

With a small-town feel, Burns, Wyoming, offers its residents easy access to Cheyenne, Wyoming, to the west and other parts of the state of Wyoming, as well as nearby Colorado to the south, including the Pawnee National Grasslands, and Nebraska to the east. As a part of the greater Cheyenne, Wyoming, Metropolitan Statistical Area, and with limited access to medical facilities, Burns offers its own set of unique challenges when it comes to providing out-of-hospital EMS care.

The Land

Burns, Wyoming, sits on 3.05 square miles, all of that land.⁸ Small in size, in comparison to nearby Cheyenne, Burns boasts a somewhat arid climate — it lies between the Laramie and Snowy Ranges, sitting at roughly 5,500 feet above sea level.

The land around Burns is relatively flat, which led to its use for agriculture and livestock in the past. To the south of town lies the North Fork Muddy Creek, which runs parallel to Interstate 80.



Source: [Wikimedia Commons](#)

In addition to livestock farming, area residents also produce a variety of products that are sold at area stores, including fresh milk, butter, eggs, and other items. Burns is home to the Frenchman Valley Coop, which provides services, expertise, and services to farmers in the Burns area.⁹

The town of Burns gives easy access to the Pawnee National Grasslands to the south in Colorado, as well as areas further north in Wyoming, especially past the city of Laramie. There are no public lands within Burns due to its smaller size.

Transportation

The transportation layout of Burns, Wyoming, includes Interstate 80 to the north, as well as a few thoroughfares going into and out of town. This includes Wyoming Highway 213, which is almost 20 miles in length. Highway 213, also named Burns Road, runs from Interstate 80 to the south and through Burns on its way to Wyoming Highway 216 and U.S. 85 to the north of town.

⁸ "2019 U.S. Gazetteer File": https://www2.census.gov/geo/docs/maps-data/data/gazetteer/2019_Gazetteer/2019_gaz_place_56.txt

⁹ Fvcoop.com: <http://www.fvcoop.com/index.cfm?show=10&mid=88>

Before its current route was established, Wyoming Highway 213 used to run along the old service road for Interstate 80, running parallel to the Interstate from Burns, heading to the west before ending past Hillsdale but before reaching Cheyenne. It's now called Old Highway 213.

Also running from Wyoming Highway 213 and heading west is Road 148, which then turns to the north, where it travels for about 12 miles before intersecting Wyoming Highway 216, also known as Golden Prairie Road.



Source: wyocamp.com

The closest airport to Burns, Wyoming, lies in nearby Cheyenne, 28 miles away. Cheyenne Regional Airport Hosts about 124 operations per day, many involving multi-engine and jet airplanes, as well as military aircraft.¹⁰ Other nearby airports include Laramie Regional Airport to the northwest and Nebraska Airport to the east.

Nebraska Regional Airport, also known as the William B. Heilig Airport, serves about 83 aircraft a day, many of those transient or general aviation aircraft.¹¹ While much smaller, Laramie Regional Airport has about 29 aircraft operations in a single day, with many of those being either general aviation or transient in nature.¹²

Land Use, Tourism & Industry

The primary use for land in the area around Burns, Wyoming, is agriculture, including raising livestock. Other areas of employment include office and administrative support, transportation, and construction.¹³

Unlike other areas in Wyoming, Burns is not a big draw when it comes to tourism, though it does serve as a sort of crossroads for travelers journeying between the city of Cheyenne and the surrounding areas, as well as the state of Colorado to the south and Nebraska to the east.

The People

As of 2010, Burns, Wyoming, had a population of 301.¹⁴ That is an increase of 16, or roughly 5.6%, from the 2010 population of 285.¹⁵ An estimated 58.5% of

¹⁰ Airnav.com: <https://www.airnav.com/airport/KCYS>

¹¹ Airnav.com: <https://www.airnav.com/airport/KBFF>

¹² Airnav: <https://www.airnav.com/airport/KLAR>

¹³ DATA USA: Burns, WY: <https://datausa.io/profile/geo/burns-wy/>

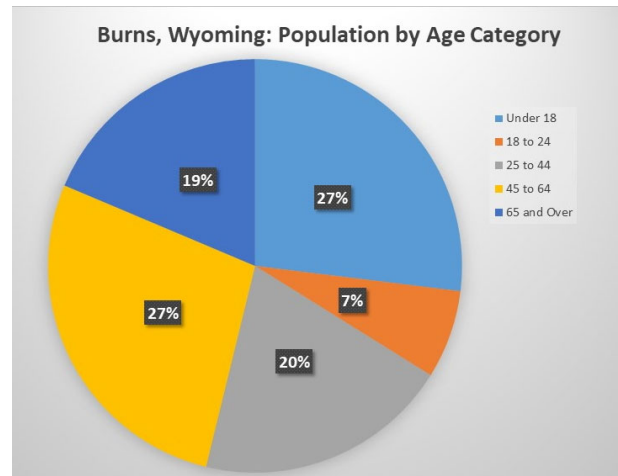
¹⁴ Wikipedia: https://en.wikipedia.org/wiki/Burns,_Wyoming

¹⁵ Ibid.

households in Burns, Wyoming, are family households. The other 41.5% are non-traditional households, with 23.7% of those being one-person households.¹⁶

The main ethnicity in Burns, Wyoming, is White at 94.7%, followed by 1.3% Native American, 1.0% Black, and 3.0% from other or two or more ethnicities. In addition, 3.7% of the population also identified as Hispanic or Latino.¹⁷

The median age in Burns, Wyoming, as of 2010, was 41.6 years old. Of the population, 26.9% were under the age of 18. Another 6.9% were between the ages of 18 and 24, 19.9% were 25 to 44, and 27.5% were age 45 to 64. A further 18.6% of the town's population was 65 or older.¹⁸



Source: [Wikipedia](#)

And while, technically, Burns, Wyoming, is not a tourist destination, visitors in the area do travel through the town on their way to other areas of the state and to the adjacent states of Colorado and Nebraska. As such, these travelers must be taken into account when planning for future EMS medical funding, as they will opt to use local resources when injured as opposed to waiting until they return home.

It is projected that by 2025, the population of Burns, Wyoming, will rise to 334, a 10.9% increase. Furthermore, the population in Burns is expected to increase to 347 by 2030, 353 by 2035, and to 360 by 2040.¹⁹

This increase in population, even if small, can be expected to raise the demands placed on current EMS services in the area. And while this demand will be higher, community members will still expect to receive the same level of service as before, especially given Burns' rural nature.

The Economy

The median household income in Burns, Wyoming, is \$46,375.²⁰ This is roughly \$15,000 less than the average median household income of \$61,584 for the state of Wyoming.²¹ About 64% of households in Burns make less than \$50,000, while the

¹⁶ Wikipedia: https://en.wikipedia.org/wiki/Burns,_Wyoming

¹⁷ Ibid.

¹⁸ Ibid.

¹⁹ "Population for Wyoming, Counties, Cities, and Towns: 2010 to 2040": <http://eadiv.state.wy.us/pop/wyc&sc40.htm>

²⁰ DATA USA: <https://datausa.io/profile/geo/burns-wy/>

²¹ DATA USA:

<https://datausa.io/profile/geo/wyoming#:~:text=Median%20household%20income%20in%20Wyoming%20is%20%2461%2C584.>

rest make more. Only 7% of households in Burns have a median household income over \$100,000.²²

The poverty rate in Burns, Wyoming, is 9.73%,²³ which is lower than the Wyoming average of 11.1%.²⁴ In addition, the current unemployment rate in Laramie County, Wyoming, where Burns is located, sits at 5.8%.²⁵ This is a decrease from a recent high unemployment rate of 9%²⁶ from a few months previously. Since 2010, when unemployment sat at 8.2%, the unemployment rate had gone down until more recently.²⁷ This is still lower than the Wyoming state average of 7.1%.²⁸

Of the total population in Laramie County, Wyoming, 80% report having health insurance.²⁹ Of that group, 57% are insured by private health insurance plans and 35% rely on public coverage.³⁰

²² DATA USA: <https://datausa.io/profile/geo/burns-wy/>

²³ Ibid.

²⁴ DATA USA:

<https://datausa.io/profile/geo/wyoming#:~:text=Median%20household%20income%20in%20Wyoming%20is%20%2461%2C584.>

²⁵ ²⁵ "Unemployment Rate in Laramie County, WY," <https://fred.stlouisfed.org/series/WYLARA0URN>

²⁶ Ibid.

²⁷ Ibid.

²⁸ Pine Bluffs Post: <https://www.pinebluffspost.com/story/2020/08/27/news/wyoming-unemployment-falls-to-71-in-july-2020/8204.html>

²⁹ "Laramie County Health Matters,"

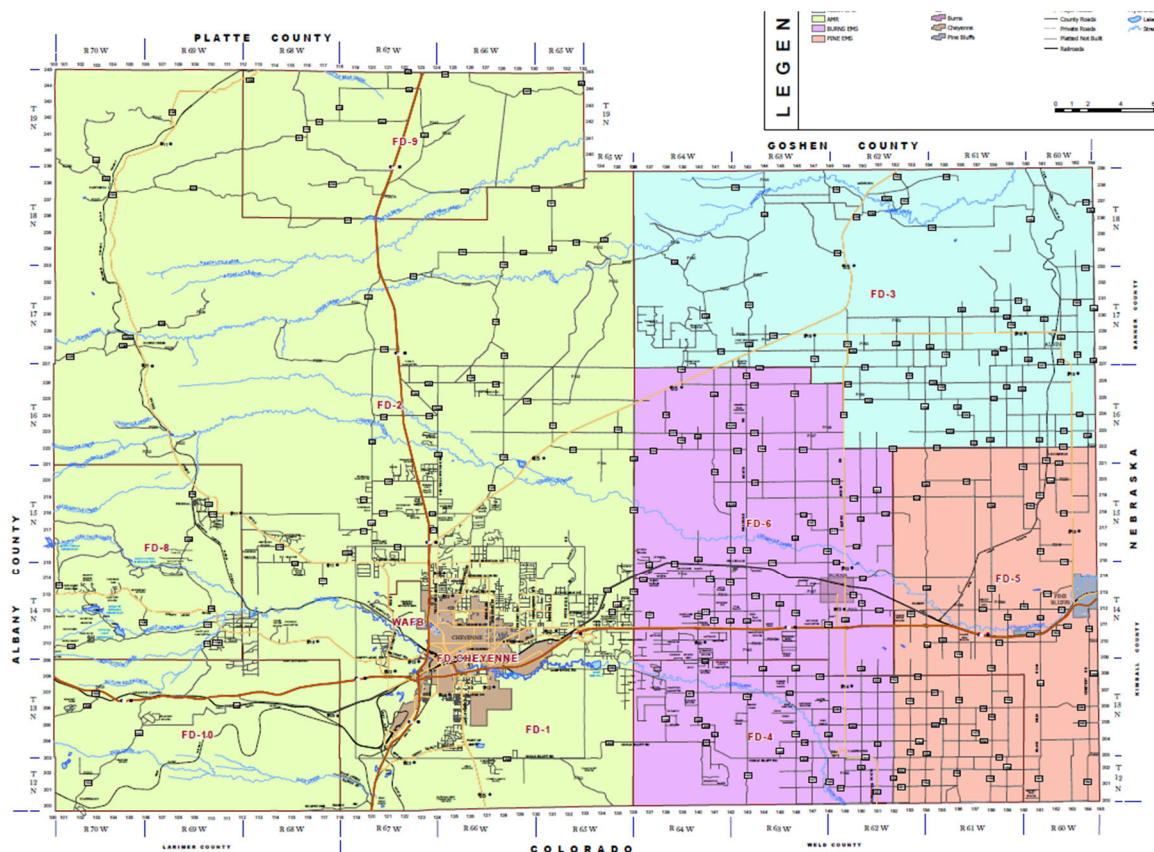
<http://www.laramiecountyhealthmatters.org/indicators/index/view?indicatorId=362&localeId=3182>

³⁰ Ibid.

III. Overview of Burns, Wyoming, EMS System

BEMS is an Advanced Life Support (ALS) licensed volunteer EMS organization, using Advanced EMTs (AEMT), that serves the South Central area of Laramie County (see section below in purple). The service is owned by the city of Burns and governed by and reports to the Town Council. It has an engaged, prepared, and proactive leader who has an active leadership team. The service has found the right balance between club and business. Many rural, remote, volunteer EMS organizations are structured more like clubs, where individuals can come and go as they desire and expectations, more importantly, accountability is low. However, clubs are rich with history and comradery and have cultures that are fun, friendly, and family like. Business are often characterized by cultures that have high expectations and accountability but can feel cold, calculating, and analytical. The EMS supervisor and his leadership team bring equal measures of both. The building, equipment, and ambulance were modern, well cared for, and spotless. Policies, procedures, expectations, and accountabilities were well-defined and clearly understood. The culture was light, engaging, and contagious.

The service has one ambulance located in the Town of Burns in their own building, which has space for a second ambulance. Their building also has a combination training room/office/crew quarters.



A general overview of the organization is provided below:

System Overview

Operational Resources

Calls

WATRS calendar 2019	19
LQuadC calendar 2019	129
Burns EMS estimate	180
2020 Projected	
- WATRS	12
- LQuadC	152
- Burns EMS	200

Roughly a 50% response rate

Roughly a 25% transport rate

Employees* 11

*Generally 4 respond to the majority of the calls

**Generally no call schedule

Vehicles 1

Locations 1

Financial Resources (fiscal 2020)

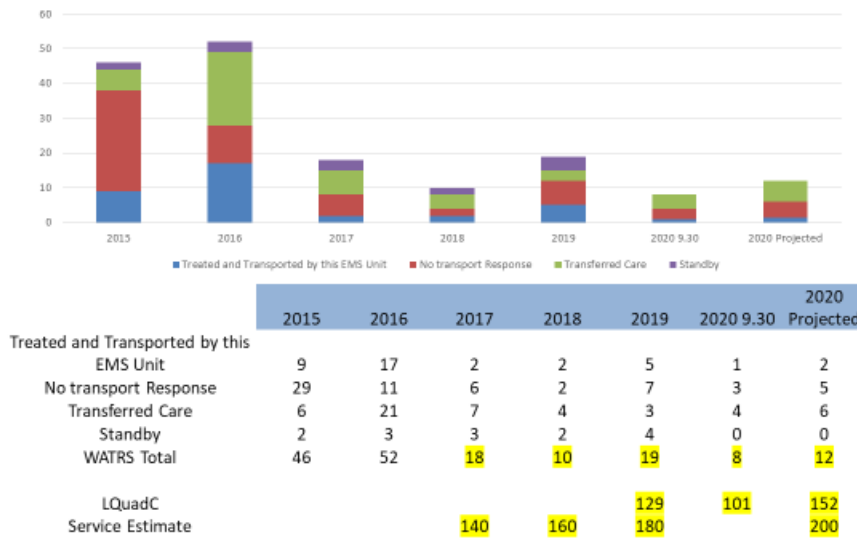
Total Cash Resources	\$35,164.68
Total Expenses	\$2,500 allotted
Salary Cost	\$0
Donated labor costs	\$447,285.60
In kind services from City	

Organizational Governance

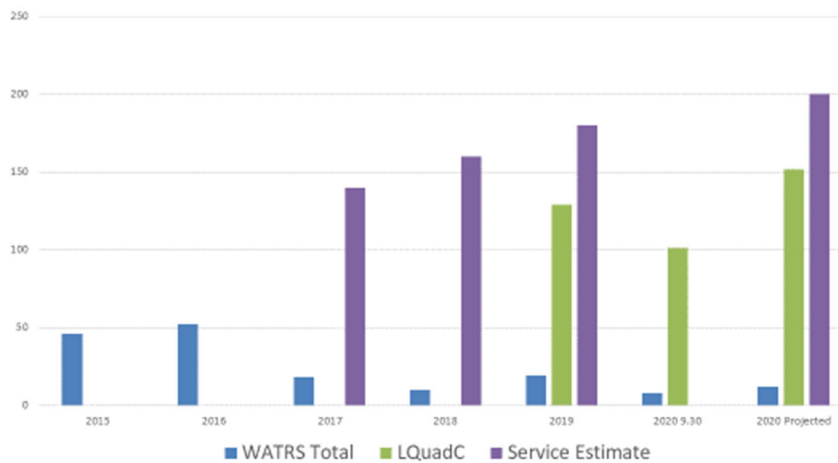
- Owned by city of Burns
- Service leader reports to City Council
- Staff reports to service leader
- Service has a designated leader/manager
- Uses an external billing agency

The service received approximately 129 requests for services in 2019, as reported by LQuadC, and is projected to respond to 152 in 2020, as reported by LQuadC. There is some disagreement on exact request for service numbers. The chart below shows the data as reported by the Wyoming Ambulance Transport Reporting System (WATRS), LQuadC, and data from the EMS supervisor from their IamResponding (IaR) application. The data highlighted in yellow indicate the variances in data from the different data sources.

Call Volume Trends



Data Variances



BEMS was able to respond to roughly half of the requests for service, and when they were able to respond, they transported the patient, when transport was needed, roughly 25% of the time. Proactively, the service entered into a dual response system with the EMS contractor in Cheyenne, AMR. Every request for service has a dual response from AMR and BEMS. In the event BEMS is unable to respond, AMR is already enroute and able to provide Advanced Life Support (ALS) care. When BEMS is able to respond, approximately 25% of the time they will transport the patient to

Cheyenne Regional Medical Center (CRMC). In the event BEMS does not transport and the patient is in need of transport, AMR will transport the patient. Both organizations, community leaders, medical directors, medical center clinical leaders, and providers report positive experiences with this system.

Finances and Financial Resources

BEMS is funded by a combination of revenues from transport, a fixed amount allocated from the Town of Burns, and in-kind services from the town of Burns (fuel, insurances, their facility). Volunteers on the service do not receive any compensation for their time.

System Finances

Fiscal 2019-2020

- Total cash resources \$35,164.68*
- Total Expenses \$2,500 allotted

Note* Revenue and expenses are part of a municipal budget

	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021
Gross Revenue**					\$35,164.68
Total Expenses	\$5,800.00	\$3,000.00	\$3,000.00	\$3,000.00	\$2,500.00
Net Revenue**					\$32,665

Note** Data not available

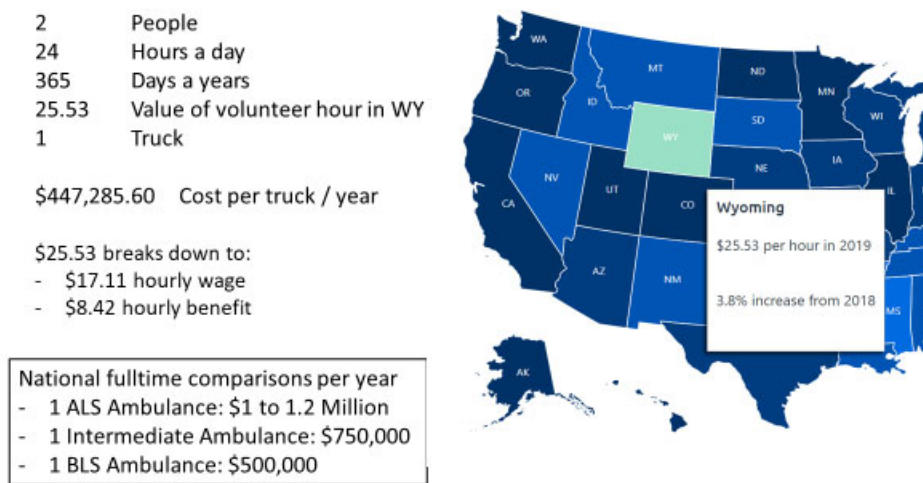
The service operates on a governmental fiscal year of July through June. The 2019–2020 fiscal year began with a balance of \$35,164.68. There was a fixed allotment of \$2,500 for operational expenses, resulting in a positive balance of \$32,664.68 at the end of the fiscal year. Other expenses may have occurred but were likely part of broader categories in a municipal budget.

The service uses an external billing agency that was unable to report a payer mix due to the extreme low amount of calls billed. Since 2016, the billing agency only reports billing 6 transports for BEMS. This highlights another variance in data. If only 6 transports have been billed since 2016, and the agency is projected to have 152 requests for services in calendar 2019, responds to half of the requests (76), and transports roughly 25% (19), there should have been at least a half dozen or more billed transports, just in this fiscal year. The service is likely missing revenue that could assist it as it navigates the path toward sustainability. The service could also be missing critical, required patient care documentation.

What is not accounted for in the current finances is the cost of labor. Today, BEMS is able to provide some responses due to the dedication, commitment, and sacrifice of a few individuals; as discussed previously, the availability of volunteers is dwindling. To fully understand the finances and financial resources of BEMS, one must account for the volunteer labor or, said differently, the subsidy provided to the community by the individuals willing to provide EMS labor for free.

An ambulance service in Wyoming is required by law to have at least two personnel on every ambulance transport. One of the two must be at least an EMT-Basic. To account for volunteer labor, a calculation is used that references the value of a volunteer hour in Wyoming as determined by the Bureau of Labor Statistics, Volunteer Sector. This number represents the cost BEMS would need to pay to employee an individual with benefits.

Determining True Labor Costs



The value is multiplied by two individuals, 24 hours a day, 365 days a year and results in a total labor cost of \$447,285.60. Today, BEMS and the town of Burns do not account for this cost.

Labor Costs Accounting for Donated Labor



Also of note when considering BEMS finances and financial resources is their current rate structure. With the primary revenue source for the organization being fee for service, specifically billing for treatment and transportation, it is critical BEMS ensure its rates match its expenses. Today, BEMS rates do appear to match its true expenses. However, there appears to be a gap in their true responses and the total number of calls billed.

Personnel

There are 11 employees/volunteers on BEMS. Of those 11, generally 4 are able to respond when calls for service are received. Of note, the EMS supervisor, in addition to his leadership and management role, also a volunteer, responds to a majority of the calls when BEMS is able to respond. BEMS relies on an “all call” system for scheduling personnel to be available to respond to requests for service.

Call Taking, Dispatch & Communications

BEMS is dispatched by LQuadC. 911 is used throughout the BEMS service area, as well as all of Laramie County. LQuadC is a combined communication center for all of public safety in Laramie County. Emergency Medical Dispatching (EMD) is used, as well as Medical Priority Dispatching Services (MPDS) where applicable. Both VHF and Wyolink are used for communication between BEMS and LQuadC and other public safety agencies. Cellular service is limited due to signal strength and density of cellular towers. The ICBM force in the area adds additional complications with communications, as the military and missile silos can be on different frequencies and communication modalities. LQuadC is often able to breach the gap and cross connect communications for non-military providers. Users provide excellent

reviews of LQuadC, its technology, reliability, and expert staff. BEMS does not pay a fee for the communication services.

First Response

BEMS receives medical first response through the fire districts. Laramie County Sheriff's Department may respond to calls for service; however, the response time may be delayed. The area fire district also responds for request for manpower, extrication, and rescue services.

Ground Ambulance Service

BEMS receives, when needed, mutual aid from Pine Bluffs EMS and AMR through their dual response agreement.

Receiving Facilities & Other County Healthcare Resources

The primary receiving facility for patients from BEMS is Cheyenne Regional Medical Center.

Mobile Integrated Health

To date there are no mobile integrated healthcare/community EMT/paramedic programs in place.

EMS Education

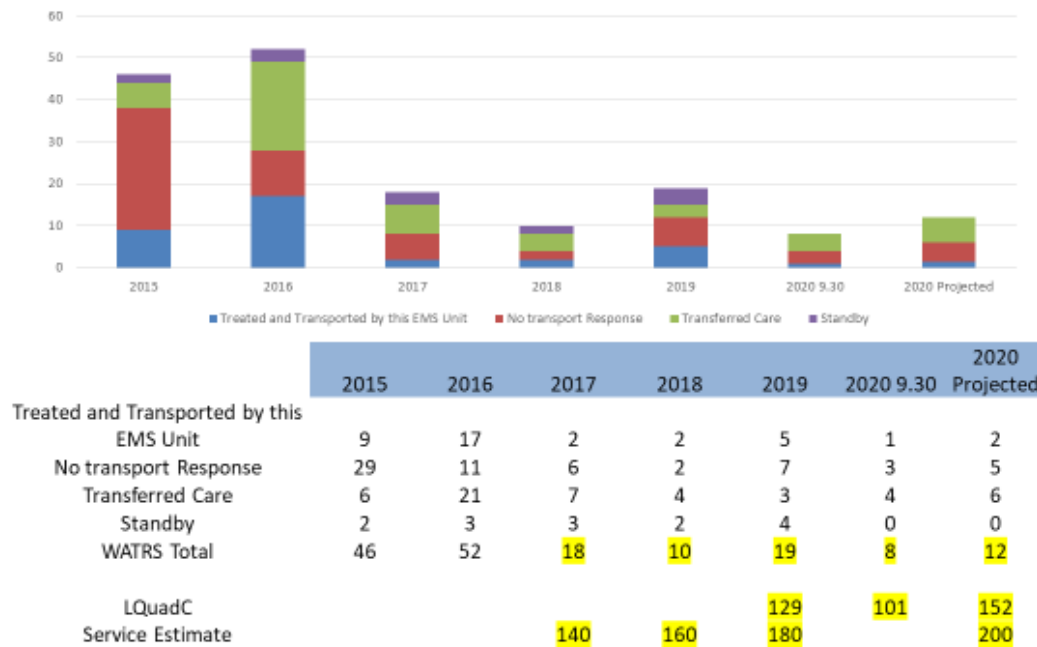
Initial and continuation education is provided by BEMS staff and leaders. The service medical director is also highly engaged and often provides continuing clinical education.

EMS System Oversight

EMS in Laramie County is governed through and EMS Joint Powers Board (EMSJPB). Today, the EMSJPB primarily focuses on management and leadership of the ambulance contract for Western Laramie County. The EMSJPB has created many components of an EMS system for all of Laramie County. For example, all services in Laramie County use medical guidelines developed through the EMSJPB. All services share the same medical directors, contracted through the EMSJPB. The EMSJPB also facilitates conversation on mutual aid, dual response, equipment purchases, and disaster coordination.

Call Volume

Call Volume Trends



Note: Data highlighted in yellow indicate variances between the data reported in WATRS, LQuadC, and IaR.

V. Key Findings

Finding 1: The organization has structure, expectations, and the right blend of club and business.

Rural, remote, volunteer EMS organizations are often structured more like clubs. This typically comes from the organic nature in which they were formed, when often a few individuals came together to create an ambulance service in a local community. Clubs, like other community volunteer organizations, are characterized by the ability for individuals to come and go as they desire, and expectations and accountability are generally low. This is not intended to suggest that clinical care skills are low in clubs. It's often the opposite; volunteers excel at the portion of the club that directly link to what drove them and drives them to be part of the club. What may suffer, in the case of ambulance services, is non-clinical expectations, such as paperwork; shift duties; and other needed administrative work. Clubs are also rich with history, comradery, and have cultures that are fun, friendly, and family-like. Business are sometimes characterized by cultures that have high expectations and accountability — volunteers sometimes describe business as cold, calculating, and analytical.

The EMS supervisor and his leadership team bring equal measures of both. The building, equipment, and ambulance are modern, well cared for, and spotless. Policies, procedures, expectations, and accountabilities are well-defined and clearly understood. The culture is light, engaging, and contagious. The service and its leaders have found the right balance between club and business.

Finding 2: An EMS system already exists within Laramie County, though it is informal.

Today, EMS medical direction is shared by all four EMS organizations in Laramie County. There is a dual response system in place, ensuring an ambulance response to 100% of the calls for service. Countywide EMS issues are considered and discussed at an EMS joint powers board, and mutual aid happens frequently. However, today there are four separate EMS organizations often vying for the same resources of finances, personnel, time, and attention. Similarly, there is duplication in areas of management, leadership, and administration.

Finding 3: As operating today, Burns EMS is not sustainable.

BEMS has a volunteer staff that is dedicated, committed, and loyal, and they have sacrificed much in the name of providing service to their community

and citizens. As volunteerism, EMS, and small-town America has changed, the ability of the volunteers to ensure a 100% response to all requests for service has come into question. Today, BEMS is able to respond to roughly 50% of their requests for service. This response rate is likely to decrease as more volunteers leave the profession and operational demands increase. BEMS' relative close proximity to Cheyenne creates additional challenges, such as many staff working in Cheyenne, as well as the draw of the larger city for the younger generations. The gap between current revenues and the town of Burns' own financial resources is likely too great to make having a full-time or part-time ambulance service practical.

Finding 4. EMS is a vital and desirable element of healthcare and quality of life.

In all interviews conducted as part of this assessment, it was clear that EMS is a desired and expected component of life in all parts of Laramie County. Respondents especially cited the critical need for EMS in Eastern Laramie County due to the distances from healthcare facilities and the lack of clinic or urgent care facilities in local communities. The interviews reflected a true appreciation, not only for the service, but for the people providing this care — both volunteers and paid employees.

Finding 5: Workforce recruitment and retention is, and will likely continue to be, a major challenge.

Finding and keeping more of the right people is likely to be one of the greatest challenges to face EMS in Laramie County. This challenge is shared by EMS organizations across Wyoming and the nation. EMS recruitment and retention is facing a perfect storm of factors; these factors are shared by both full-time and volunteer organizations. Initial and ongoing training requirements are increasing for all levels of EMS practitioners. Interest in vocational careers such as EMS is decreasing, now especially in light of Covid-19. Rural communities are seeing their populations decrease as young people move away for higher-paying career opportunities while at the same time rural community healthcare needs grow due to an aging population and the lack of basic services. Compounding all of these factors is the regionalization of healthcare.

Finding 6: There is a lack of consensus around the specifics of EMS in Eastern Laramie County: who funds it, who ensures the provision of service(s), who governs it, and who operates it.

When asked, all interviewees could agree on the need for EMS in Eastern Laramie County. Most agreed that in order for EMS in Eastern Laramie

County to be long-term sustainable, it would require full-time EMS personnel at considerable expense. Some agreed on the likely staging and deployment of possible future full-time resources. Where there was marked lack of agreement was around who would fund the resources and how they would be managed and operated. Some saw it as the legal responsibility of county leaders. Others saw it as the responsibility of local communities and their citizens, and others saw it as the responsibility of already-in-place collaborative services, such as the fire districts.

Finding 7: The current collaboration between Burns and AMR, through the EMS Joint Powers Board, is ensuring there is the provision of EMS in the area served by Burns.

Regardless of the challenges of volunteerism and volunteer staffing, there is a 100% response and, if needed, a 100% transport rate in the area served by BEMS. The dual response system with AMR ensures that there is always an ambulance responding to every call for service and always a transporting ambulance available, regardless of which organization it is from.

Finding 8: AMR's current contract may be creating a disincentive for AMR to dual respond.

Like many performance-based contracts, the contract between the EMSJPB and AMR has specific performance requirements, such as level of effort and response times based on severity of the call. Contractors, such as AMR, match their operational deployment to the contract expectations and financial resources. To incentivize performance, the contract also has substantial penalties for performances failures.

This creates an interesting paradox for the contractor, AMR. While they are not penalized for sending an ambulance outside their contracted area for a dual response with Burns, it does create a scenario where AMR could then be penalized within Cheyenne as they now have fewer ambulances in Cheyenne for the same volume of work. This scenario could create a disincentive for the current or future contractor to provide a dual response service for fear of operational, clinical, and financial penalties.

Finding 9: There is perceived lack of fairness in how the financial burden of providing EMS is shared.

Communities across Wyoming and the nation are struggling with the expectation to provide more services and infrastructure with fewer resources. As they consider what services to fund with these limited resources, they have begun to ask if it is appropriate for the citizens of their

tax base to pay for a service that provides services outside their geographic boundaries. In the case of BEMS, the city of Burns is made up of a few square miles. However, BEMS provides services to approximately 500 square miles in Eastern Laramie County. The question being asked is: Should everyone within the service area contribute to the cost of providing the service?

Finding 10: Some of the structures and practices of an integrated countywide EMS system are already in place.

Structures and practices such as dual response, mutual aid, shared medical direction, joint equipment purchased, shared medical guidelines and a EMSJPB are all already in place and functioning well.

Finding 11: Current operations may not be in compliance with state law.

The state of Wyoming rules and regulations governing licensed ambulance services require an ambulance service respond to 100% of their requests for services and, if requested, provide transport of the patient. Today, BEMS is only able to respond to requests for service roughly 50% of the time. There is no provision in law for a part-time ambulance service.

Finding 12: Gathering and leveraging data may be helpful and will likely be essential.

During the assessment, it was noted that there were variances between run volume data for BEMS in the WATRS system, the requests for service provided by LQuadC, and IaR. Data, especially run volume data, is critical to understand the need, costs, and deployment requirements for an ambulance service. The data would also be essential when imagining, creating, designing, and implementing a new countywide EMS system. Every effort should be given to ensuring 100% of the data is entered into the WATRS system, with special attention to when the service is requested but does not respond and when they respond but do not transport.

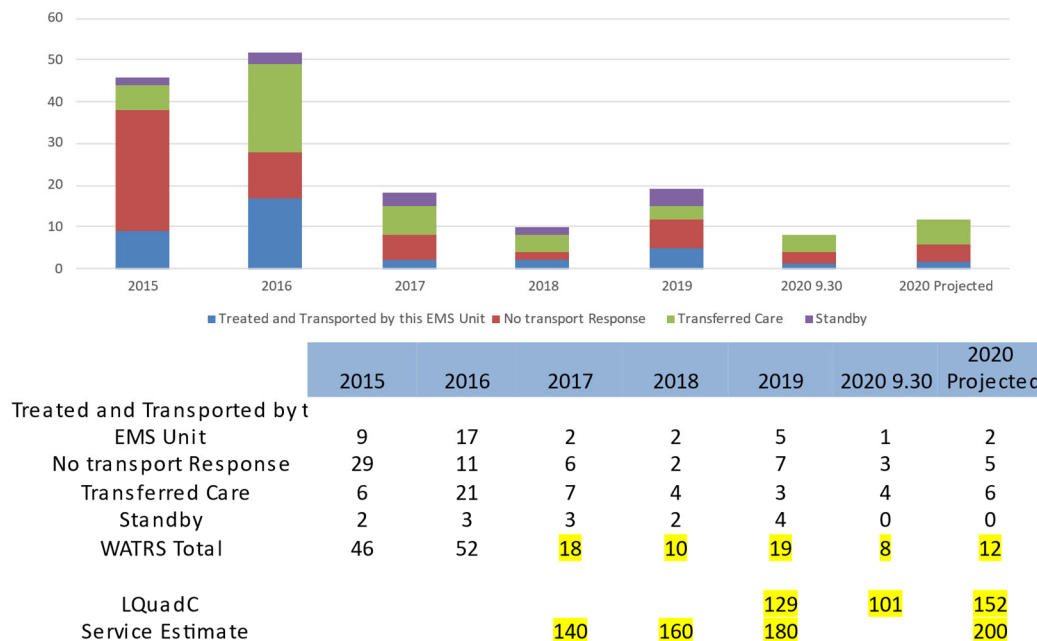
Finding 13: The relationship between Burns EMS and other organizations appears strained.

Some reported strained relationships between the BEMS organization and other organizations. All reported that any tensions were at the organizational level and had not interfered with effective and professional interactions during calls for service.

Finding 14: There seems to be a large variance between EMS responses, data submitted to WATRS, and the EMS billing agency.

There appears to be a significant variance between the different sources of call volume data. As seen below, the variance in 2019 calendar actual run volume ranges from 19 responses entered in WATRS, 129 reported by LQuadC, and 180 reported by BEMS leaders based on their IaR application. The variance raises many concerns, including potential lost revenue due to not providing documentation to the billing agency; missing data for the purposes of planning, managing, and leading the organization; and regulatory requirements and potential liability for missing or incomplete patient care documentation.

Call Volume Trends



VI. Recommendations

Recommendation 1: Transition Burns EMS to a new response.

It is unlikely that the geographic area served by BEMS would be able to generate enough financial resources to fund a full-time ALS-level ambulance service. It generally requires 650 transports a year for a full-time BLS ambulance service at a cost of roughly \$500,000 a year to produce enough revenue from transports to cover its operating expenses. An ALS ambulance typically needs 1,200 to 2,000 transports at year at an annual operating expense of \$750,000 to \$1,000,000 a year to cover its operating expenses.

BEMS is well-positioned to play a critical role in a potential future Laramie County EMS system. Their location could house a Laramie County EMS System full-time ambulance resource, as well as being an ideal location to deploy a regional EMS first response service. With the likelihood that the ambulance resource would be responding to calls for service in the Albin area, as well as along I80 toward Cheyenne, a highly engaged, medical first-responder organization would be needed to provide care while ALS transportation resources are enroute. In practicality, this is the service BEMS is providing at least 50% or more of the time when AMR co-responds to call for service and BEMS is unable to respond.

Recommendation 2: More deeply understand and accept the needs of the current EMS system.

Convene a process to more deeply understand what is desired by the community, what is financially sustainable, how to fund the system, and how to govern the system while maintaining strong partnerships. Use this listening and learning session(s) to imagine what is possible and what is desired. This process must also hold a mirror up to what is desired and what those that might use the system are willing to pay for; without this balance and acceptance, the system is likely to fail.

Recommendation 3: Formalize the current EMS System.

Begin by documenting the current system, and ensure there are formal written agreements to memorialize the dual response system. These agreements should be between both EMS agencies, as well as an expectation in the contractor agreement with AMR and any future EMS contractor. Continue by removing any adverse consequences for AMR's dual response, such as direct or indirect level of effort or response-time penalties. Consider adding an incentive for the contractor to provide the service as a method to

ensure the costs of providing the service are weighed against the possible incentives.

Recommendation 4: Create a community-wide shared vision for EMS.

With the knowledge and education gained in recommendation 2, gather community stakeholders to create a shared vision for the future. This new vision should have a clear statement of clinical, operational, governance, and financial structures. One must only look at success and failures of area-wide or countywide school consolidations to understand how strong or fragile a system can be without the proper transparency and up-front agreements.

Recommendation 5: Participate in creating a Laramie County EMS system for 2021 and beyond.

Using the work from recommendation 2 and 4, bring stakeholders together from both Eastern and Western Laramie County to create a roadmap for a sustainable EMS system for 2021 and beyond. Engage all voices and balance needs and wants with what everyone is willing to pay, now and into the future. Account for all costs, including volunteer labor.

Recommendation 6: Ensure data is gathered and used to its full potential.

Document all responses and clearly note those responses when BEMS was unable to respond, when they were able to respond but did not transport, and when they did transport. Leverage the data to understand the current system and the needs of a current countywide EMS system. Ensure all responses, patient interactions, and transports are fully documented for clinical and billing needs.